

REVISED AGENDA- Only change was to the order of the agenda items
 Minibook for November 30, 2023 meeting- excludes meeting minutes- page numbers listed correspond to page number of pdf
 document- all materials are draft documents for board consideration

TENTATIVE AGENDA
 STATE WATER CONTROL BOARD MEETING

THURSDAY, NOVEMBER 30, 2023

IN PERSON ONLY – GALLERY, COMMUNITY COLLEGE WORKFORCE ALLIANCE,
 1651 EAST PARHAM ROAD, RICHMOND, VA 23228

Meeting will be Live-Streamed. Go to: www.deq.virginia.gov
 Any Updates To Details/Final Arrangements To Be Announced On Virginia Regulatory Town Hall

Convene – 10:00 A.M

Agenda Item	Presenter	Tab
Minutes (August 23, 2023)	Porterfield	A
Final Exempt Regulations		
Water Quality Management Planning Regulation (9VAC25-720) Amendments - Adoption of 6 new TMDL Wasteload Allocations	Williams	B pg 5
Updates to date of 40 CFR incorporated by reference and references to EPA Methods	Norris	C pg 66
<ul style="list-style-type: none"> • Virginia Pollutant Discharge Elimination System Permit (VPDES) Regulation (9VAC25-31) • Virginia Pollution Abatement (VPA) Permit Regulation (9VAC25-32) • Virginia Water Protection (VWP) Permit Program Regulation (9VAC25-210) • Groundwater Withdrawal Regulations (9VAC25-610) • Virginia Water Protection (VWP) General Permit for Impacts Less Than One-Half Acre (9VAC25-660) • Virginia Water Protection (VWP) General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities (9VAC25-670) • Virginia Water Protection General Permit for Linear Transportation Projects (9VAC25-680) • Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities (9VAC25-690) • Sewage Collection and Treatment Regulations (9VAC25-790) 		
Final Regulations		
Local and Regional Water Supply Planning- (9VAC25-780)	Cloe	F pg 501
Reissuance of Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Nonmetallic Mineral Mining (9VAC25-190)	Sherman	D pg 217

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Agenda Item	Presenter	Tab
Reissuance of Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Storm Water Discharges Associated with Industrial Activity (9VAC25-151)	Bryan	E pg 288
Proposed Regulation		
Reissuance of Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding Operations and Animal Waste Management (9VAC25-192)	Bowles	G pg 615
Petition		
Regulate commercial fishing vessel pump water as a point source pollutant	Bryan	H pg 697
Other Business		
Withdrawal of Proposed Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91)- Amendment of the AST Regulation (2002-2003) Action 966 / Stage 2249 and Withdrawal of Proposed James River (Richmond Regional West) Surface Water Management Area (9VAC25-760) - Adoption of the James River (Richmond Regional West) Surface Water Management Area (2003) Action 886 / Stage 1875	Porterfield	I pg 718
FY 2023 Virginia Clean Water Revolving Loan Fund Final Authorizations	Crocker	J pg 721
Report to the Board Regarding Controversial Permits Mountain Valley Pipeline - Update Future Meeting date- February 23, 2024 Public Forum (time not to exceed 45 minutes - no public comment on Mountain Valley Pipeline)	Porterfield McCutcheon Porterfield	

ADJOURN

NOTE: The Board reserves the right to revise this agenda without notice unless prohibited by law. Revisions to the agenda include, but are not limited to, scheduling changes, additions or deletions. Questions on the latest status of the agenda should be directed to Melissa S. Porterfield at (804) 698-4238.

PUBLIC COMMENTS AT STATE WATER CONTROL BOARD MEETINGS: The Board encourages public participation in the performance of its duties and responsibilities. To this end, the Board has adopted public participation procedures for regulatory action and for case decisions made by the Department of Environmental Quality (Department). These procedures establish the times for the public to provide appropriate comment to the Board for regulatory action and the Department for case decisions for consideration.

For REGULATORY ACTIONS (adoption, amendment or repeal of regulations), public participation is governed by the Administrative Process Act and the Board's Public Participation Guidelines. Public comment is accepted during the Notice of Intended Regulatory Action phase (minimum 30-day comment period) and during the Notice of Public Comment Period on Proposed Regulatory Action (minimum 60-day comment period). Notice of these comment periods is announced in the Virginia Register, by posting to the Department and Virginia Regulatory Town Hall web sites and by mail to those on the Regulatory Development Mailing List. The comments received during the announced public comment periods are summarized for the Board and considered by the Board when making a decision on the regulatory action.

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For CASE DECISIONS (e.g., issuance and amendment of permits and enforcement orders), the Board adopts public participation procedures in the individual regulations which establish the permit programs. (Note: as of July 1, 2022, the Department takes final action on all case decisions.) As a general rule, public comment is accepted on a draft permit for a period of 30 days. In some cases a public hearing is held at the conclusion of the public comment period on a draft permit. In other cases there may be an additional comment period during which a public hearing is held, usually 45 days.

In light of these established procedures, the Board accepts public comment on regulatory actions as well as general comments, at Board meetings in accordance with the following:

REGULATORY ACTIONS: Comments on regulatory actions are allowed only when the staff initially presents a regulatory action to the Board for final adoption. At that time, those persons who commented during the public comment period on the proposal are allowed up to 3 minutes to respond to the summary of the comments presented to the Board. Adoption of an emergency regulation is a final adoption for the purposes of this policy. Also, public comment will be accepted for certain final exempt actions where there has been no public comment period. Persons are allowed up to 3 minutes to address the Board on the emergency regulation and final exempt actions under consideration.

POOLING MINUTES ON REGULATORY ACTIONS: Those persons who commented during the public hearing or public comment period and attend the Board meeting may pool their minutes to allow for a single presentation to the Board that does not exceed the time limitation of 3 minutes times the number of persons pooling minutes, or 15 minutes, whichever is less.

NEW INFORMATION ON A REGULATORY ACTION will not be accepted at the meeting. The Board expects comments and information on a regulatory action to be submitted during the established public comment periods. However, the Board recognizes that in rare instances new information may become available after the close of the public comment period. To provide for consideration of and ensure the appropriate review of this new information, persons who commented during the prior public comment period shall submit the new information to the Department staff contact listed below at least 10 days prior to the Board meeting. The Board's decision will be based on the Department-developed official file and discussions at the Board meeting. Should the Board or Department decide that the new information was not reasonably available during the prior public comment period, is significant to the Board's decision and should be included in the official file, the Department may announce an additional public comment period in order for all interested persons to have an opportunity to participate.

PUBLIC FORUM: The Board schedules a public forum at each regular meeting to provide an opportunity for citizens to address the Board on matters other than those on the agenda or pending regulatory actions. Those persons wishing to address the Board during this time should indicate their desire on the sign-in cards/sheet and limit their presentations to 3 minutes or less. Note, there is no pooling of minutes during the public forum.

The Board reserves the right to alter the time limitations set forth in this policy without notice and to ensure comments presented at the meeting conform to this policy.

Department of Environmental Quality Staff Contact: Melissa S. Porterfield, Policy Analyst, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4238, e-mail: Melissa.porterfield@deq.virginia.gov

Additional Meeting Information:

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- Attendees may not erect any signage inside or outside the meeting room or building.
- Attendees are not entitled to be disorderly or disrupt the meeting from proceeding in an orderly, efficient, and effective fashion. Disruptive behavior may result in a recess or removal from the meeting.
- Possession or use of any device that may disrupt the conduct of business is prohibited, including but not limited to: voice-amplification equipment; bullhorns; blow horns; sirens, or other noise-producing devices; as well as signs on sticks, poles or stakes; or helium-filled balloons.
- All attendees are asked to be respectful of all speakers.
- Rules will be enforced fairly and impartially not only to ensure the efficient and effective conduct of business, but also to ensure no interference with the business of the complex, its employees and guests.
- Attendees wishing to record the proceedings are welcome to do so; however, you may not interfere with the business of the meeting, nor impede the view or participation of other meeting attendees and staff.
- No smoking is allowed unless in a designated outside space. This includes tobacco & e-cigarettes.
- No alcohol, fireworks, pyrotechnics, weapons, or any substances/items controlled by law are allowed.
- No firearms are allowed in the State's contracted spaces except for firearms carried by law-enforcement officers or authorized security personnel.
- All violators may be subject to removal from the meeting facility.
- Anyone removed from the facility may not reenter.
- Anyone who fails to comply with removal may be charged with trespass.

TAB B



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
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MEMORANDUM

TO: State Water Control Board Members

FROM: Elizabeth McKercher
Director, Water Planning Division

DATE: October 10, 2023

RE: Approval of amendment to the Water Quality Management Planning regulation to include six wasteload allocations from two Total Maximum Daily Load reports.

Executive Summary

Staff will ask the Board to approve amendments to Virginia’s Water Quality Management Planning regulation (9VAC25-720) to add wasteload allocations (WLAs) from two TMDL reports. As of July 1, 2014, TMDL WLAs receive State Water Control Board approval prior to EPA approval of TMDL reports due to amendments outlined in §2.2-4006 A 14 of the Code of Virginia. The TMDL reports were developed using public engagement, consistent with DEQ’s “Public Participation Procedures for Water Quality Management Planning.” The TMDL reports have been reviewed by EPA for required TMDL elements and given provisional approval pending State Water Control Board approval of the wasteload allocations.

I. Background

The Clean Water Act (“CWA”) and the U.S. EPA Water Quality Management and Planning Regulation (40 CFR §130) require states to identify waters that are in violation of water quality standards and to place these waters on the state’s 303(d) List of Impaired Waters. Also, the CWA and EPA’s enabling regulation require that a TMDL be developed for those waters identified as impaired. In addition, the Code of Virginia, §62.1-44.19:7.C requires the State Water Control Board (“the Board”) to develop TMDLs for impaired waters. A TMDL is a determination of the amount of a specific pollutant that a water body is capable of receiving without violating water quality standards for that pollutant. TMDLs are required to identify all sources of the pollutant and calculate the pollutant loads from each source that are necessary for the attainment of water quality standards.

Every TMDL consists of three basic components. They are the point source component called the wasteload allocation (“WLA”), the nonpoint source component called the load allocation (“LA”), and the margin of safety component (“MOS”). The TMDL is equal to the sum of these three components.

The U.S. EPA’s Water Quality Management and Planning Regulation 40 CFR §130.7(d) (2) directs the states to incorporate TMDLs in the state’s Water Quality Management Plan. Also, U.S. EPA’s Water Quality Management and Planning Regulation 40 CFR§122.44(d) (1) (vii) (B) requires that new or reissued Virginia Pollution Discharge Elimination System (VPDES) permits be consistent with the TMDL WLA. This means that the WLA component of the TMDL will be implemented through the requirements specified in the VPDES permits, for example through numeric water quality based effluent limitations or in certain cases best management practices (“BMPs”). Virginia implements the LA component using existing voluntary, incentive, and regulatory programs such as the Virginia Agricultural Cost-Share Program and Federal Section 319(h) TMDL implementation funding. Specific management actions addressing the LA component are compiled in a TMDL implementation plan (“TMDL IP”).

II. Proposed Actions

Staff will propose the following Board actions:

Amendment of Water Quality Management Planning regulation to incorporate six new WLAs (Attachment II)

Attachment I includes specific portions of the TMDL reports in which DEQ developed the WLA’s including the TMDL itself and all the TMDL allocation components, the pollutant reduction scenarios, implementation strategies, reasonable assurance that the TMDL can be implemented, and a summary of the public participation process.

1. The report titled, “*Benthic TMDL Development for the Moores Creek and Mill Creek Watersheds Located in Rockbridge County, Virginia*” proposes sediment reductions for Moores Creek and Mill Creek and provides sediment wasteload allocation of 60,080 pounds/year for Moores Creek and 44,360 pounds/year for Mill Creek.
2. The report titled, “*Benthic TMDL Development for the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch Watersheds Located in Bedford, Pittsylvania and Franklin Counties*” proposes sediment reductions for Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch and provides wasteload allocations of 51,410 pounds/year, 6,593 pounds/year, 39,200 pounds/year, and 3,357 pounds/year, respectively.

The process for amending the Water Quality Management Planning regulation is specified in §2.2-4006 A 14 and §2.2-4006 B of the Code of Virginia. The amendments consist of adding six new WLAs that are included in the TMDL reports reviewed by EPA. Staff will therefore propose that the Board, in accordance with §2.2-4006 A 14 and §2.2-4006 B of the Code of Virginia, adopt the amendments to the Water Quality Management Planning regulation (9 VAC 25-720) as provided in Attachment II. The associated Virginia Regulatory Town Hall document is included as Attachment III.

III. Public Participation

The TMDL reports listed in Attachment I were developed in accordance with Federal Regulations (40 CFR §130.7). The TMDL reports were subject to the public participation process contained in §2.2-4006 A 14 of the Code of Virginia and DEQ’s “Public Participation Procedures for Water Quality Management Planning”. Both draft reports were public noticed and no comments were received. TMDL reports are also made available to the public on DEQ’s web site under <https://www.deq.virginia.gov/our-programs/water/water-quality/tmdl-development/draft-tmdls>.

The proposed final amendments to the Water Quality Management Planning regulation are exempt from the provisions of Article II of the Administrative Process Act. The TMDL WLAs listed in Attachment II were published in the Virginia Register (Volume 40, Issue 3) on September 25, 2023, with a public comment period ending on October 25, 2023. Staff received no comments.

IV. Presenter Contact Information:

Wasteload Allocation Changes to the Water Quality Management Planning Regulation

Contact: Justin Williams, Manager, Office of Watershed & Local Government Assistance
Phone Number: (804) 659-1125
E-mail: Justin.Williams@DEQ.Virginia.gov

V. Attachments

- **Attachment I** – Portions of two TMDL reports (with six new TMDL wasteload allocations) from which DEQ developed the WLAs
- **Attachment II** – Amended Water Quality Management Planning regulation proposed for Board adoption
- **Attachment III** – Virginia Regulatory Town Hall Form TH-09 – Exempt Action Final Regulation

Attachment I – Portions of two TMDL reports, with the six new wasteload allocations for approval by the Board

Affected Waterbodies and Localities for the six new TMDL waste load allocations:

James River Basin (9VAC25-720-60 A)

1. *“Benthic TMDL Development for the Moores Creek and Mill Creek Watersheds Located in Rockbridge County, Virginia”*
 - Benthic TMDL Development for the Moores Creek and Mill Creek Watersheds proposes sediment reductions for Moores Creek and Mill Creek and provides sediment wasteload allocations of 60,080 pounds/year and 44,360 pounds/year.

Roanoke River Basin (9VAC25-720-80.A)

2. *“The Benthic TMDL Development for the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch Watersheds Located in Bedford, Franklin, and Pittsylvania Counties”*
 - The Benthic TMDL Development for the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch Watersheds proposes sediment reductions for Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch and provides sediment wasteload allocations of 51,410 pounds/year, 6,593 pounds/year, 39,200 pounds/year, and 3,357 pounds/year.

**Benthic TMDL Development for the Moores Creek
and Mill Creek Watersheds
Located in Rockbridge County, Virginia**



**Prepared by:
Wetland Studies and Solutions, Inc.
and
James Madison University**

**Prepared for:
Virginia Department of Environmental Quality**

December 2022



Acknowledgements

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Jay Lewis – Rockbridge County Board of Supervisors (BOS)

John Pancake, Sandra Stuart, Barbara Walsh, Chris Wise – Rockbridge Conservation (RC)

Sarah Coffey – Chesapeake Bay Foundation

Tom Stanley – Virginia Cooperative Extension (VCE)

Charlie Simmons – Natural Resources Conservation Service (NRCS)

Lee Cummings, Sandra Stuart – Natural Bridge Soil and Water Conservation District
(NBSWCD)

Bill Sweeney, Cole Young, Teagan O’Brian – Virginia Department of Forestry (DOF)

Toby Jonas – White’s Travel Center

David Walsh – Outdoor Rockbridge

David Mims, Sidney Huffman –Citizen

For additional information, please contact:

Virginia Department of Environmental Quality

Valley Regional Office, Harrisonburg: Nesha McRae, (540) 217-7173

EXECUTIVE SUMMARY

Background

The Moores Creek and Mill Creek watersheds are located in both Rockbridge County and Augusta County, Virginia. Moores Creek drains the Raphine and Willow Lake communities south to South River and has a mostly agricultural watershed. Mill Creek drains a predominantly rural watershed northeast of Lexington southwest to Maury River. South River confluences with the Maury River south of the project area, and the Maury River is a direct tributary to the James River, which flows in an easterly direction until it reaches the Chesapeake Bay.

Definition:

Watershed – All of the land area that drains to a particular point or body of water.



Moores Creek and Mill Creek are listed as impaired on Virginia’s 2020 Section 305(b)/303(d) Water Quality Assessment Integrated Report due to water quality violations of the general aquatic life (benthic) standard. The impaired segments addressed in this document are shown in **Table 1-1**. The watersheds of the impaired streams are show in **Figure 1-1**.

Table 1-1. Impaired segments addressed in this TMDL study.

Moores Creek	VAV-I36R_MRC01A00 (9.09 mi)	I36R-02-BEN	2-MRC002.14	2006
Mill Creek	VAV-I35R_MIS01A00 (9.14 mi)	I35R-02-BEN	2-MIS000.04 2-MIS002.23	2016

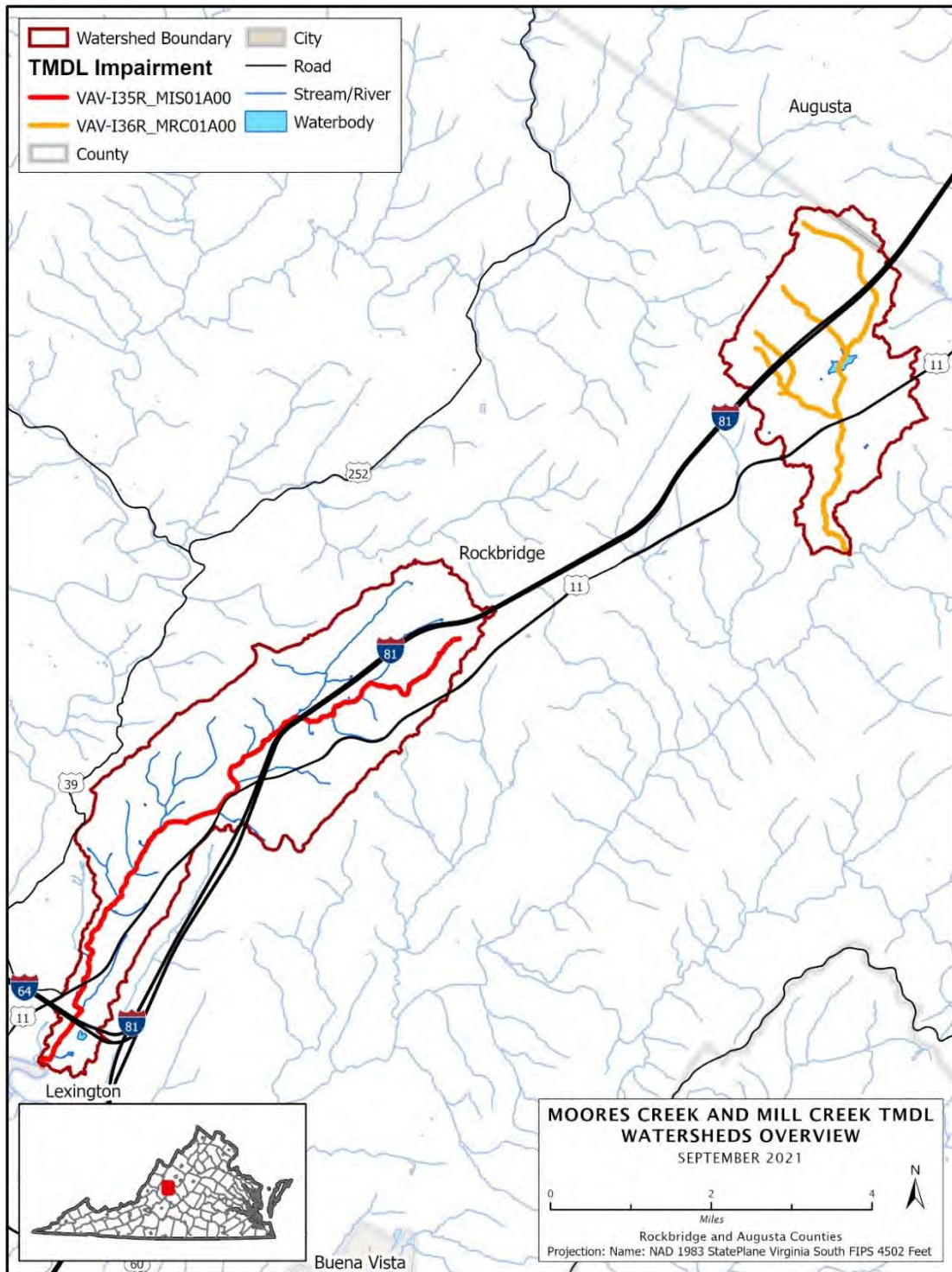


Figure 1-1. Location of the Moores Creek and Mill Creek watersheds and impairments.

The Problem

Impaired Aquatic Life

The Commonwealth of Virginia establishes designated uses for all the waters in the state. Some of these uses include recreation, fishing, wildlife and aquatic life. Water quality standards have been developed to ensure that some of these uses are met, while others are assessed using narrative criteria. The aquatic life use designation states that all waters of the state must support a healthy and diverse population of aquatic life. The Virginia Department of Environmental Quality (DEQ) determines whether this designated use is met by monitoring the benthic macroinvertebrate community (bugs that live on the bottom of the stream) in our waterways. The health and diversity of these bugs are assessed using the Virginia Stream Condition Index (VSCI). The VSCI is a multimetric index used to derive stream health scores ranging from 0 to 100. Scores below 60 are categorized as impaired. **Figure 1-2** shows DEQ's biological monitoring stations in the Moores and Mill Creek watersheds, which are color-coded by the average score at each site. Red and yellow icons indicate that the streams do not support a healthy and diverse community of aquatic life.

A benthic stressor analysis was conducted in 2021 to determine the cause(s) of benthic impairment in the Moores Creek and Mill Creek watersheds (**Appendix D**). The study found that the primary stressor to aquatic life in both streams was sediment.

Too Much Sediment

Excess sediment was identified as the primary stressor in Moores and Mill Creeks. When it rains, sediment is washed off of the land into nearby creeks and rivers. The amount of soil that is washed off depends upon how much it rains and the characteristics of the surrounding watershed. Rain falling on highly tilled cropland without a cover crop or a construction site may carry a large amount of sediment to a stream. Conversely, forested land and cropland where no-till practices are used contribute much less sediment to waterways during rainfall events. When that soil reaches nearby streams, it can fall to the stream bottom as sediment, where it can destroy valuable habitat for aquatic macroinvertebrates that live underneath and between rocks and gravel on the bottom of the stream. Without this valuable habitat, the diversity of aquatic life in a stream may be severely limited.

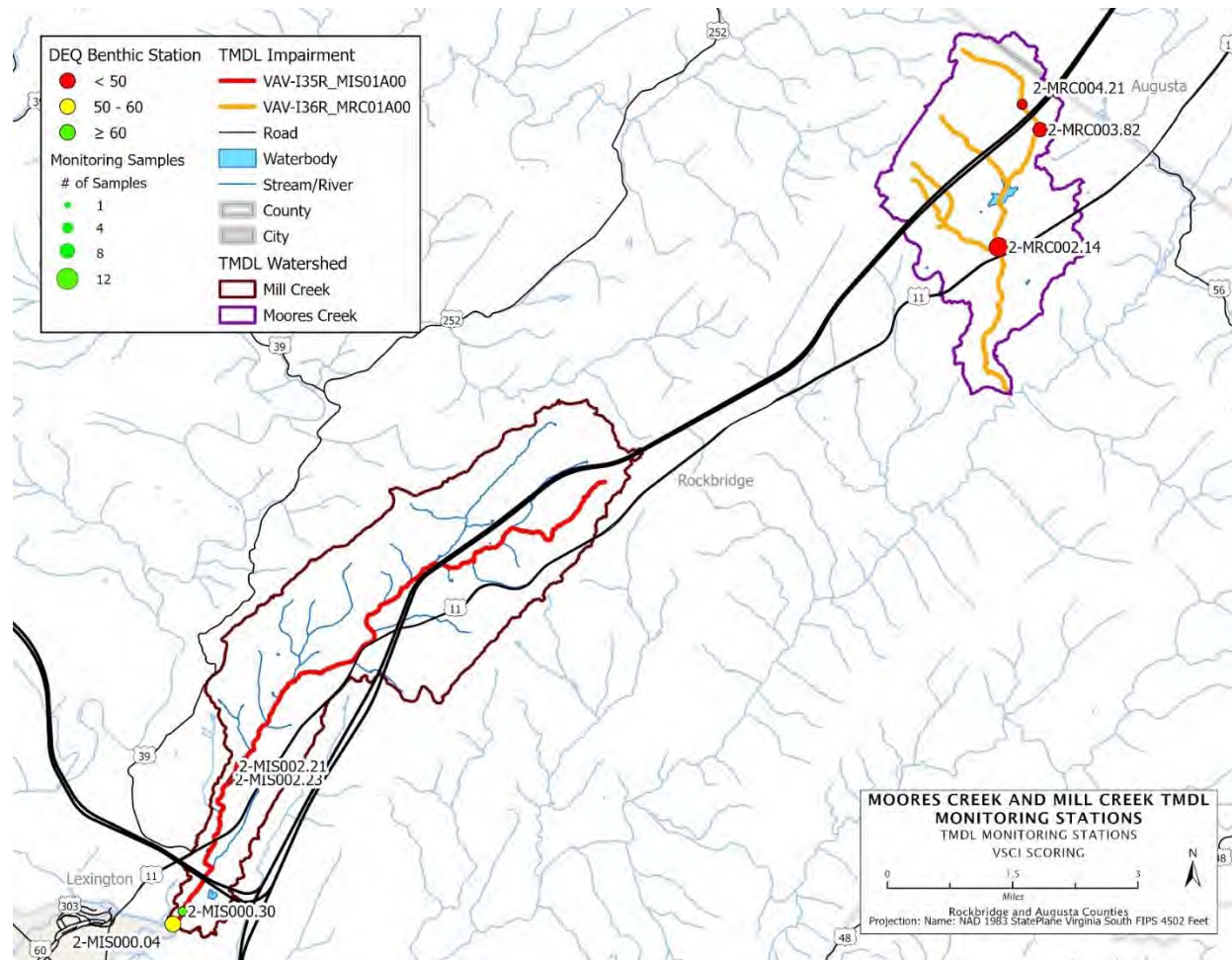



Figure 1-2. Stream health score summaries in the Moores Creek and Mill Creek watersheds.

The Study


To study the problem of excess sediment in the Moores and Mill Creek watersheds, a combination of monitoring and computer modeling was utilized. Monitoring was used to tell how much sediment is in the streams at any given time and how aquatic life conditions have changed over time. The computer model was used to estimate where the sediment is coming from and make predictions about how stream conditions would change if those sources were reduced.

For this purpose, a computer model called the Generalized Watershed Loading Function model (or GWLF) was used. This model considers the slope, soils, land cover, erodibility, and runoff to estimate the amount of soil eroded in the watershed and deposited in the stream. The model was calibrated against real-world flow measurements in order to ensure that it is producing accurate results. The calibrated model was then used to estimate the sediment reductions that would be needed to completely restore a healthy aquatic life to the impaired streams in the watershed.



Frequently Asked Question:

Why use a computer model? Sampling and testing tell you a lot about the present and the past, but nothing about the future. A computer model is a tool that can help you make predictions about the future. This is necessary to figure out



Definition:

TMDL – Total Maximum Daily Load. This is the amount of a pollutant that a stream can receive and still meet water quality standards. The term TMDL is also used more generally to describe the state's formal process for cleaning up

This report summarizes the study and sets goals for a clean-up plan. The study is called a Total Maximum Daily Load (TMDL) study because it determines the maximum amount of sediment that can get into a certain stream without harming the stream or the creatures living in it.

Current Conditions

For this report, the Virginia Geographic Information Network (VGIN) 2016 Virginia Land Cover Dataset (VLCD) was used to represent the current land use. The land cover distribution for each impaired watershed is shown in **Figure 1-3** and **Figure 1-4**. The Moores Creek watershed is largely hay and pasture (47%), moderately forested (25%), moderately developed (21% combined urban/suburban land and turf grass), and contains a sizable amount of cropland (7%). The Mill Creek watershed is largely forested (51%), used for pasture and hay (31%), and moderately developed (16% combined urban/suburban land and turf grass).

This land cover dataset combined with an accounting of the permitted discharges represent the major pollutant sources in the watershed. The GWLF model was used to determine the relative contribution of sources of sediment in the impaired watersheds. **Figure 1-3** and **Figure 1-4** show the distribution of sediment contributions from various sources in the watersheds. Permitted sources of sediment include one industrial stormwater permit and three Construction General Permits in Mill Creek and six Construction General Permits in Moores Creek. The sediment loads from permitted sources were calculated based on the permit language, reported discharge data, and land cover type and area (detailed in **Section 4.3.2**). In Moores Creek, hay and pasture covers a greater extent than urban areas, and as such the majority of the sediment loads are derived from hay and pasture lands. In Mill Creek, the greater urban land cover is reflected in a higher urban sediment load. Both watersheds have a significant portion of their overall sediment load resulting from stream bank and bed erosion.



Definition:

Point Source – pollution that comes out of a pipe (like at a sewage treatment plant).

Non-point Source – pollution that does not come out of a pipe but comes generally from the

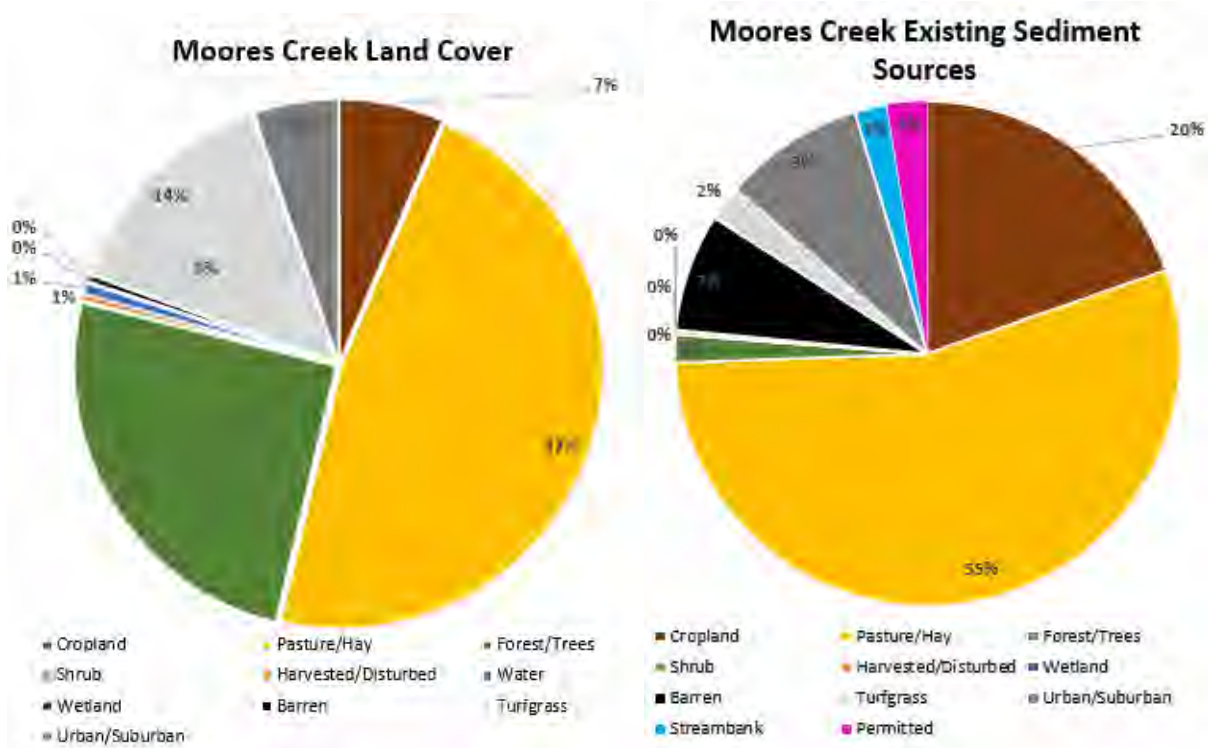


Figure 1-3. Land cover and existing source load distributions in the Moores Creek watershed.

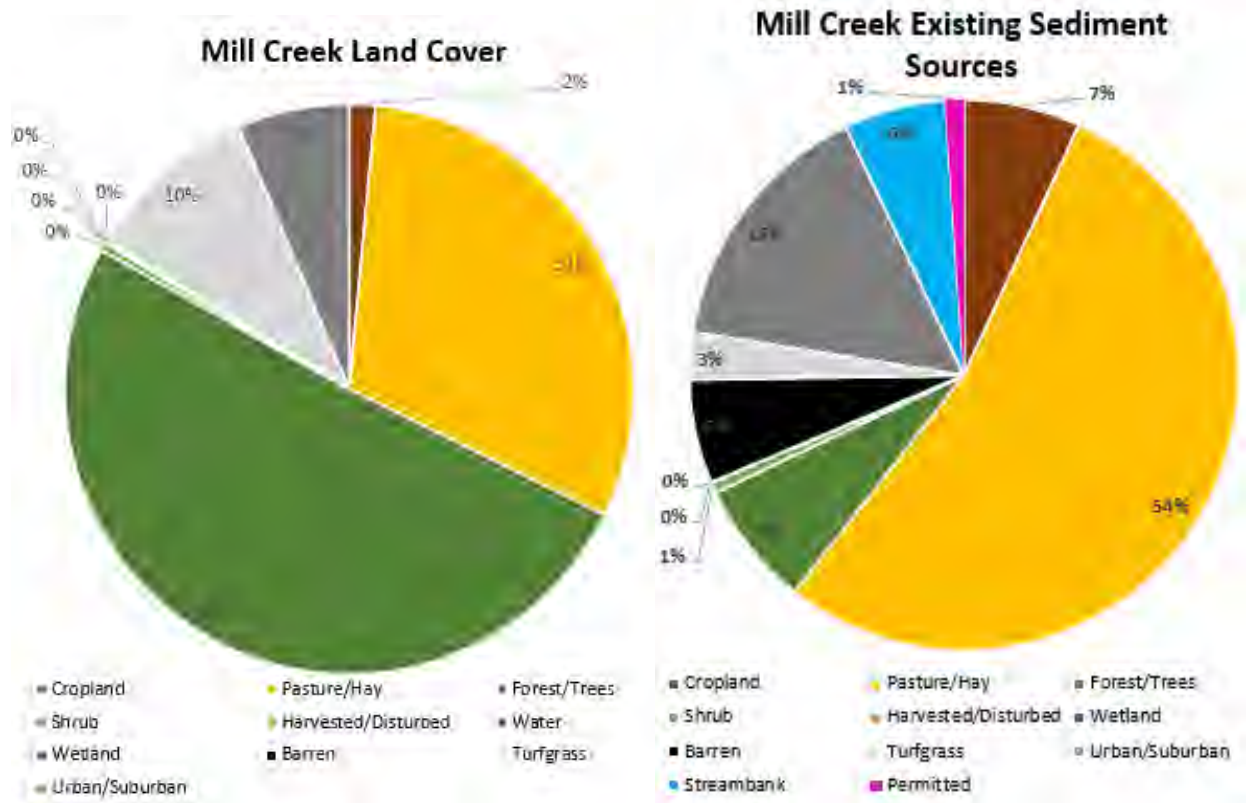


Figure 1-4. Land cover and existing source load distributions in the Mill Creek watershed.

Future Goals (the TMDL)

After determining where the sediment in the impaired streams is coming from, a computer model was used to figure out how much sediment loads need to be reduced to clean up each stream. The ultimate goal for these streams is to have sediment levels that allow for diverse and abundant aquatic life. The reductions in sediment needed to meet these goals are shown in **Table 1-2**.

Table 1-2. Percent Reductions in sediment needed to clean up the impaired waters.

Watershed	Crop, Pasture, Hay	Forest, Trees, Shrubs, Wetland	Developed Pervious and Impervious Areas, Turfgrass	Streambank Erosion	Permitted Sources
Moores Creek	23.0%	0%	8.5%	23.0%	0%
Mill Creek	25.0%	0%	13.6%	25.0%	0%

In order to obtain healthy sediment levels in the impaired streams, significant reductions are needed from several sediment sources. Four sediment reductions scenarios were developed for each watershed and presented to the Technical Advisory Committee for review (**Table 1-3** and **Table 1-4**). For each stream, Scenario 1 presents an even reduction across all anthropogenic sources. Scenario 2 focuses reductions on agricultural sources, and Scenario 3 focuses reductions

on urban sources. Scenario 4 was included to provide a more tailored approach, with greater reductions recommended for the larger source (agricultural vs. urban). Scenario 4 was selected by the Technical Advisory Committee for both watersheds. Based on this scenario, sediment loads from agricultural land cover and streambank erosion within the Moores Creek watershed need to be reduced by 23.0%. Urban/suburban land covers within the Moores Creek watershed need to be reduced by 8.5%. Sediment loads from agricultural land cover and streambank erosion within the Mill Creek watershed need to be reduced by 25.0%. Urban/suburban land cover within the Mill Creek watershed need to be reduced by 13.6%. The total maximum daily load, or TMDL, is equal to the total amount of sediment per year that would be entering each of these streams after the recommended reductions are made (**Table 1-5** and **Table 1-6**). These annual loads are converted to daily maximum loads as well, as described in **Section 6.3** (**Table 1-7** and **Table 1-8**). If sediment loads are reduced to these amounts, healthy aquatic life should be restored in these streams.

Table 1-3 Sediment allocation scenarios for the Moores Creek Watershed.

<i>Moores Creek</i>	Scenario 1	Scenario 2	Scenario 3	Scenario 4*
Source	% Reduction			
Cropland	20.2	25.1	0.0	23.0
Hay	20.1	25.1	0.0	23.0
Pasture	20.1	25.1	0.0	23.0
Forest	-	-	-	-
Trees	-	-	-	-
Shrub	-	-	-	-
Harvested	-	-	-	-
Wetland	-	-	-	-
Barren	20.2	0.0	91.8	8.5
Turfgrass	20.2	0.0	91.8	8.4
Developed Pervious	20.1	0.0	91.7	8.5
Developed Impervious	20.1	0.0	91.7	8.5
Streambank Erosion	20.1	25.0	91.7	23.0
Const. Permits	-	-	-	-
ISW Permits	-	-	-	-
TOTAL	17.3%	17.3%	17.3%	17.3%

* Selected scenario for Moores Creek sediment TMDL

Table 1-4 Sediment allocation scenarios for the Mill Creek Watershed.

<i>Mill Creek</i>	Scenario 1	Scenario 2	Scenario 3	Scenario 4*
Source	% Reduction			
Cropland	21.9	30.0	0.0	25.0
Hay	21.9	30.1	0.0	25.0
Pasture	21.9	30.1	0.0	25.0
Forest	-	-	-	-

<i>Mill Creek</i>	Scenario 1	Scenario 2	Scenario 3	Scenario 4*
Source	% Reduction			
Trees	-	-	-	-
Shrub	-	-	-	-
Harvested	-	-	-	-
Wetland	-	-	-	-
Barren	21.8	0.0	66.6	13.5
Turfgrass	21.8	0.0	66.7	13.5
Developed Pervious	21.9	0.0	66.7	13.6
Developed Impervious	21.9	0.0	66.7	13.6
Streambank Erosion	21.9	30.0	66.6	25.0
Const. Permits	-	-	-	-
ISW Permits	-	-	-	-
TOTAL	18.3%	18.3%	18.3%	18.3%

* Selected scenario for Mill Creek sediment TMDL

Table 1-5. Annual sediment loads that will meet the water quality standard in Moores Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/yr)	Allocated Nonpoint Sources (LA) (lb/yr)	Margin of Safety (MOS) (lb/yr)	Total Maximum Daily Load (TMDL) (lb/yr)	Existing Load (lb/yr)	Overall Reduction (%)
Moores Creek (VAV-I36R_MRC01A00)	60,080	1,070,000	125,600	1,260,000	1,520,000	17.3%
<i>Construction Stormwater General Permits</i>	34,970					
<i>Future Growth (2% of TMDL)</i>	25,110					

Table 1-6. Annual loads that will meet the water quality standard in Mill Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/yr)	Allocated Nonpoint Sources (LA) (lb/yr)	Margin of Safety (MOS) (lb/yr)	Total Maximum Daily Load (TMDL) (lb/yr)	Existing Load (lb/yr)	Overall Reduction (%)
Mill Creek (VAV-I35R_MIS01A00)	44,360	1,394,000	159,800	1,600,000	1,960,000	18.3%
<i>Construction Stormwater General Permits</i>	6,409					
<i>Industrial Stormwater Permits</i>	5,984					
<i>Future Growth (2% of TMDL)</i>	31,960					

Table 1-7. Maximum daily sediment loads for Moores Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/day)	Allocated Nonpoint Sources (LA) (lb/day)	Margin of Safety (MOS) (lb/day)	Maximum Daily Load (MDL) (lb/day)
Moores Creek (VAV-I36R_MRC01A00)	164.5	6,116	697.8	6,978
<i>Construction Stormwater General Permits</i>	95.75			
<i>Future Growth</i>	68.75			

Table 1-8. Maximum daily sediment loads for Mill Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/day)	Allocated Nonpoint Sources (LA) (lb/day)	Margin of Safety (MOS) (lb/day)	Maximum Daily Load (MDL) (lb/day)
Mill Creek (VAV-I35R_MIS01A00)	121.4	7,085	800.7	8,007
<i>Construction Stormwater General Permits</i>	17.55			
<i>Industrial Stormwater Permits</i>	16.38			
<i>Future Growth</i>	87.50			

Public Participation

Throughout this study, VADEQ asked for the help of local residents and knowledgeable stakeholders – those who have a particular interest in or may be affected by the outcome of the project. Public participation keeps stakeholders informed, and it allows for stakeholder input to ensure information in the study is accurate. While the project was progressing, VADEQ held two public meetings and two Technical Advisory Committee (TAC) meetings, as well as a Pre-TAC meeting to identify key stakeholders. The final public meeting was held on October 26, 2022 to present the draft TMDL document and begin the official public comment period. The public comment period closed on November 29, 2022, no comments were received.

Reasonable Assurance


Public participation in the development of the TMDL and implementation plans, follow-up monitoring, permit compliance, and current implementation progress within the watersheds all combine to provide reasonable assurance that these TMDLs will be implemented and water quality will be restored in the impaired watersheds.

What Happens Next

VADEQ will receive public comment on this report and then submit it to the U.S. Environmental Protection Agency (USEPA) for approval. This report sets the clean-up goals for Moores Creek and Mill Creek, but the next step is a clean-up plan (or Implementation Plan) that lays out how those goals will be reached. Clean-up plans set intermediate goals and describe actions that should be taken to improve water quality in the impaired streams. Some of the potential actions that could be included in an implementation plan for the Moores Creek and Mill Creek watersheds are listed below:

- Fence out cattle from streams and provide alternative water sources
- Implement conservation tillage practices on cropland
- Conduct stream bank restoration projects in areas where banks are actively eroding
- Leave a band of 35 – 100 ft along the stream natural so that it buffers or filters out sediment from farm or residential land (a riparian buffer)
- Reduce runoff by increasing green spaces and reducing hardened spaces (asphalt or concrete)

These and other actions that could be included in a clean-up plan are identified in the planning process along with associated costs and the extent of each practice needed. The clean-up plan also identifies potential sources of money to help in the clean-up efforts. Most of the money utilized to implement actions in the watersheds to date has been in the form of cost-share programs, which share the cost of improvements with the landowner. Additional funds for urban stormwater practices can be made available through various grant programs, including an annual funding opportunity through the National Fish and Wildlife Foundation's Chesapeake Bay Stewardship Fund program. Please be aware that the state or federal government will not fix the problems with the impaired streams. It is primarily the responsibility of individual landowners and local governments to take the actions necessary to improve these streams. The role of state agencies is to help with developing the plan and find money to support implementation, but actually making the improvements is up to those that live in the watershed. By increasing education and awareness of the problem, and by working together to each do our part, we can make the changes necessary to improve the streams.



Frequently Asked

Question:

How will the TMDL be implemented? For point sources, TMDL reductions will be implemented through discharge permits. For nonpoint sources, TMDL reductions will be implemented through best management practices (BMPs). Landowners will be asked to voluntarily participate in state and federal programs that help

VADEQ will continue to sample aquatic life in these streams and monitor the progress of clean-up. This sampling will let us know when the clean-up has reached certain milestones listed in the plan. To begin moving towards these clean-up goals, VADEQ recommends that concerned citizens come together and begin working with local governments, civic groups, soil and water conservation districts, and local health districts to increase education and awareness of the problem and promote those activities and programs that improve stream health.

**Benthic TMDL Development for the Beaverdam
Creek, Fryingpan Creek, Pigg River, and Poplar
Branch Watersheds
Located in Bedford, Pittsylvania, and Franklin
Counties**



Prepared by:

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2.0 and

3.0 James Madison University

4.0

Prepared for:

5.0 Virginia Department of Environmental Quality

6.0 October 2022



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Acknowledgements

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EXECUTIVE SUMMARY

Background

The Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch watersheds are in Bedford, Franklin, and Pittsylvania Counties, Virginia. Beaverdam Creek is situated in Bedford County and drains the area east of the City of Roanoke, including the town of Stewartsville. Beaverdam Creek flows into upper Smith Mountain Lake (Roanoke River), and is largely a mosaic of cropland, forest, and pasture. Fryingpan Creek is situated in Pittsylvania County and flows northwest into the Pigg River, just before it joins Leesville Lake. The study portion of Fryingpan Creek runs from its headwaters for 2.5 miles, ending roughly a mile after it crosses under route 40. Fryingpan Creek's watershed consists mostly of cropland, forest, and pasture. The study portion of the Pigg River lies in Franklin County, and its watershed consists primarily of cropland, pasture and forested land. The impaired reach extends from the junction of the Pigg River and Turners Creek upstream 2.95 miles. Poplar Branch is situated in Franklin County, running from its confluence with Snow Creek upstream 2.56 miles. Poplar Branch's watershed, like the other study watersheds, consists primarily of cropland, pasture, and forested land. All study reaches are either direct or indirect tributaries to the Roanoke River (also referred to as the Staunton River in some areas) which flows southeast through North Carolina into the Albemarle Sound and the Atlantic Ocean.



Definition:

Watershed – All of the land area that drains to a particular point or body of water.

Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch are listed as impaired on Virginia's 2020 Section 305(b)/303(d) Water Quality Assessment Integrated Report due to water quality violations of the general aquatic life (benthic) standard. The impaired segments addressed in this document are shown in **Table 1-1**. The watersheds of the impaired streams are shown in **Figure 1-1**.

Table 1-1. Impaired segments addressed in this TMDL study.

Beaverdam Creek	VAW-L07R_BDA01A00 (4.98 miles)	L07R-01-BEN	4ABDA006.72	2010
	VAW-L07R_BDA02A00 (5.35 miles)			
Fryingpan Creek	VAW-L18R_FRY01A06 (2.56 miles)	L18R-01-BEN	4AFRY006.08	2006
Pigg River	VAW-L14R_PGG05B12 (1.48 miles)	L14R-01-BEN	4APGG076.93	2012
	VAW-L14R_PGG06A02 (1.01 miles)			
	VAW-L14R_PGG06B12 (1.94 miles)			
Poplar Branch	VAW-L17R_PAA01A04 (2.56 miles)	L17-01-BEN	4APAA000.24	2008
			4APAA000.71	

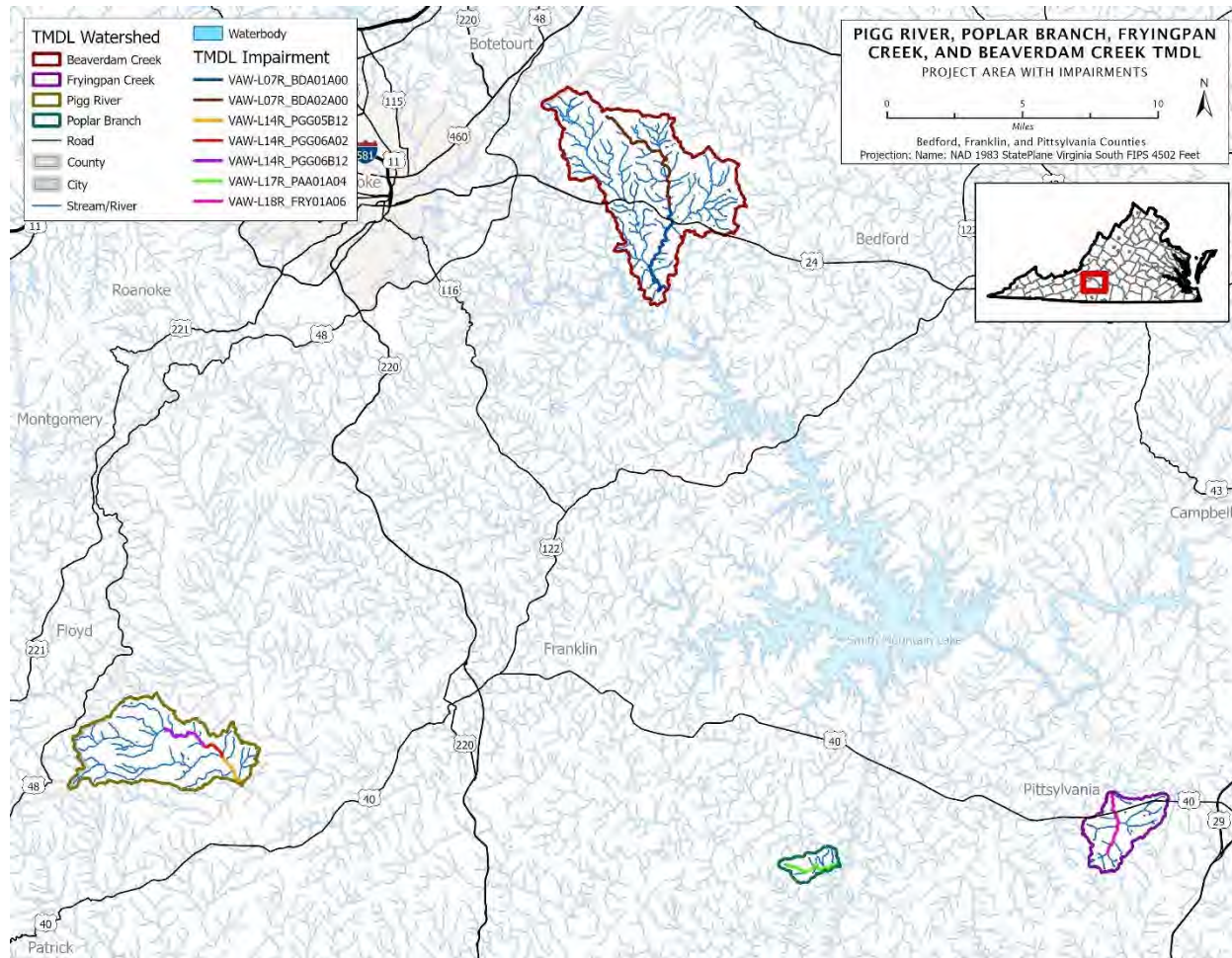


Figure 1-1. Location of the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch watersheds and impairments.

The Problem

Impaired Aquatic Life

The Commonwealth of Virginia sets standards for all the waters in the state. One of those standards is the expectation that every stream will support a healthy and diverse community of bugs and fish (the aquatic life standard). The Virginia Department of Environmental Quality (VADEQ) determines whether this standard is met by measuring the diversity and pollution sensitivity of benthic macroinvertebrates (bugs that live on the bottom of the stream). The health and diversity of these bugs are assessed using the Virginia Stream Condition Index (VSCI), which is measured on a scale from 0 to 100, with scores greater than 60 being acceptable. **Figure 1-2** shows the various monitoring stations throughout the watershed, color-coded by the average score at each site. Red and yellow icons indicate that the streams do not support a healthy and diverse community of bugs and fish. This shows that the various impaired streams in this study fail the aquatic life standard, and pollutants within the watershed need to be identified and reduced.

A benthic stressor analysis study was conducted in 2021 to determine the reason for the benthic impairments in the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch watersheds (**Appendix D**). The study found that the main cause of all impairments was too much sediment.

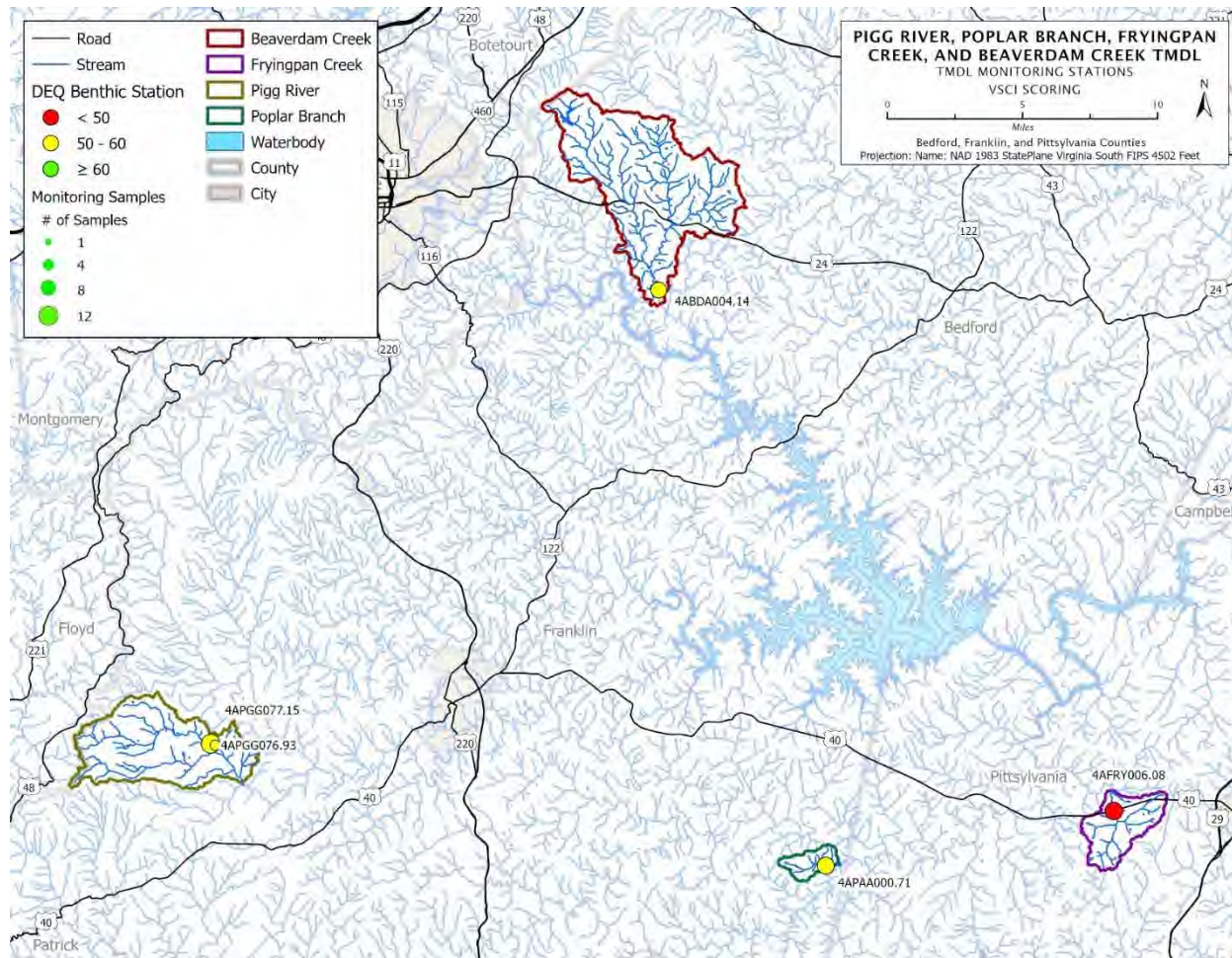


Figure 1-2. Stream health score summaries in the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch Watersheds.


Excess Sediment

Excess sediment was identified as the primary stressor in all TMDL watersheds. When it rains, sediment is washed off the land surface into nearby creeks and rivers. The amount of soil that is washed off depends upon how much it rains and the type of land that the rain falls on. Some land types, like a freshly plowed farm field or a construction site, can yield large amounts of sediment when it rains, while other land types, like forests and well-maintained pasture, yield only a small amount. When that soil gets into nearby streams, it falls to the bottom as sediment and can smother certain aquatic insects that live on the bottom of the stream, limiting the diversity of aquatic life.

The Study

To study the problem of excess sediment in the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch watersheds, a combination of monitoring and computer modeling was utilized. Monitoring was used to determine how much sediment is in the streams at any given time and how aquatic life conditions have changed over time. The computer model was used to estimate where the sediment is coming from and make predictions about how stream conditions would change if those sources were reduced.

For this purpose, a computer model, the Generalized Watershed Loading Function model (or GWLF), was used. GWLF considers the slope, soils type, land cover, soil erodibility, and runoff to estimate the amount of soil eroded from the watershed and deposited in the stream. The model was calibrated against real-world flow measurements taken from the stream to ensure that it was producing accurate results. The tested model was then used to estimate the sediment reductions that would be needed to restore a healthy condition for aquatic life in the impaired streams.



Frequently Asked Question:

Why use a computer model? Sampling and testing tell you a lot about the present and the past, but nothing about the future. A computer model is a tool that can help you make predictions about the future. This is necessary to figure out



Definition:

TMDL – Total Maximum Daily Load. This is the amount of a pollutant that a stream can receive and still meet water quality standards. The term TMDL is also used more generally to describe the state’s formal process for cleaning up

This report summarizes the study and sets goals for a clean-up plan. The study is called a Total Maximum Daily Load (TMDL) because it determines the maximum daily amount of sediment that can get into a certain stream without harming the stream or the creatures living in it.

Current Conditions

For this report, the Virginia Geographic Information Network (VGIN) 2016 Virginia Land Cover Dataset (VLCD) was used to represent the current land use

(Section 3.4). The land cover distribution for each impaired watershed is shown in **Figure 1-3** to **Figure 1-6**. Most of the land cover in all study watersheds is forest, ranging from 57 to 76%, followed by pasture, ranging from 15 to 26%. Except for Beaverdam creek, cropland is the third most common land cover type, ranging from 5 to 7%. None of the watersheds are significantly developed.

This land cover dataset combined with an accounting of the permitted discharges represent the major pollutant sources in the watersheds. The GWLF model was used to figure out the relative contribution of sources of sediment in the impaired watersheds. **Figure 1-3** through **Figure 1-6** show the distribution of sediment contributions from various sources in the watersheds. The permitted sources include one Virginia Pollutant Discharge Elimination System (VPDES) individual permit and two domestic sewage permits, all in Beaverdam Creek. The sediment loads from permitted sources were calculated based on the permit language, reported discharge data, and land cover type and area (detailed in **Section 4.3.2**). In all four of these TMDL watersheds, pasture or cropland were the primary sources of sediment.



Definition:

Point Source – pollution that comes out of a pipe (like at a sewage treatment plant).

Nonpoint Source – pollution that does not come out of a pipe but comes generally from the

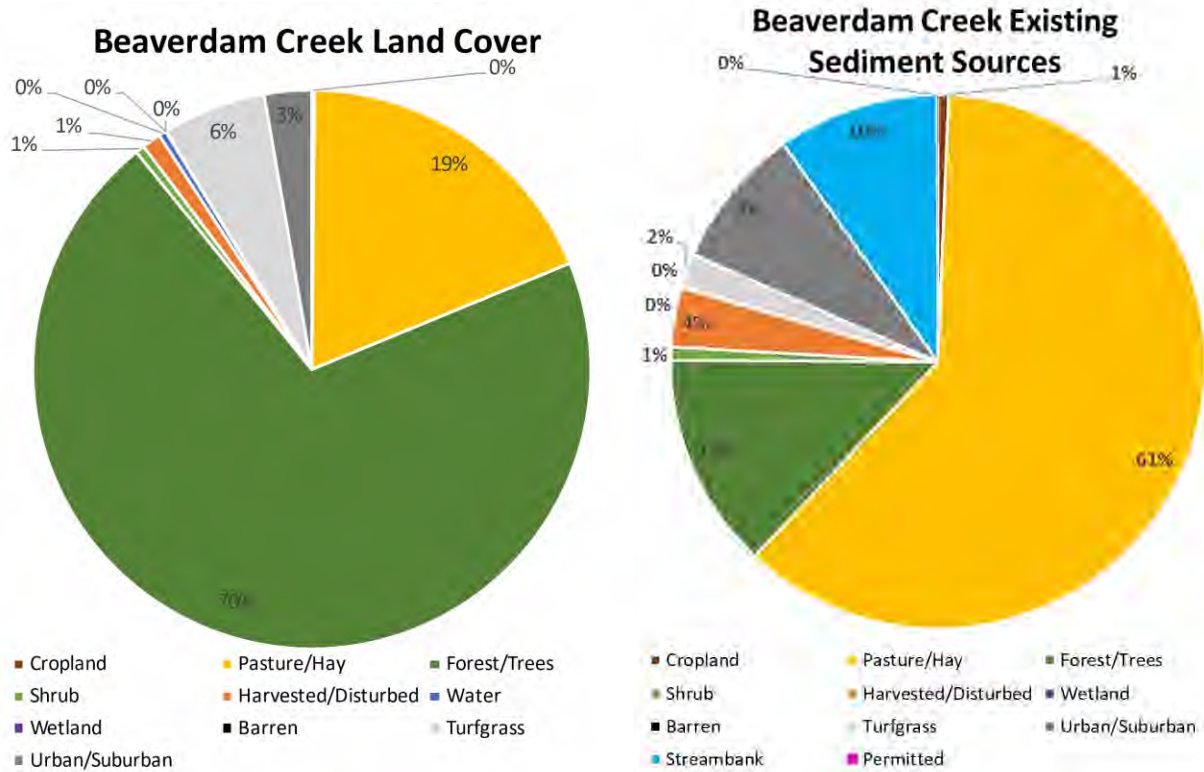


Figure 1-3. Land cover and existing source load distributions in the Beaverdam Creek watershed.

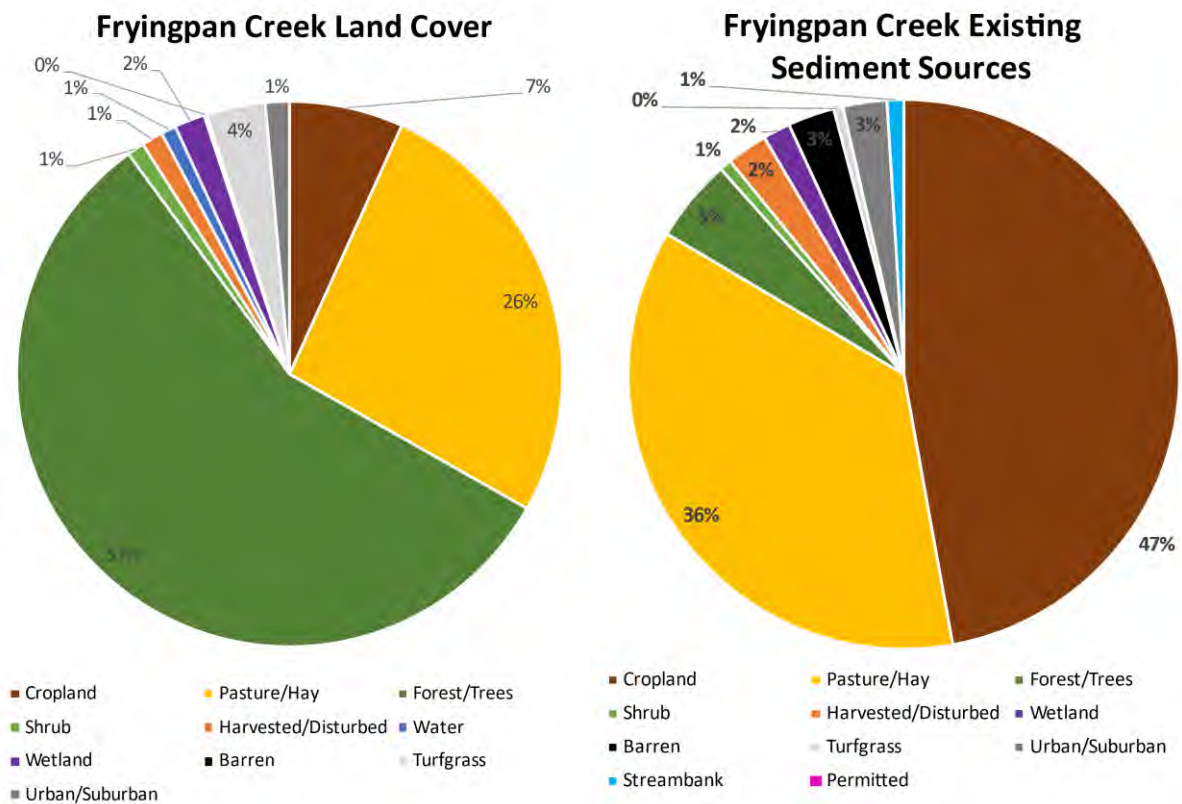


Figure 1-4. Land cover and existing source load distributions in the Fryingpan Creek watershed.

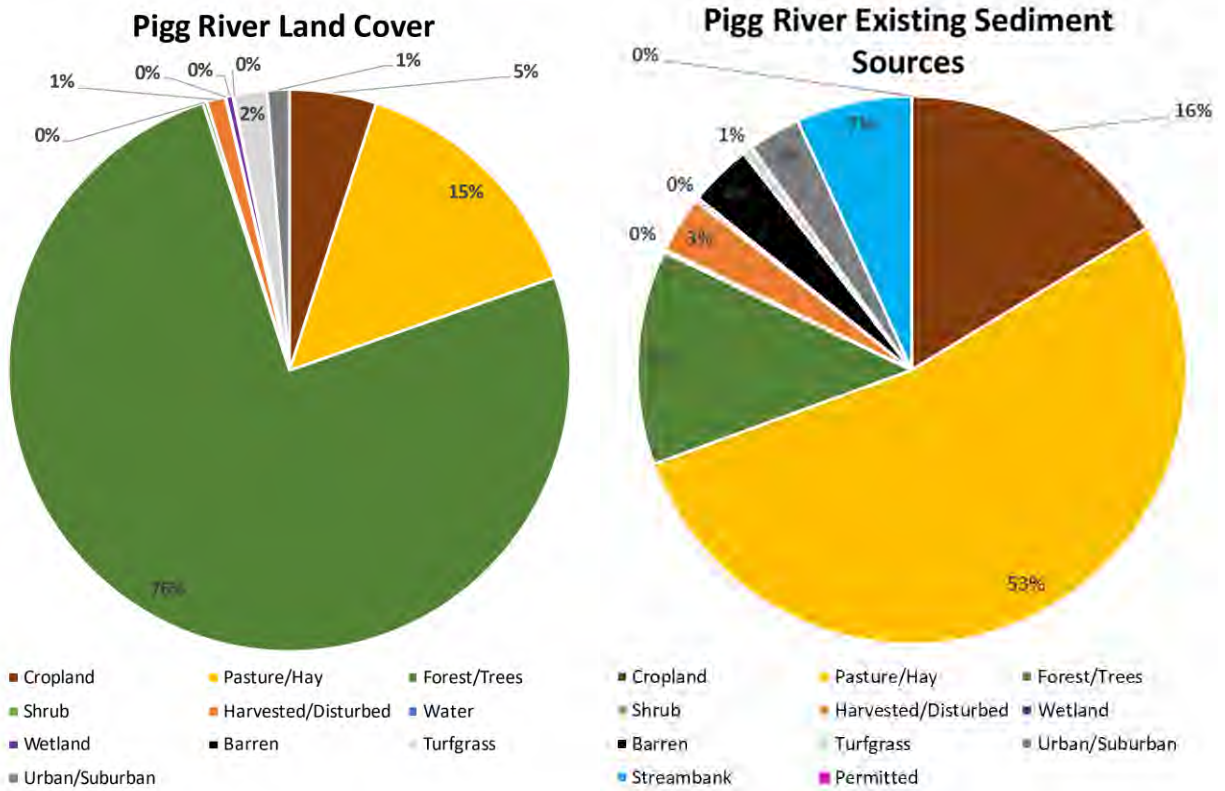


Figure 1-5. Land cover and existing source load distribution in the Pigg River watershed.

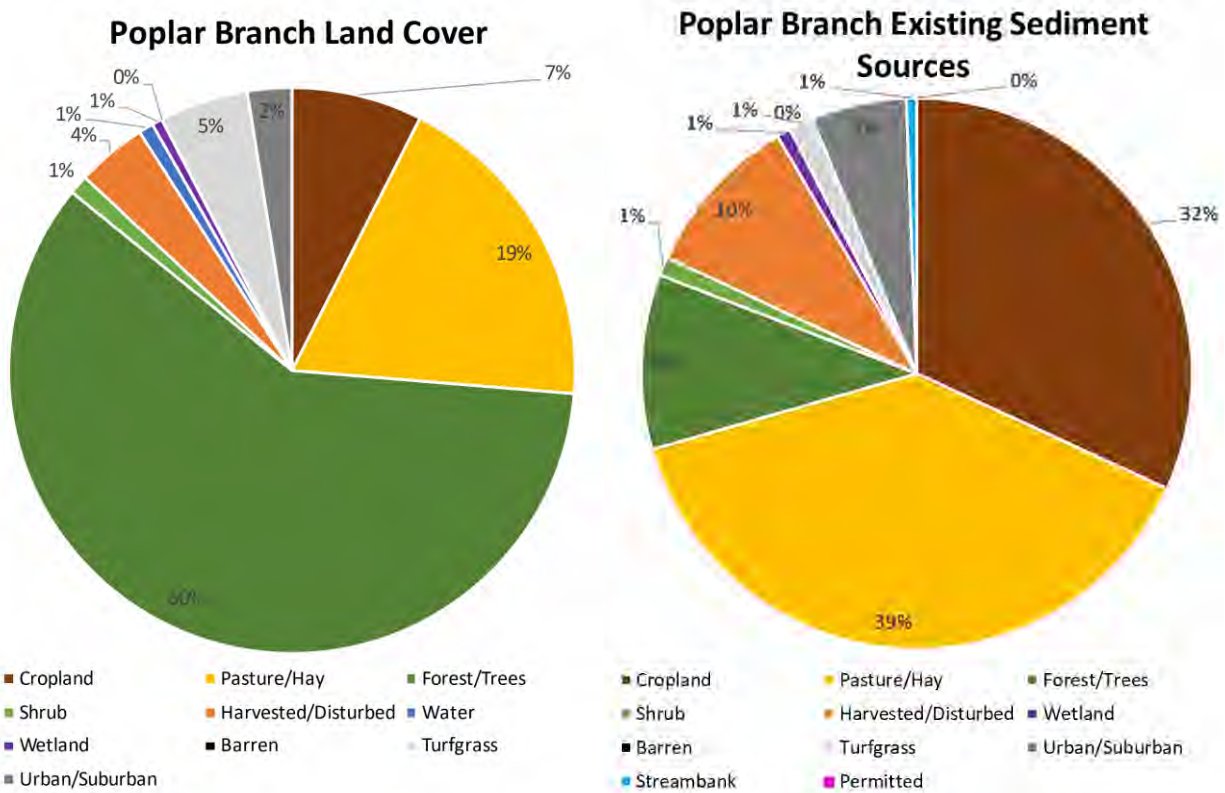


Figure 1-6. Land cover and existing source load distribution in the Poplar Branch watershed.

Future Goals (the TMDL)

After determining the source of sediment in the impaired stream, a computer model was used to determine the amount that sediment loads need to be reduced to promote healthy aquatic life in each stream. The goal for these reductions is for the impaired streams to have sediment levels that allow for diverse and abundant aquatic life. The reductions in sediment needed to meet these goals are shown in **Table 1-2**.

Table 1-2. Percent reductions in sediment needed to clean up the impaired waters.

Watershed	Crop, Pasture, Hay (%)	Forest, Trees, Shrubs, Wetland (%)	Developed Pervious and Impervious Areas, Barren, Turfgrass (%)	Streambank Erosion (%)	Permitted Sources (%)
Beaverdam Creek	30.4	0	30.4	30.4	0
Fryingpan Creek	76.1	0	76.1	76.1	0
Pigg River	31.5	0	31.5	31.5	0
Poplar Branch	56.1	0	56.1	56.1	0

To obtain healthy sediment levels in the impaired streams, significant reductions are needed from several sediment sources. Sediment loads from agricultural and urban/suburban land covers within Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch need to be reduced by 30.4%, 76.1%, 31.5%, and 56.1%, respectively. The total amount of sediment per year that would be entering each of these streams after the recommended reductions are made represent the total maximum daily load of sediment for each stream (**Table 1-3** through **Table 1-6**). This load includes permitted sources as well as future growth to account for potential future permitted sources. These annual loads are converted to daily maximum loads as well, as described in **Section 6.3** (**Table 1-7** and **Table 1-10**). If sediment loads are reduced to these amounts, healthy aquatic life is expected to be restored in these streams.

Table 1-3. Annual sediment loads that will meet the water quality standard in Beaverdam Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/yr)	Allocated Nonpoint Sources (LA) (lb/yr)	Margin of Safety (MOS) (lb/yr)	Total Maximum Daily Load (TMDL) (lb/yr)	Existing Load (lb/yr)	Overall Reduction (%)
Beaverdam Creek (VAW-L07R_BDA01A00, VAW-L07R_BDA02A00)	51,410	2,216,000	252,000	2,520,000	3,300,000	23.7%
<i>VA0020842</i>	822					
<i>Domestic Sewage Permits</i>	183					
<i>Construction Permits (0.2% of TMDL)</i>	5,040					
<i>Future Growth (1.8% of TMDL)</i>	43,360					

Table 1-4. Annual loads that will meet the water quality standard in Fryingpan Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/yr)	Allocated Nonpoint Sources (LA) (lb/yr)	Margin of Safety (MOS) (lb/yr)	Total Maximum Daily Load (TMDL) (lb/yr)	Existing Load (lb/yr)	Overall Reduction (%)
Fryingpan Creek (VAW-L18R_FRY01A06)	6,593	289,300	32,960	329,000	1,020,698	67.8%
<i>Construction Permits (0.2% of TMDL)</i>	659					
<i>Future Growth (1.8% of TMDL)</i>	5,933					

Table 1-5. Annual loads that will meet the water quality standard in the Pigg River.

Impairment	Allocated Permitted Point Sources (WLA) (lb/yr)	Allocated Nonpoint Sources (LA) (lb/yr)	Margin of Safety (MOS) (lb/yr)	Total Maximum Daily Load (TMDL) (lb/yr)	Existing Load (lb/yr)	Overall Reduction (%)
Pigg River (VAW-L14R_PGG05B12, VAW-L14R_PGG06A02, VAW-L14R_PGG06B12)	39,200	1,720,000	196,000	1,960,000	2,610,000	24.9%
<i>Construction Permits (0.5% of TMDL)</i>	9,799					
<i>Future Growth (1.5% of TMDL)</i>	29,400					

Table 1-6. Annual loads that will meet the water quality standard in Poplar Branch.

Impairment	Allocated Permitted Point Sources (WLA) (lb/yr)	Allocated Nonpoint Sources (LA) (lb/yr)	Margin of Safety (MOS) (lb/yr)	Total Maximum Daily Load (TMDL) (lb/yr)	Existing Load (lb/yr)	Overall Reduction (%)
Poplar Branch (VAW-L17R_PAA01A04)	3,357	147,500	16,780	168,000	311,000	46.1%
<i>Construction Permits (0.2% of TMDL)</i>	336					
<i>Future Growth (1.8% of TMDL)</i>	3,021					

Table 1-7. Maximum daily sediment loads for Beaverdam Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/day)	Allocated Nonpoint Sources (LA) (lb/day)	Margin of Safety (MOS) (lb/day)	Maximum Daily Load (MDL) (lb/day)
Beaverdam Creek (VAW-L07R_BDA01A00, VAW-L07R_BDA02A00)	141	14,300	1,600	16,000
<i>VPDES Individual Permit</i>	2.25			
<i>Domestic Sewage Permits</i>	0.5			
<i>Construction Permits</i>	13.8			
<i>Future Growth</i>	124			

Table 1-8. Maximum daily sediment loads for Fryingpan Creek.

Impairment	Allocated Permitted Point Sources (WLA) (lb/day)	Allocated Nonpoint Sources (LA) (lb/day)	Margin of Safety (MOS) (lb/day)	Maximum Daily Load (MDL) (lb/day)
Fryingpan Creek (VAW-L18R_FRY01A06)	18.1	1,910	214	2,140
<i>Construction Permits</i>	1.8			
<i>Future Growth</i>	16.3			

Table 1-9. Maximum daily sediment loads for the Pigg River.

Impairment	Allocated Permitted Point Sources (WLA) (lb/day)	Allocated Nonpoint Sources (LA) (lb/day)	Margin of Safety (MOS) (lb/day)	Maximum Daily Load (MDL) (lb/day)
Pigg River (VAW-L14R_PGG05B12, VAW-L14R_PGG06A02, VAW-L14R_PGG06B12)	107	11,300	1,270	12,700
<i>Construction Permits</i>	<i>26.8</i>			
<i>Future Growth</i>	<i>80.5</i>			

Table 1-10. Maximum daily sediment loads for the Poplar Branch.

Impairment	Allocated Permitted Point Sources (WLA) (lb/day)	Allocated Nonpoint Sources (LA) (lb/day)	Margin of Safety (MOS) (lb/day)	Maximum Daily Load (MDL) (lb/day)
Poplar Branch (VAW-L17R_PAA01A04)	9.19	981	110	1,100
<i>Construction Permits</i>	<i>0.92</i>			
<i>Future Growth</i>	<i>8.27</i>			

1.1.1. Allocation Scenarios

There are many ways to reduce pollutants to reach TMDL goals. Several versions of these reduction plans, or allocation scenarios, were developed. These were presented to the Technical Advisory Committee which determined that Scenario 1 was preferred for each watershed (see **Table 1-11** through **Table 1-14**) . Model results were rounded to four significant figures, and calculated totals of those results were rounded to three significant figures.

Table 1-11. Allocation scenarios for Beaverdam Creek sediment loads.

Beaverdam Creek Watershed		Scenario 1 (preferred)		Scenario 2		Scenario 3	
Source	Existing TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)
Cropland	17,820	30.4	12,400	25.2	13,330	-	17,820
Hay	132,100	30.4	91,970	25.2	98,840	43.0	75,320
Pasture	1,686,000	30.4	1,173,000	25.2	1,261,000	43.0	961,000
Forest	304,700	-	304,700	-	304,700	-	304,700
Trees	96,380	-	96,380	-	96,380	-	96,380
Shrub	24,450	-	24,450	-	24,450	-	24,450
Harvested	110,800	30.4	77,130	25.2	82,890	-	110,800
Wetland	405	-	405	-	405	-	405
Barren	-	-	-	-	-	-	-
Turfgrass	64,030	30.4	44,560	25.2	47,890	-	64,030
Developed Pervious	5,339	30.4	3,716	25.2	3,994	-	5,339
Developed Impervious	258,700	30.4	180,000	25.2	193,500	-	258,700
Streambank Erosion	297,300	30.4	206,900	70.0	89,180	-	297,300
VA0020842	822	-	822	-	822	-	822
Domestic Sewage Permits	183	-	183	-	183	-	183
Construction Permits (0.2%)	5,041	-	5,041	-	5,041	-	5,041
Future Growth (1.8%)	45,360	-	45,360	-	45,360	-	45,360
MOS (10%)	252,000	-	252,000	-	252,000	-	252,000
TOTAL	3,300,000	23.6	2,520,000	23.6	2,520,000	23.6	2,520,000

Table 1-12. Allocation scenarios for Fryingpan Creek sediment loads.

Fryingpan Creek Watershed		Scenario 1 (preferred)		Scenario 2		Scenario 3	
Source	Existing TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)
Cropland	470,800	76.1	112,500	70.0	141,200	82.8	80,980
Hay	27,880	76.1	6,662	82.5	4,878	65.0	9,756
Pasture	318,100	76.1	76,010	82.5	55,660	65.0	111,300
Forest	42,260	-	42,260	-	42,260	-	42,260
Trees	6,609	-	6,609	-	6,609	-	6,609
Shrub	7,081	-	7,081	-	7,081	-	7,081
Harvested	24,080	76.1	5,756	82.5	4,215	82.8	4,142
Wetland	16,030	-	16,030	-	16,030	-	16,030
Barren	27,380	-	6,544	-	4,792	-	4,710
Turfgrass	5,384	76.1	1,287	82.5	942	82.8	926
Developed Pervious	296	76.1	71	82.5	52	82.8	51
Developed Impervious	25,490	76.1	6,092	82.5	4,461	82.8	4,384
Streambank Erosion	9,796	76.1	2,341	82.5	1,714	82.8	1,685
Construction Permits (0.2%)	659	-	659	-	659	-	659
Future Growth (1.8%)	5,934	-	5,934	-	5,934	-	5,934
MOS (10%)	32,960	-	32,960	-	32,960	-	32,960
TOTAL	1,020,000	67.7	329,000	67.7	329,000	67.7	329,000

Table 1-13. Allocation scenarios for Pigg River sediment loads.

Pigg River Watershed		Scenario 1 (preferred)		Scenario 2		Scenario 3	
Source	Existing TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)
Cropland	387,800	31.5	265,700	34.2	255,200	25.0	290,900
Hay	48,590	31.5	33,290	34.2	31,980	25.0	36,450
Pasture	1,211,000	31.5	829,800	34.2	797,100	25.0	908,600
Forest	270,100	-	270,100	-	270,100	-	270,100
Trees	30,640	-	30,640	-	30,640	-	30,640
Shrub	3,872	-	3,872	-	3,872	-	3,872
Harvested	79,560	31.5	54,500	34.2	52,350	25.0	59,670
Wetland	5,177	-	5,177	-	5,177	-	5,177
Barren	87,440	31.5	59,900	34.2	57,540	64.6	30,950
Turfgrass	13,990	31.5	9,586	34.2	9,208	64.6	4,954
Developed Pervious	1,929	31.5	1,322	34.2	1,270	64.6	683
Developed Impervious	71,400	31.5	48,910	34.2	46,980	64.6	25,280
Streambank Erosion	161,900	31.5	110,900	-	161,900	64.6	57,330
Construction Permits (0.5%)	9,799	-	9,799	-	9,799	-	9,799
Future Growth (1.5%)	29,400	-	29,400	-	29,400	-	29,400
MOS (10%)	196,000	-	196,000	-	196,000	-	196,000
TOTAL	2,610,000	24.9	1,960,000	24.9	1,960,000	24.9	1,960,000

Table 1-14. Allocation scenario for Poplar Branch sediment loads.

Poplar Branch Watershed		Scenario 1 (preferred)		Scenario 2		Scenario 3	
Source	Existing TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)	Reduction (%)	Allocation TSS (lb/yr)
Cropland	92,610	56.1	40,660	45.1	50,840	75.0	23,150
Hay	11,140	56.1	4,888	70.0	3,340	45.3	6,091
Pasture	101,300	56.1	44,490	70.0	30,400	45.3	55,440
Forest	25,070	-	25,070	-	25,070	-	25,070
Trees	4,793	-	4,793	-	4,793	-	4,793
Shrub	3,200	-	3,200	-	3,200	-	3,200
Harvested	27,970	56.1	12,280	45.1	15,360	45.3	15,300
Wetland	2,359	-	2,359	-	2,359	-	2,359
Barren	-	-	-	-	-	-	-
Turfgrass	4,205	56.1	1,846	45.1	2,309	45.3	2,300
Developed Pervious	595	56.1	261	45.1	326	45.3	325
Developed Impervious	15,630	56.1	6,861	45.1	8,580	45.3	8,549
Streambank Erosion	1,768	56.1	776	45.1	971	45.3	967
Construction Permits (0.2%)	336	-	336	-	336	-	336
Future Growth (1.8%)	3,021	-	3,021	-	3,021	-	3,021
MOS (10%)	16,780	-	16,780	-	16,780	-	16,780
TOTAL	311,000	46.0	168,000	46.0	168,000	46.0	168,000

Public Participation

Throughout this study, VADEQ asked for the help of local residents and knowledgeable stakeholders – those who have a particular interest in or may be affected by the outcome of the project. Public participation keeps stakeholders informed, and it allows for stakeholder input to ensure information in the study is accurate. While the project was progressing, VADEQ held two public meetings and three Technical Advisory Committee (TAC) meetings. The final public meeting was held on September 27th, 2022 to present the draft TMDL document and begin the official public comment period.

Reasonable Assurance

Public participation in the development of the TMDL and implementation plans, follow-up monitoring, permit compliance, and current implementation progress within the watersheds all combine to provide reasonable assurance that these TMDLs will be implemented and water quality will be restored in the impaired watersheds.

What Happens Next

VADEQ will receive public comment on this report and then submit it to the U.S. Environmental Protection Agency (USEPA) for approval. This report sets the clean-up goals for Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch, but the next step is a clean-up plan (or Implementation Plan) that lays out how those goals will be reached. Clean-up plans set intermediate goals and describe actions that should be taken to improve water quality in the impaired streams. Some of the potential actions that could be included in an implementation plan for Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch watersheds are listed below:

- Fence out cattle from streams and provide alternative water sources
- Implement conservation tillage practices on cropland
- Conduct stream bank restoration projects in areas where banks are actively eroding
- Leave a band of 35 – 100 ft along the stream natural so that it buffers or filters out sediment from farm or residential land (a riparian buffer)
- Expanded street sweeping programs in urban areas



Frequently Asked

Question:

How will the TMDL be implemented? For point sources, TMDL reductions will be implemented through discharge permits. For nonpoint sources, TMDL reductions will be implemented through best management practices (BMPs). Landowners will be asked to voluntarily participate in state and federal programs that help

- Reduce runoff by increasing green spaces and reducing hardened spaces (asphalt or concrete)

These and other actions that could be included in a clean-up plan are identified in the planning process along with associated costs and the extent of each practice needed. The clean-up plan also identifies potential sources of money to help in the clean-up efforts. Most of the money utilized to implement actions in the watersheds to date has been in the form of cost-share programs, which share the cost of improvements with the landowner. Additional funds for urban stormwater practices have been made available through various grants. Please be aware that the state or federal government will not fix the problems with the impaired streams. It is primarily the responsibility of individual landowners and local governments to take the actions necessary to improve these streams. The role of state agencies is to help with developing the plan and find money to support implementation, but actually making the improvements is up to those that live in the watershed. By increasing education and awareness of the problem, and by working together to each do our part, we can make the changes necessary to improve the streams.

VADEQ will continue to sample aquatic life in these streams and monitor the progress of clean-up. This sampling will let us know when the clean-up has reached certain milestones listed in the plan. To begin moving towards these clean-up goals, VADEQ recommends that concerned citizens come together and begin working with local governments, civic groups, soil and water conservation districts, and local health districts to increase education and awareness of the problem and promote those activities and programs that improve stream health.

**Attachment II – Amended Water Quality Management Planning Regulation
proposed for Board Adoption**

9 VAC 25-720-60 A James River Basin
9 VAC 25-720-80 A Roanoke River Basin

9VAC25-720-60. James River Basin.

A. Total Maximum Daily Load (TMDLs).

TMDL #	Stream Name	TMDL Title	City/County	Waterbody Identification	Pollutant	WLA ¹	Units
<u>183.</u>	<u>Moores Creek</u>	<u>Benthic TMDL Development for the Moores Creek and Mill Creek Watersheds Located in Rockbridge County, Virginia</u>	<u>Rockbridge, Augusta</u>	<u>I36R</u>	<u>Sediment</u>	<u>60,080</u>	<u>lbs/yr</u>
<u>184.</u>	<u>Mill Creek</u>	<u>Benthic TMDL Development for the Moores Creek and Mill Creek Watersheds Located in Rockbridge County, Virginia</u>	<u>Rockbridge</u>	<u>I35R</u>	<u>Sediment</u>	<u>44,360</u>	<u>lbs/yr</u>

¹The total WLA can be increased prior to modification provided that DEQ track these changes for bacteria TMDLs where the permit is consistent with water quality standards for bacteria.

² GS means growing season.

9VAC25-720-80. Roanoke River Basin.

A. Total Maximum Daily Load (TMDLs).

TMDL #	Stream Name	TMDL Title	City/County	Waterbody Identification	Pollutant	WLA ¹	Units
<u>121.</u>	Beaverdam Creek	Benthic TMDL Development for the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch Watersheds Located in Bedford, Pittsylvania and Franklin Counties	<u>Bedford</u>	<u>L07R</u>	<u>Sediment</u>	<u>51,410</u>	<u>lbs/year</u>
<u>122.</u>	Fryingpan Creek	<u>Benthic TMDL Development for the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch Watersheds Located in Bedford, Pittsylvania and Franklin Counties</u>	<u>Pittsylvania</u>	<u>L18R</u>	<u>Sediment</u>	<u>6,593</u>	<u>lbs/year</u>
<u>123.</u>	<u>Pigg River</u>	<u>Benthic TMDL Development for the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch Watersheds Located in Bedford, Pittsylvania and Franklin Counties</u>	<u>Franklin</u>	<u>L14R</u>	<u>Sediment</u>	<u>39,200</u>	<u>lbs/year</u>
<u>124.</u>	<u>Poplar Branch</u>	<u>Benthic TMDL Development for the Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch Watersheds Located in Bedford, Pittsylvania and Franklin Counties</u>	<u>Franklin</u>	<u>L17R</u>	<u>Sediment</u>	<u>3,357</u>	<u>lbs/year</u>

¹The total WLA can be increased prior to modification provided that DEQ track these changes for bacteria TMDLs where the permit is consistent with water quality standards for bacteria.

²WLAs from the Dan River TMDL report represent the WLA for the watershed, which may include North Carolina waters in addition to Virginia waters. Virginia permits will be issued in accordance with the Virginia water quality standard.



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Exempt Action: Final Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-720
VAC Chapter title(s)	Water Quality Management Planning Regulation
Action title	Amendment to add six new TMDL wasteload allocations in the James River Basin (9VAC25-720-60 A) and Roanoke River Basin (9VAC25-720-80 A).
Final agency action date	November 30, 2023
Date this document prepared	September 15, 2023

This information is required for executive branch review pursuant to Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19. In addition, this information is required by the Virginia Registrar of Regulations pursuant to the Virginia Register Act (§ 2.2-4100 et seq. of the Code of Virginia). Regulations must conform to the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code. 30, 2023*

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The amendments to the state’s Water Quality Management Planning Regulation (9 VAC 25-720) include adding two new Total Maximum Daily Load (TMDL) wasteload allocations (WLA) in the James River Basin (9VAC25-720-60 A) and four new TMDL WLAs in the Roanoke River Basin (9VAC25-720-80 A).

The TMDL WLAs were developed in accordance with Federal Regulations (40 CFR § 130.7) and are exempt from the provisions of Article II of the Virginia Administrative Process Act (§2.2-4006 A 14). The TMDL reports where WLAs are developed are subject to the TMDL public participation

process, and the WLAs are adopted as part of 9 VAC 25-720 in accordance with the Department of Environmental Quality’s (DEQ’s) “Public Participation Procedures for Water Quality Management Planning”.

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, “mandate” has the same meaning as defined in the ORM procedures, “a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part.”

The Clean Water Act (“CWA”) and the U.S. EPA Water Quality Management and Planning Regulation (40 CFR §130) require states to identify waters that are in violation of water quality standards and to place these waters on the state’s 303(d) List of Impaired Waters. Also, the CWA and EPA’s enabling regulation require that a TMDL be developed for those waters identified as impaired. In addition, the Code of Virginia, §62.1-44.19:7.C requires DEQ to develop TMDLs for impaired waters. A TMDL is a determination of the amount of a specific pollutant that a water body is capable of receiving without violating water quality standards for that pollutant. TMDLs are required to identify all sources of the pollutant and calculate the pollutant loads from each source that are necessary for the attainment of water quality standards.

The U.S. EPA’s Water Quality Management and Planning Regulation 40 CFR §130.7(d) (2) directs the states to incorporate TMDLs in the state’s Water Quality Management Plan (9 VAC 25-720). Also, U.S. EPA’s Water Quality Management and Planning Regulation 40 CFR §122.44(d) (1) (vii) (B) requires that new or reissued VPDES permits be consistent with the TMDL WLA. This means that the WLA component of the TMDL incorporated into the regulation will be implemented through the requirements specified in the VPDES permits, for example through numeric water quality based effluent limitations or in certain cases best management practices (“BMPs”).

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the “Definitions” section of the regulation.

Allocation: That portion of a receiving water’s loading capacity that is attributed to one of its existing or future pollution sources (nonpoint or point) or to natural background sources.

Nonpoint source: Pollution that is not released through pipes but rather originates from multiple sources over a relatively large area. Nonpoint sources can be divided into source activities related to either land or water use including failing septic tanks, improper animal-keeping practices, forest practices, and urban and rural runoff.

Total Maximum Daily Load (TMDL): The sum of the individual wasteload allocations (WLA’s) for point sources, load allocations (LA’s) for nonpoint sources and natural background, plus a margin of safety (MOS). TMDLs can be expressed in terms of mass per time, toxicity, or other appropriate measures that relate to a state’s water quality standard.

Wasteload allocation (WLA): The portion of a receiving water’s loading capacity that is allocated to one of its existing or future point sources of pollution. WLAs constitute a type of water quality-based effluent limitation.

Water quality standard: Law or regulation that consists of the beneficial designated use or uses of a water body, the numeric and narrative water quality criteria that are necessary to protect the use or uses of that particular water body, and an anti-degradation statement.

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

At its meeting on November 30, 2023, the State Water Control Board (SWCB) adopted the amendments to the Water Quality Management Planning Regulation (9 VAC 25-720 et seq.).

Legal Basis

Identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity’s overall regulatory authority.

§62.1-44.15 of the State Water Control Law authorizes the State Water Control Board to promulgate regulations controlling water pollution to protect public health and welfare. The U.S. EPA’s § 62.1-44.19:7 directs the Board to develop plans to address impaired waters. Water Quality Management and Planning Regulation 40 CFR §130.7(d) (2) directs the states to incorporate TMDLs in the state’s Water Quality Management Plan (9VAC25-720). Changes to this chapter of the Virginia Administrative Code are exempt from Article 2 of the Administrative Process Act – §2.2-4006 A 14

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it’s intended to solve.

The regulatory changes are needed to meet the mandates of the federal Clean Water Act and the implementing Water Quality Management and Planning Regulation (40 CFR §130) to protect public health and welfare by requiring states to identify waters that are in violation of water quality standards and to place these waters on the state’s 303(d) List of Impaired Waters. Also, the CWA, EPA’s enabling regulation, and the Code of Virginia, §62.1-44.19:7.C require Virginia to develop a TMDL for impaired waters. The U.S. EPA’s Water Quality Management and Planning Regulation 40 CFR §130.7(d) (2) directs the states to incorporate TMDLs in the state’s Water Quality Management Plan (9VAC25-720). This regulatory change contributes to achieving the pollution reductions needed from point source dischargers to remove a stream from the impaired waters list and improve water quality to the benefit of citizens to take advantage of all beneficial uses available from State Waters.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the “Detail of Changes” section below.

The amendments to the state’s Water Quality Management Planning Regulation (9 VAC 25-720) include adding two new TMDL wasteload allocation in the James River Basin (9VAC25-720-60.A) and four new TMDL wasteload allocation in the Roanoke River Basin (9VAC25-720-80.A).

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

Public: The regulatory change broadly benefits the public by improving the water quality of impaired waters by identifying the maximum amount of pollutant load a stream can assimilate and meet Water Quality Standards (9VAC25-260), to support all designated uses of waters, and ultimately be removed from Virginia’s 303(d) list of impaired waters. Improved water quality will protect human health and aquatic life, resulting in healthier fisheries, safer and reliable public water supplies, and contribute to economic benefits from tourism, economic development, and commercial and recreational fishing industries.

Agency or Commonwealth: The agency and commonwealth will benefit because the change to the regulation meets the legal mandate in state and federal law to incorporate the WLA into the Water Quality Management Planning Regulation to meet State Water Control Law § 62.1-44.19:7. Additionally, this meets the Clean Water Act 40 CFR 130.7 requirement to include the approved TMDL loads in the state’s waters quality management plans and VPDES permits.

There are no disadvantages associated with this regulatory action to either the public or the Commonwealth. No cost to the public is anticipated because the proposed WLAs do not exceed the existing permit requirements of existing facilities which already discharge well below their permit requirements and the WLA.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change that is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

This regulatory change has no requirements that exceed applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

Identify any other state agencies, localities, or other entities particularly affected by the regulatory change. “Particularly affected” are those that are likely to bear any identified disproportionate material impact, which would not be experienced by other agencies, localities, or entities. “Locality” can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or

regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.

Other State Agencies Particularly Affected:

This regulatory change will not particularly affect other state agencies

Localities Particularly Affected:

This regulatory change will not particularly affect any localities

Other Entities Particularly Affected:

This regulatory change will not particularly affect other entities

Public Comment

Summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. Ensure to include all comments submitted: including any received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

The comment period for the regulation amendment with the TMDL wasteload allocations extended from September 25 – October 25, 2023. No comments were received.

Details of All Changes Proposed in this Regulatory Action

*List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
60 A	N/A	James River Basin section does not include WLA for these impaired sections of Moores Creek and Mill Creek	Adding two new TMDL WLA in the James River Basin to reduce sediment discharges into these impaired sections of Moores Creek and Mill Creek
80 A	N/A	Roanoke River Basin section does not include WLA for these impaired sections of Fryingpan Creek, Pigg River, Poplar Branch and Beaverdam Creek	Adding four new TMDL WLA in the Roanoke River Basin to reduce sediment discharges into these impaired sections of Fryingpan Creek, Pigg River, Poplar Branch and Beaverdam Creek

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

These regulation amendments meet the requirements of federal and state law and regulation. The regulatory amendment does not directly impose any direct compliance requirement, reporting requirement, or performance standard that could be lessened or substituted for small business. Any delays in adopting the standards or exemption of small businesses from these requirements will not meet the minimum requirements of federal law and regulation. No alternative approach to developing a TMDL and the associated WLA was considered since State Water Control Law § 62.1-44.19:7 and the Clean Water Act 40 CFR 130.7(c) requires DEQ to develop a TMDL for each impaired water body to address pollutants that may enter the water. The regulation only lists the TMDLs and WLA, along with the impaired streams where it applies, but does not identify any facilities affected or mandate any direct measures, compliance, reporting, or standard that facilities must take to meet the WLA.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The amendment of the Water Quality Management Planning Regulation is for the protection of public health, safety, and welfare and the Board does not anticipate any direct impact on the institution of the family and family stability.

Office of Regulatory Management
Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC 25-720
VAC Chapter title(s)	Water Quality Management Planning Regulation
Action title	Add State Water Control Board adopted wasteload allocations (WLAs) for 2 total maximum daily load (TMDL) studies: 1) Moores and Mill Creek TMDL, and 2) Beaverdam Creek, Fryingpan Creek, Pigg River, and Poplar Branch TMDL
Date this document prepared	October 10, 2023
Regulatory Stage (including Issuance of Guidance Documents)	Final Exempt Action

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Introduction.

To address impaired waters, the State Water Control Board (Board) proposes to amend 9 VAC 25-720 Water Quality Management Planning Regulation (WQMPR) to add total maximum daily load (TMDL) wasteload allocations (WLAs). A TMDL WLA is a calculation of the maximum

amount of a pollutant that an impaired waterbody can receive from point sources while still maintaining Virginia Water Quality Standards (WQS) (9VAC25-260) and meeting its designated uses, such as recreational uses, aquatic life; wildlife; and producing edible and marketable natural resources.

DEQ proposes to amend 9VAC25-720-60 A for the James River Basin to incorporate sediment WLAs developed for the Benthic TMDL study for the Moores Creek and Mill Creek Watersheds TMDL located in Rockbridge County, Virginia. Additionally, DEQ proposes to amend 9VAC25-720-80 A for the Roanoke River Basin to incorporate sediment WLAs developed for the Benthic TMDL study for Fryingpan Creek, Pigg River, Poplar Branch and Beaverdam Creek in Bedford, Franklin, and Pittsylvania Counties.

Virginia’s 2022 Section 305(b)/303(d) Water Quality Assessment Integrated Report lists the streams affected by the WLA as impaired because they have too much sediment which violates the general aquatic life (benthic) water quality standard. Consequently, State Water Control Law § 62.1-44.19:7 and the Clean Water Act 40 CFR 130.7(c) requires DEQ to develop a TMDL of the pollutant (sediment) causing the impairments that may enter the water for each impaired water body. In each TMDL study, DEQ considered multiple scenarios to effectively reduce the amount of sediment in the affected streams. Feedback from stakeholders guided the selection of the preferred scenarios for each TMDL watershed. The Environmental Protection Agency (EPA) has preliminarily approved both TMDLs and associated WLA’s included in this regulatory change.

WLA’s adopted, amended, or repealed by the Board pursuant to the State Water Control Law are identified as final exempt actions by the Administrative Process Act § 2.2-4006 A.14. To meet the requirements of the APA exemption for adding a WLA, the public, including impacted facilities, were invited to participate in the process during multiple stakeholder meetings, which included two public meetings with 30-day comment periods for the stakeholders to provide comments on the TMDL development and report. No comments were received.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p><u>Direct costs:</u> The WQMPR (9VAC 25-720) does not result in any direct monetizable costs. The regulation only lists the TMDL reports and WLA, along with the impaired streams where it applies, but does not identify any facilities affected or mandate any direct measures that facilities must take to meet the WLA that would directly impose a cost.</p> <p><u>Indirect Costs:</u> WLAs are primarily used when DEQ issues new or modified Virginia Pollution Elimination Discharge System (VPDES) permits in the impaired watershed. Therefore, DEQ is not able to monetize indirect costs at this time because the effect of a WLA, if any, depend on the facility operations and permit being issued. The WLAs for sediment could indirectly impact facility costs if a DEQ permit needed pollutant reductions to meet the overall WLA. Sediment discharges are dependent on various industrial processes or Best Management Practices specific to facilities, which makes it difficult to estimate the costs</p>
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	<p>resulting from adding a WLA to the regulation because each permittee would have different requirements and options to reduce pollutants.</p> <p>DEQ does not expect existing facilities discharging to the impaired waters of the Moores Creek and Mill Creek, and the Fryingpan Creek, Pigg River, Poplar Branch and Beaverdam Creek Watersheds to incur indirect costs in this case. For this regulatory amendment, the WLA for sediment affects three existing VPDES permitted facilities in the Beaverdam Creek Watershed and one facility with an Industrial Stormwater General Permit in the Mill Creek watershed. However, for these facilities, no economic cost is anticipated because the proposed WLA was calculated using their currently allowable permitted discharge amount. Therefore, these facilities would not need to modify their current treatment system or operations since they already discharge well below their permitted amounts and the WLA.</p> <p>Future facilities needing a VPDES permit to discharge sediment into the impaired waters will also need to comply with the WLA. As the WLAs were calculated using standard permit requirements for discharging sediment, facilities would be unlikely to need to manage discharges beyond typical VPDES permit requirements. Additionally, the WLAs include a buffer for future growth to allow for new facilities with sediment discharges starting operations in the watersheds. Permittees commonly monitor for sediment in existing VPDES permit requirements so in all likelihood no new monitoring would be required.</p> <p><u>Direct Benefits:</u> The addition of the WLA benefits the water body by ensuring that permit limits will result in improved water quality and contribute to efforts to remove the streams from the list of impaired waters. The amendment does not have any direct benefits that can be monetized since the regulation only lists the TMDL reports with the WLA amount and does not mandate any direct measures to meet the WLA.</p> <p><u>Indirect Benefits:</u> DEQ is not able to monetize the potential indirect benefits to implement the WLA at this time. Indirect benefits are incurred at the time VPDES permits incorporate the WLA, if necessary to manage sediment discharges to improve water quality. Improved water quality will protect human health and aquatic life, resulting in healthier fisheries, safer and reliable public water supplies, and contribute to economic benefits from tourism, economic development, and producing edible and marketable natural resources, such as by commercial and recreational fishing industries.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) Not applicable	(b) Not applicable
(3) Net Monetized Benefit	Not applicable	
(4) Other Costs & Benefits (Non-Monetized)	<p><u>Indirect Costs:</u> Regulated entities could incur costs such as installing new equipment, changing operational procedures, or undertaking best practices if they needed to reduce pollution discharges. These cannot be monetized because of the variability in potential industrial processes and the need to review a VPDES permit application to assess if an individual facility would need to reduce sediment discharges.</p> <p><u>Direct Benefits:</u> This change to the regulation meets the legal mandate in state and federal law to incorporate the WLA into the WQMPR to meet State Water Control Law § 62.1-44.19:7. Additionally, this meets the Clean Water Act 40 CFR 130.7 requirement to include the approved TMDL loads in the state’s waters quality management plans and VPDES permits. DEQ needs to adopt the WLA into the WQMPR to receive final EPA approval of the TMDL study, which also addresses non-point sources of sediment that need to be managed to remove the streams from the impaired waters list. The regulatory change broadly benefits the public by improving the water quality of impaired waters by identifying the maximum amount of pollutant load a stream can assimilate and meet WQS (9VAC25-260), to support all designated uses, and ultimately be removed from Virginia’s 303(d) list of impaired waters.</p> <p><u>Indirect Benefits:</u> Improved water quality will protect human health and aquatic life, resulting in healthier fisheries, safer and reliable public water supplies, and contribute to economic benefits from tourism, economic development, and producing edible and marketable natural resources, such as by commercial and recreational fishing industries.</p>	
(5) Information Sources	Moore's Creek and Mill Creek TMDL Report Fryingpan Creek, Pigg River, Poplar Branch and Beaverdam Creek TMDL Report	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	The status quo could be maintained by not drafting or implementing the TMDL studies or incorporating the WLA into the WQMPR. However, State Water Control Law § 62.1-44.19:7 and the Clean Water Act 40 CFR 130.7(c) requires DEQ to develop a TMDL for pollutants that may enter the water for each impaired water body. DEQ needs to adopt the WLA into the WQMPR to receive final EPA approval of the TMDL
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	<p>study, which also addresses non-point sources of sediment that need to be managed to remove the streams from the impaired waters list. Also, this would not improve water quality in the stream segments impaired because the sediment reductions necessary to improve the water quality would not be identified and implemented in response to the TMDL study.</p> <p><u>Direct Costs</u> - There are no direct economic costs with maintaining the status quo since the regulation does not directly mandate any requirements.</p> <p><u>Indirect Costs</u> - No indirect costs can be monetized at this time. Without developing or implementing a TMDL study and WLA, DEQ will not quantify the point and non-point source sediment reductions needed to improve water quality in these watershed. The economic costs are related to the waterbody remaining impaired and not fully providing beneficial uses to the public overall, such as diminished recreation or fishing opportunities. The potential uses are too variable to monetarily estimate the economic impact of the reduced water quality.</p> <p><u>Direct Benefits</u> –DEQ anticipates no direct economic benefits with maintaining the status quo since the proposed amendments would not have required existing permittees to take any action or incur costs to reduce sediment discharges to meet the proposed WLA. DEQ drafted the TMDL for the proposed WLAs consistent with their existing permit requirements.</p> <p><u>Indirect Benefits</u> - For the two TMDLs, there are no anticipated monetizable indirect economic benefits with maintaining the status quo since the TMDL was drafted so that the proposed WLAs used the existing VPDES permit requirements.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not Applicable	(b) Not Applicable
(3) Net Monetized Benefit	Not Applicable	
(4) Other Costs & Benefits (Non-Monetized)	Maintaining the status quo would not lead to improved water quality in an impaired water body. The status quo would not meet State Water Control Law § 62.1-44.19:7 and the Clean Water Act 40 CFR 130.7(c) requirements to develop a TMDL of pollutants that may enter the water for each impaired water body. Failing to proceed with TMDL’s to address an impairment can also create the potential for legal action for	

	<p>failing to meet Clean Water Act requirements (see previous case <u>American Canoe vs EPA</u>).</p> <p><u>Indirect Costs:</u> Without adopting the WLA into the WQMPR, EPA would not approve the TMDL study. Without an approved TMDL study, the non-point source reductions needed, which make up a large majority of the sediment causing the impairments, would also not be identified and addressed. Lack of an approved TMDL may prevent the public from accessing funds to develop BMPs that would reduce sediment into these impaired waters. Values are not available due to the large variability in BMPs, system sizes, locations, and beneficial uses. Indirect costs could come from the impacts of poor water quality on human health and aquatic life, resulting poor fisheries, less reliable public water supplies, and negative economic costs to tourism, economic development, and commercial and recreational fishing industries.</p>
(5) Information Sources	<p>DEQ TMDL Program procedures, documents, and staff American Canoe vs EPA - https://law.justia.com/cases/federal/district-courts/FSupp2/30/908/2417146/</p>

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>No alternative approach to developing TMDL studies and WLA amounts was considered because State Water Control Law § 62.1-44.19:7 and the Clean Water Act 40 CFR 130.7(c) requires DEQ to develop a TMDL study and incorporate WLA’s into the WQMPR for each impaired water body to address point source discharges of pollutants into the water.</p> <p>However, DEQ could revisit a TMDL study to look at alternate WLAs to make it have more or less stringent pollutant amounts. DEQ develops the proposed WLA amount by looking at alternative scenarios to decide how to balance the pollutant amounts among various point (permitted) sources and unregulated non-point sources.</p> <p><u>Direct Costs:</u> DEQ would incur direct costs to evaluate alternate WLA amounts and make any resulting changes to the document. These costs would likely mirror costs to model WLA scenarios when originally creating the TMDL study. For the Pigg River TMDL study, DEQ paid contractors \$35,234 to develop allocation scenarios, complete project coordination and draft the document, which would be similar costs to revisit the WLA. Assuming the Moore’s and Mill Creek project would have similar cost, then total costs to revise both TMDL studies, by doubling the Pigg River amount, could be approximately \$70,000, plus any DEQ staff time required to revise the study results. Generating a different WLA would require DEQ to coordinate with the public again and obtain EPA approval of any revision.</p>
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	<p><u>Indirect Costs:</u> Generating a more stringent WLA amount could cause existing permittees to incur costs because the facilities may need to change their operations to reduce pollution discharges. Additionally, a TMDL and WLA is a balanced equation so allowing higher pollutant amounts from one source would cause reductions from other sources, shifting cost burdens of pollution controls to other permittees or non-point sources in the watershed.</p> <p><u>Direct Benefits:</u> No direct monetizable benefit is expected from considering alternate WLA amount. The existing permitted sources would not gain any economic benefit by generating a less stringent WLA since they are already not impacted at the proposed WLA amount. Any alternate scenario would need to have the same overall pollution reduction required to meet the WQS so other sources would need to incur the costs to reduce pollutants.</p> <p><u>Indirect Benefits:</u> No indirect monetizable benefit from this alternative approach. Any alternate scenario would make the same overall pollution reduction required to meet the WQS.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) \$70,000 plus staff time	(b) Not Applicable
(3) Net Monetized Benefit	Not Applicable	
(4) Other Costs & Benefits (Non-Monetized)	Evaluating less stringent alternative scenarios for point source pollution reduction could lessen costs and provide benefits to the permittees affected by the preferred scenario. However, those costs would be shifted to other sources or permittees to make up the pollution reductions necessary to meet the WQS. Additionally, as noted above, no additional costs for current permittees are anticipated and thus their fiscal impact would not change.	
(5) Information Sources	DEQ TMDL Program, Pigg River TMDL Scope of Work.	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p><u>Direct costs:</u> The WQMPR (9VAC 25-720) does not result in any direct monetizable costs to Local Partners. The regulation only lists the TMDLs and WLA, along with the impaired streams where it applies, but does not identify affected facilities or mandate any direct measures that facilities must take to meet the WLA that would directly impose a cost.</p> <p><u>Indirect Costs:</u> There are no indirect costs associated with this regulatory amendment on Local Partners. Stewartsville Elementary School in Bedford County is the only Local Partner in the affected watershed with a current VPDES permit. Since the WLA amount was calculated using their current permitted discharge amount, they would not incur any cost to change their processes to meet the new WLA.</p> <p><u>Direct Benefits:</u> The proposed regulatory amendment does not have any monetizable direct benefits for local partners. The regulatory change broadly benefits the public by improving the water quality of impaired waters by identifying the maximum amount of pollutant load a stream can assimilate to meet WQS (9VAC25-260), support all designated uses, and ultimately be removed from Virginia’s 303(d) list of impaired waters.</p> <p><u>Indirect Benefits:</u> The proposed regulatory amendment does not have any monetizable indirect benefits. Improved water quality will protect human health and aquatic life, resulting in healthier fisheries, safer and reliable public water supplies, and contribute to economic benefits from tourism, economic development, and producing edible and marketable natural resources, such as by commercial and recreational fishing industries.</p>	
<p>(2) Present Monetized Values</p>	<p>Direct & Indirect Costs</p>	<p>Direct & Indirect Benefits</p>
	<p>(a) Not Applicable</p>	<p>(b) Not Applicable</p>
<p>(3) Other Costs & Benefits (Non-Monetized)</p>	<p>Local partners will benefit from improved water quality that protect human health and aquatic life, resulting healthier fisheries, safer and reliable public water supplies, and contribute to economic benefits from tourism, economic development, and commercial and recreational fishing industries utilized and enjoyed by their citizens.</p>	
<p>(4) Assistance</p>	<p>N/A</p>	

(5) Information Sources	DEQ TMDL Program procedures, documents, and staff
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Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	This regulation is not expected to have an impact on the institution of the family and family stability.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not Applicable	(b) Not Applicable
(3) Other Costs & Benefits (Non-Monetized)	Improved water quality will protect human health and aquatic life, resulting healthier fisheries, safer and reliable public water supplies, and contribute to economic benefits from tourism, economic development, and producing edible and marketable natural resources, such as by commercial and recreational fishing industries.	
(4) Information Sources	DEQ TMDL Program procedures, documents, and staff	

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	This regulatory amendment is not expected to have an impact on small businesses since the one existing small business affected would only continue operating under their current permit requirements and not need to make any changes to meet the WLA. Additionally, the WLA has a buffer built into it to account for the likelihood of future growth that would support new small business that may need to discharge sediment into the impaired waters.
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Not Applicable	(b) Not Applicable
(3) Other Costs & Benefits (Non-Monetized)	Not Applicable	
(4) Alternatives	none	
(5) Information Sources	DEQ TMDL Program procedures, documents, and staff	

Changes to Number of Regulatory Requirements

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved	Authority of Change	Initial Count	Additions	Subtractions	Net Change	
9VAC25 – 720-60	Statutory:	0	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25 – 720-80	Statutory:	0	0	0	0	
	Discretionary:	0	0	0	0	
					Total Net Change of Statutory Requirements:	0
					Total Net Change of Discretionary Requirements:	0

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
NA	0	0	0	0

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
NA	NA	NA

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Length	New Length	Net Change in Length
NA	NA	NA	NA

TAB C



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

MEMORANDUM

TO: State Water Control Board Members

FROM: Meghan Mayfield
Director, Division of Water Permitting 

DATE: November 3, 2023

SUBJECT: Regulatory Update to Title 40 Code of Federal References (CFR)/Methods Update Rule
Final Exempt Action – Amendments Conforming to Federal Regulations

This regulatory update to the 40 CFR references and the incorporated by reference Methods Update Rule (MUR) is presented to the State Water Control Board (Board) for your consideration as a final regulation. Section 2.2-4006.A.4.(c) of the Code of Virginia allows the Board to adopt these amendments to existing regulations as a final exempt action as the changes are necessary to conform to changes in the federal regulations.

On July 19, 2021, the U.S. Environmental Protection Agency (EPA) finalized specific changes to analytical test procedures used by industries and municipalities to analyze the chemical, physical, and biological components of wastewater and other environmental samples required by regulations under the Clean Water Act (CWA). The changes included:

1. Revised EPA methods that include updated acceptance criteria for Initial Precision and Recovery (IPR), Ongoing Precision and Recovery (OPR), and Matrix Spike/Matrix Spike Duplicate (MS/MSD), and clarifications and revisions based on user questions and feedback about Method 1623 over the past 19 years.
2. New or revised methods published by Voluntary Consensus Standards Bodies (VCSB) such as ASTM International (ASTM; *formerly known as the American Society for Testing and Materials*) and the Standards Methods Committee.

3. New and updated methods developed by the U.S. Geological Survey which includes an ion chromatography method that lists several target analytes: Bromide, chloride, fluoride, nitrate, nitrite, orthophosphate, and sulfate.
4. New methods reviewed under the Alternate Test Procedure (ATP) program as now appropriate for nationwide use.
5. Minor changes to quality assurance and quality control within individual methods concerning commercially prepared standards and filter paper.

The EPA finalized changes to its test procedures required by industries and municipalities when analyzing the chemical, physical, and biological properties of wastewater and other environmental samples for reporting under EPA’s National Pollutant Discharge Elimination System (NPDES) permit program. The CWA requires the EPA to promulgate these test procedures (analytical methods) for analysis of pollutants. The EPA anticipates that these changes will provide increased flexibility for the regulated community in meeting monitoring requirements while improving data quality. In addition, this update to the CWA methods is incorporating technological advances in analytical technology.

Various regulations of the State Water Control Board include references to EPA regulations under Title 40 of the Code of Federal Regulations (CFR). This regulatory amendment will bring these references up to date with the 40 CFR 136 requirements published in the July 1, 2023, update. The following regulations are being amended as part of this regulatory action: 9VAC25-31 Virginia Pollutant Discharge Elimination System Permit (VPDES) Regulation; 9VAC25-32 Virginia Pollution Abatement (VPA) Permit Regulation; 9VAC25-210 Virginia Water Protection Permit Program Regulation; 9VAC25-610 Groundwater Withdrawal Regulations; and 9VAC25-790 Sewage Collection and Treatment Regulations. This regulatory action also amends the Virginia Water Protection General Permit for Impacts Less Than One-Half Acre (9VAC25-660); the Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities (9VAC25-670); the Virginia Water Protection General Permit for Linear Transportation Projects (9VAC25-680); and the Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities (9VAC25-690) to incorporate EPA’s MUR amendments

At your Board meeting scheduled for November 30, 2023, the Department will request that the Board adopt these amendments as final regulations, authorize their publication, and affirm that the Board will receive, consider, and respond to petitions by any interested person at any time with respect to reconsiderations or revision.

ATTCHMENTS:

- Virginia Regulatory Town Hall Documents (TH-09)
 - 2023 Methods Update Rule
- Final Exempt – 2023 Methods Update Rule
 - RIS PROJECT 7077
- ORM Economic Review Form

- 2023 Methods Update Rule Economic Review Form.
- Federal Register: 86 FR 27226
 - Clean Water Act Methods Update Rule for the Analysis of Effluent.



townhall.virginia.gov

**Exempt Action: Final Regulation
Agency Background Document**

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	<p>9VAC25-31</p> <p>Secondary Chapters:</p> <p>9VAC25-32</p> <p>9VAC25-210</p> <p>9VAC25-610</p> <p>9VAC25-660</p> <p>9VAC25-670</p> <p>9VAC25-680</p> <p>9VAC25-690</p> <p>9VAC25-790</p>
VAC Chapter title(s)	<ul style="list-style-type: none"> ○ Virginia Pollutant Discharge Elimination System Permit (VPDES) Regulation (9VAC25-31) ○ Virginia Pollution Abatement Permit (VPA) Regulation (9VAC25-32) ○ Virginia Water Protection Permit Program (VWP) Regulation (9VAC25-210) ○ Groundwater Withdrawal Regulations (9VAC25-610) ○ Virginia Water Protection (VWP) General Permit for Impacts Less Than One-Half Acre (9VAC25-660) ○ Virginia Water Protection (VWP) General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities (9VAC25-670)

	<ul style="list-style-type: none"> ○ Virginia Water Protection (VWP) General Permit for Linear Transportation Projects (9VAC25-680) ○ Virginia Water Protection (VWP) General Permit for Impacts from Development and Certain Mining Activities (9VAC25-690) ○ Sewage Collection and Treatment (SCAT) Regulations (9VAC25-790)
Action title	2023 40 CFR Reference Update/Methods Update Rule
Final agency action date	November 30, 2023
Date this document prepared	October 31, 2023

This information is required for executive branch review pursuant to Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19. In addition, this information is required by the Virginia Registrar of Regulations pursuant to the Virginia Register Act (§ 2.2-4100 et seq. of the Code of Virginia). Regulations must conform to the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

Various regulations of the State Water Control Board include references to U.S. Environmental Protection Agency’s (EPA) regulations under Title 40 of the Code of Federal Regulations (CFR). These regulatory amendments will bring these references up to date with the 40 CFR 136 requirements published in the July 1, 2023, update. The following regulations are being amended as part of this regulatory action: 9VAC25-31 Virginia Pollutant Discharge Elimination System Permit (VPDES) Regulation; 9VAC25-32 Virginia Pollution Abatement (VPA) Permit Regulation; 9VAC25-210 Virginia Water Protection Permit Program Regulation; 9VAC25-610 Groundwater Withdrawal Regulations; and 9VAC25-790 Sewage Collection and Treatment Regulations. This regulatory action also amends the Virginia Water Protection General Permit for Impacts Less Than One-Half Acre (9VAC25-660); the Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities (9VAC25-670); the Virginia Water Protection General Permit for Linear Transportation Projects (9VAC25-680); the Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities (9VAC25-690); to incorporate EPA’s Methods Update Rule (MUR) amendments.

The EPA finalized changes to its test procedures required by industries and municipalities when analyzing the chemical, physical, and biological properties of wastewater and other environmental samples for reporting under EPA’s National Pollutant Discharge Elimination System (NPDES) permit program. The Clean Water Act (CWA) requires the EPA to promulgate these test procedures (analytical methods) for analysis of pollutants. The EPA anticipates that these changes will provide increased flexibility for the regulated community in meeting monitoring requirements while improving data quality. In addition, this update to the CWA methods is incorporating technological advances in analytical technology.

Section 402 of the Clean Water Act (33 USC § 1251 et seq.) authorizes states to administer the National Pollutant Discharge Elimination System (NPDES) permit program under state law. The Commonwealth of Virginia received such authorization in 1975 under the terms of a Memorandum of Understanding with the

U.S. EPA and operates the Virginia Pollutant Discharge Elimination System (VPDES) program and Virginia 's regulations need to maintain consistency with the federal regulations. Section 2.2-4006. A.4(c) of the Code of Virginia allows the Board to adopt these amendments to existing regulations as a final exempt action as the changes are necessary to conform to changes in the federal regulations.

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, "mandate" has the same meaning as defined in the ORM procedures, "a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part."

On July 19, 2021, the Environmental Protection Agency (EPA) finalized specific changes to analytical test procedures used by industries and municipalities to analyze the chemical, physical, and biological components of wastewater and other environmental samples required by regulations under the Clean Water Act. This amendment updates the State Water Control Board's regulations to be consistent with EPA's Methods Update Rule (MUR) amendments to 40 CFR Part 136. Section 2.2-4006.A.4(c) of the Code of Virginia allows the Board to adopt this regulatory amendment as a final exempt action as the changes are necessary to conform to changes in the federal regulations.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the "Definitions" section of the regulation.

- APA: Administrative Process Act
- ASTM: ASTM International
- ATP: Alternate Test Procedure
- CFR: Code of Federal Regulations
- CWA: Clean Water Act
- EPA: U.S. Environmental Protection Agency
- IPR: Initial Precision and Recovery
- MS/MSD: Matrix Spike/Matrix Spike Duplicate (MS/MSD),
- MUR: Methods Update Rule promulgated by the EPA and published in the Federal Register on May 19, 2021 (86 FR 27226)
- NPDES: National Pollutant Discharge Elimination System
- OPR: Ongoing Precision and Recovery (OPR),
- USGS: United States Geological Survey (USGS)
- VCSCB: Voluntary Consensus Standards Bodies (VCSCB)

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

The State Water Control Board approved amendments to: Virginia Pollutant Discharge Elimination System Permit Regulation (9VAC25-31); Virginia Pollution Abatement Permit Regulation (9VAC25-32); Virginia Water Protection Permit Program Regulation (9VAC25-210); Groundwater Withdrawal Regulations (9VAC25-610); Virginia Water Protection General Permit for Impacts Less Than One-Half Acre (9VAC25-660); Virginia Water Protection General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities (9VAC25-670); Virginia Water Protection

General Permit for Linear Transportation Projects (9VAC25-680); Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities (9VAC25-690) and the Sewage Collection and treatment Regulations (9VAC25-790) on November 30, 2023, as a final regulation, and affirmed that the Board will receive, consider and respond to requests by any interested person at any time with respect to reconsideration or revision.

Legal Basis

Identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity’s overall regulatory authority.

Section 2.2-4006.A.4(c) and as a final exempt action as the changes are necessary to conform to changes in the federal regulations. Section 62.1-44.15(10) of the Code of Virginia allows the Board to adopt this regulatory amendment.

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it’s intended to solve.

The regulatory updates are necessary to align state regulations with those of the EPA, ensuring DEQ maintains the authority to implement the national program. The National Pollutant Discharge Elimination System permits must include conditions to ensure compliance with the Clean Water Act’s technology-based and water quality-based requirements, including restrictions on the quantity of specific pollutants that can be discharged and requirements for pollutant monitoring, measurement, and reporting to DEQ. The changes incorporate the EPA’s Methods Update Rule amendments to 40 CFR Part 136 that became effective on July 19, 2021, which introduce new and revised test procedures for industries and municipalities to analyze the chemical, physical, and biological properties of wastewater and other environmental samples for reporting under the NPDES permit program and updates the regulations to incorporate the 40 CFR requirements published in the July 1, 2023, update.

The new test procedures should provide increased flexibility for the regulated community to meet monitoring requirements while improving data quality. By allowing the use of newly approved and revised test procedures, the regulatory changes should indirectly benefit the health, safety, and welfare of citizens by improving the accuracy of pollutant measurements and reducing the risk of harmful substances released into the environment. The goals of the regulatory change are to ensure compliance with federal regulations and promote the use of advanced analytical technology to better protect the environment and public health.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the “Detail of Changes” section below.

The proposed methods update allows for all state regulations to remain consistent with the standards in 40 CFR Part 136. National Pollutant Discharge Elimination System (NPDES) permits must include conditions designed to ensure compliance with the technology-based and water quality-based requirements of the Clean Water Act (CWA), including in many cases, restrictions on the quantity of specific pollutants that can be discharged as well as requirements for pollutant monitoring, measurement and reporting to NPDES authorities. Often, entities have a choice in deciding which approved test procedure they will use for a specific pollutant because EPA has approved the use of more than one method.

The procedures for the analysis of pollutants required by CWA section 304(h) are a central element of the NPDES permit program. Examples of where these EPA-approved analytical methods must be used include the following: (1) Applications for NPDES permits, (2) sampling or other reports required under NPDES permits, (3) other requests for quantitative or qualitative effluent data under the NPDES regulations, (4) State CWA 401 certifications and (5) sampling and analysis required under EPA's General Pretreatment Regulations for Existing and New Sources of Pollution, 40 CFR 136.1 and 40 CFR 403.12(b)(5)(v).

Periodically, EPA updates the approved methods in 40 CFR part 136. In general, the changes in this final action fall into the following categories. The first is new or revised methods published by the VCSBs or the USGS that are like methods previously adopted as EPA-approved methods in 40 CFR part 136. The second category is methods EPA have reviewed under the Agency's national ATP program and preliminarily concluded are appropriate for nationwide use. Lastly, EPA finalized certain corrections or amendments to the text and tables of 40 CFR part 136. EPA adopted these revisions to improve data quality, update methods to keep current with technology advances, and provide the regulated community with greater flexibility. The changes include:

1. Revised EPA methods that include updated acceptance criteria for Initial Precision and Recovery (IPR), Ongoing Precision and Recovery (OPR), and Matrix Spike/Matrix Spike Duplicate (MS/MSD), and clarifications and revisions based on user questions and feedback about Method 1623 over the past 19 years.
2. New or revised methods published by Voluntary Consensus Standards Bodies (VCSB) such as ASTM International (ASTM) *formerly known as the American Society for Testing and Materials* and the Standards Methods Committee.
3. New and updated methods developed by the U.S. Geological Survey which includes an ion chromatography method that lists several target analytes: Bromide, chloride, fluoride, nitrate, nitrite, orthophosphate, and sulfate.
4. New methods reviewed under the Alternate Test Procedure (ATP) program as now appropriate for nationwide use.
5. Minor changes to quality assurance and quality control within individual methods concerning commercially prepared standards and filter paper.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

Identifying the issues associated with this amendment to the existing regulations involves evaluating the direct and indirect costs and benefits to various stakeholders. This amendment involves updating the Voluntary Consensus Standards Body (VCSB) methods currently incorporated by reference in 40 CFR part 136, including revisions to the Standard Methods and ASTM International methods. The cost of obtaining these updated methods ranges from \$40 to \$80, which is not a significant financial burden for permittees or environmental laboratories. Both organizations offer memberships or subscriptions that allow unlimited access to their methods. Additionally, this amendment will incorporate United States Geological Survey (USGS) methods and vendor Alternative Test Procedures (ATP), which are available free of charge on their respective websites.

Indirect costs associated with this amendment may include costs associated with training personnel on the new test procedures, costs associated with recalibrating equipment to comply with the new procedures, and costs associated with updating standard operating procedures to reflect the changes. While DEQ has concluded that the direct costs associated with obtaining the new and revised test procedures would not be a significant financial burden, it is important to note that the permittee or environmental laboratory may still incur some indirect costs because of these additional factors. However, DEQ projects these indirect costs would be minimal, as they are one-time expenses and should not significantly impact the overall cost of compliance.

This amendment should offer several direct benefits to permittees and environmental laboratories. First, by incorporating the revisions to the VCSB methods and ATPs, the proposed change will provide more options and increased flexibility to permittees in selecting suitable methods for monitoring pollutant levels. This, in turn, will improve compliance and reduce regulatory burden on regulated stakeholders. Secondly, the proposed update will enhance the quality of monitoring data by adopting the latest technological advances in analytical technology. This will enable more accurate and reliable measurement of pollutants, leading to better-informed decisions and more effective management of environmental risks. Overall, this amendment should offer direct benefits to permittees and environmental laboratories by providing more flexibility and improved data quality, while reducing regulatory burden and enhancing environmental protection.

The updates associated with the methods update rule were developed by national voluntary consensus standards and should have a ripple effect on the regulated communities beyond just meeting regulatory requirements. As an indirect benefit, these updates should encourage the use of more standardized and widely accepted methods, leading to greater precision and consistency in data collection and analysis. This in turn may then improve comparability of data across different facilities and districts, enable better tracking of trends and identification of potential issues. Additionally, the use of newer, more advanced methods and technologies can lead to more accurate and precise data, which can inform better decision-making by regulators, permittees, and other stakeholders. The adoption of these updated methods may contribute to improved environmental outcomes and protections of public health.

There are no disadvantages to the public or the Commonwealth from these amendments.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change that is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

These amendments to existing regulations revise State regulations to be consistent with the minimum Federal requirements. Therefore, the amendments are no more restrictive than the current federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

Identify any other state agencies, localities, or other entities particularly affected by the regulatory change. "Particularly affected" are those that are likely to bear any identified disproportionate material impact, which would not be experienced by other agencies, localities, or entities. "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.

Other State Agencies Particularly Affected:

No other state agencies will be particularly affected by the regulatory change.

Localities Particularly Affected:

No other localities will be particularly affected by the regulatory change.

Other Entities Particularly Affected:
 There is no locality particularly affected by the regulatory change.

Details of All Changes Proposed in this Regulatory Action

*List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

Please note, all the changes made, unless otherwise noted, are necessary to conform to changes in the federal regulations and are exempt from the APA in accordance with § 2.2-4006.A.4(c) of the Code of Virginia.

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-31-25		Applicability of incorporated references based on the dates that they became effective	Revised date from July 1, 2019, to July 1, 2023: Updates 40 CFR references in Chapter 25 to the most current CFR published in the July 1, 2023, update, to maintain consistency between state and federal regulations.
9VAC25-31-100 Q 7 d		Application for a permit. Sewage sludge management	Deleted specific dates referencing 40 CFR Parts: Updates 40 CFR references in Chapter 100 to the most current CFR published in the July 1, 2023, update, to maintain consistency between state and federal regulations.
9VAC25-32-25		Applicability of incorporated references based on the dates that they became effective	Revised date from July 1, 2019, to July 1, 2023, and deleted duplicative language referring to the CFR: Updates 40 CFR references in Chapter 25 to the most current CFR published in the July 1, 2023, update, to maintain consistency between state and federal regulations.
9VAC25-210-90		Conditions applicable to all VWP permits.	Version of 40 CFR Part 136 updated to the most current CFR published on July 1, 2023, to maintain consistency between state and federal regulations.
9VAC25-610-130 F 1		Conditions applicable to all groundwater permits.	Version of 40 CFR Part 136 updated to the most current CFR published on July 1, 2023, to maintain consistency between state and federal regulations.
9VAC25-660-100 Part III Q 1		VWP general permit. Part III. Conditions applicable to all VWP General Permits	Version of 40 CFR Part 136 updated to the most current CFR published on July 1, 2023, to maintain consistency between state and federal regulations.

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-670-100 Part III Q 1		VWP general permit. Part III. Conditions applicable to all VWP General Permits	Version of 40 CFR Part 136 updated to the most current CFR published on July 1, 2023, to maintain consistency between state and federal regulations.
9VAC25-680-100 Part III Q 1		VWP general permit. Part III. Conditions applicable to all VWP General Permits.	Version of 40 CFR Part 136 updated to the most current CFR published on July 1, 2023, to maintain consistency between state and federal regulations.
9VAC25-690-100 Part III Q 1		VWP general permit. Part III. Conditions applicable to all VWP General Permits.	Version of 40 CFR Part 136 updated to the most current CFR published on July 1, 2023, to maintain consistency between state and federal regulations.
9VAC25-790-210		Nonconventional methods, processes or equipment	Version of 40 CFR Part 136 updated to the most current CFR published on July 1, 2023, to maintain consistency between state and federal regulations.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

The regulations apply to all facilities, including small businesses. Any (1) establishment of less stringent compliance or reporting standards; (2) establishment of less stringent schedules or deadlines for compliance and reporting requirements; (3) consolidation or simplification of compliance or reporting requirements; (4) establishment of performance standards for small businesses to replace design or operational standards required in the regulation; or (5) exemption of small businesses from all or any part of the requirements contained in this regulation for all small businesses would directly, significantly and adversely affect the benefits that would be achieved through the implementation of the regulations.

Conforming state regulations to those of the EPA is necessary to maintain authority to implement the national program. Facilities benefit from state implementation of the program as they have easier access to decision makers who have a clearer understanding of state-specific issues and needs.

The Regulatory Flexibility Act statement contained in 86 FR 27226 (05/19/2021) states that this action would not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act. This action will not impose any requirements on small entities. This action would approve new and revised versions of CWA testing procedures. Generally, these changes have a positive impact on small entities by increasing method flexibility, thereby allowing entities to reduce costs by choosing more cost-effective methods. In general, EPA expects the final revisions will lead to few, if

any, increased costs. Most of the changes clarify or improve the instructions in the method, update the technology used in the method, improve the QC instructions, make editorial corrections, or reflect the most recent approval year of an already approved method. In some cases, they would add alternatives to currently approved methods for a particular analyte (e.g., Method N07–0003 for Nitrate Reductase Nitrate-Nitrogen Analysis). Because these methods would be alternatives rather than requirements, there are no direct costs associated with this proposal. EPA finalized methods that would be incorporated by reference. If a permittee elected to use these methods, they could incur a small cost associated with obtaining these methods from the listed sources.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

There is no impact on the instruction of the family or family stability.

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2 State Water Control Board

3 2021 Methods Update Rule

4 9VAC25-31-25. Applicability of incorporated references based on the dates that they
5 became effective.

6 Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in
 7 Title 40 of the Code of Federal Regulations is referenced and incorporated in this chapter that
 8 regulation shall be as it exists and has been published in the July 1, ~~2019~~2023, update.

9 9VAC25-31-100. Application for a permit.

10 A. Duty to apply. The following shall submit a complete application to the department in
 11 accordance with this section. The requirements for concentrated animal feeding operations are
 12 described in subdivisions C 1 and 2 of 9VAC25-31-130.

- 13 1. Any person who discharges or proposes to discharge pollutants; and
- 14 2. Any person who owns or operates a sludge-only facility whose biosolids use or sewage
 15 sludge disposal practice is regulated by 9VAC25-31-420 through 9VAC25-31-720 and
 16 who does not have an effective permit.

17 B. Exceptions. The following are not required to submit a complete application to the
 18 department in accordance with this section unless the department requires otherwise:

- 19 1. Persons covered by general permits;
- 20 2. Persons excluded from the requirement for a permit by this chapter; or
- 21 3. A user of a privately owned treatment works.

22 C. Who applies.

- 23 1. The owner of the facility or operation.
- 24 2. When a facility or activity is owned by one person but is operated by another person, it
 25 is the operator's duty to obtain a permit.
- 26 3. Notwithstanding the requirements of subdivision 2 of this subsection, biosolids land
 27 application by the operator may be authorized by the owner's permit.

28 D. Time to apply.

29 1. Any person proposing a new discharge shall submit an application at least 180 days
 30 before the date on which the discharge is to commence, unless permission for a later date
 31 has been granted by the department. Facilities proposing a new discharge of stormwater
 32 associated with industrial activity shall submit an application 180 days before that facility
 33 commences industrial activity which may result in a discharge of stormwater associated
 34 with that industrial activity. Different submittal dates may be required under the terms of
 35 applicable general permits. Persons proposing a new discharge are encouraged to submit
 36 their applications well in advance of the 180-day requirement to avoid delay. New
 37 discharges composed entirely of stormwater, other than those dischargers identified in
 38 9VAC25-31-120 A 1, shall apply for and obtain a permit according to the application
 39 requirements in 9VAC25-31-120 B.

40 2. All TWTDS whose biosolids use or sewage sludge disposal practices are regulated by
 41 9VAC25-31-420 through 9VAC25-31-720 must submit permit applications according to
 42 the applicable schedule in subdivision 2 a or b of this subsection.

43 a. A TWTDS with a currently effective VPDES permit must submit a permit application
44 at the time of its next VPDES permit renewal application. Such information must be
45 submitted in accordance with subsection D of this section.

46 b. Any other TWTDS not addressed under subdivision 2 a of this subsection must
47 submit the information listed in subdivisions 2 b (1) through (5) of this subsection to
48 the department within one year after publication of a standard applicable to its biosolids
49 use or sewage sludge disposal practice or practices, using a form provided by the
50 department. The department will determine when such TWTDS must submit a full
51 permit application.

52 (1) The TWTDS's name, mailing address, location, and status as federal, state,
53 private, public or other entity;

54 (2) The applicant's name, address, telephone number, electronic mail address, and
55 ownership status;

56 (3) A description of the biosolids use or sewage sludge disposal practices. Unless the
57 biosolids meets the requirements of subdivision Q 9 d of this section, the description
58 must include the name and address of any facility where biosolids or sewage sludge
59 is sent for treatment or disposal and the location of any land application sites;

60 (4) Annual amount of sewage sludge generated, treated, used or disposed (estimated
61 dry weight basis); and

62 (5) The most recent data the TWTDS may have on the quality of the biosolids or
63 sewage sludge.

64 c. Notwithstanding subdivision 2 a or b of this subsection, the department may require
65 permit applications from any TWTDS at any time if the department determines that a
66 permit is necessary to protect public health and the environment from any potential
67 adverse effects that may occur from toxic pollutants in sewage sludge.

68 d. Any TWTDS that commences operations after promulgation of an applicable
69 standard for biosolids use or sewage sludge disposal shall submit an application to
70 the department at least 180 days prior to the date proposed for commencing
71 operations.

72 E. Duty to reapply. All permittees with a currently effective permit shall submit a new
73 application at least 180 days before the expiration date of the existing permit, unless permission
74 for a later date has been granted by the department. The department shall not grant permission
75 for applications to be submitted later than the expiration date of the existing permit.

76 F. Completeness.

77 1. The department shall not issue a permit before receiving a complete application for a
78 permit except for VPDES general permits. An application for a permit is complete when
79 the department receives an application form and any supplemental information which are
80 completed to its satisfaction. The completeness of any application for a permit shall be
81 judged independently of the status of any other permit application or permit for the same
82 facility or activity.

83 2. No application for a VPDES permit to discharge sewage into or adjacent to state waters
84 from a privately owned treatment works serving, or designed to serve, 50 or more
85 residences shall be considered complete unless the applicant has provided the
86 department with notification from the State Corporation Commission that the applicant is
87 incorporated in the Commonwealth and is in compliance with all regulations and relevant
88 orders of the State Corporation Commission.

89 3. No application for a new individual VPDES permit authorizing a new discharge of
90 sewage, industrial wastes, or other wastes shall be considered complete unless it contains

91 notification from the county, city, or town in which the discharge is to take place that the
92 location and operation of the discharging facility are consistent with applicable ordinances
93 adopted pursuant to Chapter 22 (§ 15.2-2200 et seq.) of Title 15.2 of the Code of Virginia.
94 The county, city, or town shall inform in writing the applicant and the department of the
95 discharging facility's compliance or noncompliance not more than 30 days from receipt by
96 the chief administrative officer, or his agent, of a request from the applicant. Should the
97 county, city, or town fail to provide such written notification within 30 days, the requirement
98 for such notification is waived. The provisions of this subsection shall not apply to any
99 discharge for which a valid VPDES permit had been issued prior to March 10, 2000.

100 4. A permit application shall not be considered complete if the department has waived
101 application requirements under subsection K or Q of this section and EPA has
102 disapproved the waiver application. If a waiver request has been submitted to EPA more
103 than 210 days prior to permit expiration and EPA has not disapproved the waiver
104 application 181 days prior to permit expiration, the permit application lacking the
105 information subject to the waiver application shall be considered complete.

106 5. Except as specified in subdivision 5 a of this subsection, a permit application shall not
107 be considered complete unless all required quantitative data are collected in accordance
108 with sufficiently sensitive analytical methods approved under 40 CFR Part 136 or required
109 under 40 CFR Chapter I, Subchapter N (Effluent Guidelines and Standards) or O (Sewage
110 Sludge).

111 a. For the purposes of this requirement, a method approved under 40 CFR Part 136
112 or required under 40 CFR Chapter I, Subchapter N or O is "sufficiently sensitive" when:

113 (1) The method minimum level (ML) is at or below the level of the applicable water
114 quality criterion for the measured pollutant or pollutant parameter;

115 (2) The method ML is above the applicable water quality criterion, but the amount of
116 the pollutant or pollutant parameter in a facility's discharge is high enough that the
117 method detects and quantifies the level of the pollutant or pollutant parameter in the
118 discharge; or

119 (3) The method has the lowest ML of the analytical methods approved under 40 CFR
120 Part 136 or required under 40 CFR Chapter I, Subchapter N or O for the measured
121 pollutant or pollutant parameter.

122 b. When there is no analytical method that has been approved under 40 CFR 136,
123 required under 40 CFR Chapter I, Subchapter N or O, and is not otherwise required
124 by the director, the applicant may use any suitable method but shall provide a
125 description of the method. When selecting a suitable method, other factors such as a
126 method's precision, accuracy, or resolution, may be considered when assessing the
127 performance of the method.

128 6. In accordance with § 62.1-44.19:3 A of the Code of Virginia, no application for a permit
129 or variance to authorize the storage of biosolids shall be complete unless it contains
130 certification from the governing body of the locality in which the biosolids is to be stored
131 that the storage site is consistent with all applicable ordinances. The governing body shall
132 confirm or deny consistency within 30 days of receiving a request for certification. If the
133 governing body does not so respond, the site shall be deemed consistent.

134 7. No application for a permit to land apply biosolids in accordance with Part VI (9VAC25-
135 31-420 et seq.) of this chapter shall be complete unless it includes the written consent of
136 the landowner to apply biosolids on his property.

137 G. Information requirements. All applicants for VPDES permits, other than POTWs and other
138 TWTDS, shall provide the following information to the department, using the application form

139 provided by the department (additional information required of applicants is set forth in
140 subsections H through L and Q through R of this section).

- 141 1. The activities conducted by the applicant that require it to obtain a VPDES permit;
- 142 2. Name, mailing address, and location of the facility for which the application is submitted;
- 143 3. Up to four SIC and NAICS codes that best reflect the principal products or services
- 144 provided by the facility;
- 145 4. The operator's name, address, telephone number, electronic mail address, ownership
- 146 status, and status as federal, state, private, public, or other entity;
- 147 5. Whether the facility is located on Indian lands;
- 148 6. A listing of all permits or construction approvals received or applied for under any of the
- 149 following programs:
 - 150 a. Hazardous Waste Management program under RCRA (42 USC § 6921);
 - 151 b. UIC program under SDWA (42 USC § 300h);
 - 152 c. VPDES program under the CWA and the law;
 - 153 d. Prevention of Significant Deterioration (PSD) program under the Clean Air Act (42
 - 154 USC § 4701 et seq.);
 - 155 e. Nonattainment program under the Clean Air Act (42 USC § 4701 et seq.);
 - 156 f. National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction
 - 157 approval under the Clean Air Act (42 USC § 4701 et seq.);
 - 158 g. Ocean dumping permits under the Marine Protection Research and Sanctuaries Act
 - 159 (33 USC § 14 et seq.);
 - 160 h. Dredge or fill permits under § 404 of the CWA; and
 - 161 i. Other relevant environmental permits, including state permits;
- 162 7. A topographic map (or other map if a topographic map is unavailable) extending one
- 163 mile beyond the property boundaries of the source, depicting the facility and each of its
- 164 intake and discharge structures; each of its hazardous waste treatment, storage, or
- 165 disposal facilities; each well where fluids from the facility are injected underground; and
- 166 those wells, springs, other surface water bodies, and drinking water wells listed in public
- 167 records or otherwise known to the applicant in the map area;
- 168 8. A brief description of the nature of the business;
- 169 9. An indication of whether the facility uses cooling water and the source of the cooling
- 170 water; and
- 171 10. An indication of whether the facility is requesting any of the variances in subsection M
- 172 of this section, if known at the time of application.

173 H. Application requirements for existing manufacturing, commercial, mining, and silvicultural
174 dischargers. Existing manufacturing, commercial mining, and silvicultural dischargers applying for
175 VPDES permits, except for those facilities subject to the requirements of subsection I of this
176 section, shall provide the following information to the department, using application forms
177 provided by the department.

- 178 1. The latitude and longitude of each outfall to the nearest 15 seconds and the name of
- 179 the receiving water.
- 180 2. A line drawing of the water flow through the facility with a water balance, showing
- 181 operations contributing wastewater to the effluent and treatment units. Similar processes,
- 182 operations, or production areas may be indicated as a single unit, labeled to correspond
- 183 to the more detailed identification under subdivision 3 of this subsection. The water
- 184 balance must show approximate average flows at intake and discharge points and

185 between units, including treatment units. If a water balance cannot be determined (for
186 example, for certain mining activities), the applicant may provide instead a pictorial
187 description of the nature and amount of any sources of water and any collection and
188 treatment measures.

189 3. A narrative identification of each type of process, operation, or production area that
190 contributes wastewater to the effluent for each outfall, including process wastewater,
191 cooling water, and stormwater run-off; the average flow that each process contributes;
192 and a description of the treatment the wastewater receives, including the ultimate disposal
193 of any solid or fluid wastes other than by discharge. Processes, operations, or production
194 areas may be described in general terms (for example, dye-making reactor, distillation
195 tower). For a privately owned treatment works, this information shall include the identity of
196 each user of the treatment works. The average flow of point sources composed of
197 stormwater may be estimated. The basis for the rainfall event and the method of estimation
198 must be indicated.

199 4. If any of the discharges described in subdivision 3 of this subsection are intermittent or
200 seasonal, a description of the frequency, duration and flow rate of each discharge
201 occurrence (except for stormwater run-off, spillage or leaks).

202 5. If an effluent guideline promulgated under § 304 of the CWA applies to the applicant
203 and is expressed in terms of production (or other measure of operation), a reasonable
204 measure of the applicant's actual production reported in the units used in the applicable
205 effluent guideline. The reported measure must reflect the actual production of the facility
206 as required by 9VAC25-31-230 B 2.

207 6. If the applicant is subject to any present requirements or compliance schedules for
208 construction, upgrading or operation of waste treatment equipment, an identification of the
209 abatement requirement, a description of the abatement project, and a listing of the
210 required and projected final compliance dates.

211 7. Information on the discharge of pollutants specified in this subdivision (except
212 information on stormwater discharges that is to be provided as specified in 9VAC25-31-
213 120).

214 a. When quantitative data for a pollutant are required, the applicant must collect a
215 sample of effluent and analyze it for the pollutant in accordance with analytical
216 methods approved under 40 CFR Part 136 unless use of another method is required
217 under 40 CFR Subchapter N or O. When no analytical method is approved, the
218 applicant may use any suitable method but must provide a description of the method.
219 When an applicant has two or more outfalls with substantially identical effluents, the
220 department may allow the applicant to test only one outfall and report that the
221 quantitative data also apply to the substantially identical outfalls. The requirements in
222 subdivisions 7 e and f of this subsection that an applicant must provide quantitative
223 data for certain pollutants known or believed to be present do not apply to pollutants
224 present in a discharge solely as the result of their presence in intake water; however,
225 an applicant must report such pollutants as present. When this subdivision requires
226 analysis of pH, temperature, cyanide, total phenols, residual chlorine, oil and grease,
227 fecal coliform (including *E. coli*) and Enterococci (previously known as fecal
228 streptococcus at 40 CFR 122.26 (d)(2)(iii)(A)(3)), or volatile organics, grab samples
229 must be collected for those pollutants. For all other pollutants, a 24-hour composite
230 sample, using a minimum of four grab samples, must be used unless specified
231 otherwise at 40 CFR 136. However, a minimum of one grab sample may be taken for
232 effluents from holding ponds or other impoundments with a retention period greater
233 than 24 hours. In addition, for discharges other than stormwater discharges, the

234 department may waive composite sampling for any outfall for which the applicant
235 demonstrates that the use of an automatic sampler is infeasible and that the minimum
236 of four grab samples will be a representative sample of the effluent being discharged.
237 Results of analyses of individual grab samples for any parameter may be averaged to
238 obtain the daily average. Grab samples that are not required to be analyzed
239 immediately (see Table II at 40 CFR 136.3 (e)) may be composited in the laboratory,
240 provided that container, preservation, and holding time requirements are met (see
241 Table II at 40 CFR 136.3(e)) and that sample integrity is not compromised by
242 compositing.

243 b. For stormwater discharges, all samples shall be collected from the discharge
244 resulting from a storm event that is greater than 0.1 inch and at least 72 hours from
245 the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible,
246 the variance in the duration of the event and the total rainfall of the event should not
247 exceed 50% from the average or median rainfall event in that area. For all applicants,
248 a flow-weighted composite shall be taken for either the entire discharge or for the first
249 three hours of the discharge. The flow-weighted composite sample for a stormwater
250 discharge may be taken with a continuous sampler or as a combination of a minimum
251 of three sample aliquots taken in each hour of discharge for the entire discharge or for
252 the first three hours of the discharge, with each aliquot being separated by a minimum
253 period of 15 minutes (applicants submitting permit applications for stormwater
254 discharges under 9VAC25-31-120 C may collect flow-weighted composite samples
255 using different protocols with respect to the time duration between the collection of
256 sample aliquots, subject to the approval of the department). However, a minimum of
257 one grab sample may be taken for stormwater discharges from holding ponds or other
258 impoundments with a retention period greater than 24 hours. For a flow-weighted
259 composite sample, only one analysis of the composite of aliquots is required. For
260 stormwater discharge samples taken from discharges associated with industrial
261 activities, quantitative data must be reported for the grab sample taken during the first
262 30 minutes (or as soon thereafter as practicable) of the discharge for all pollutants
263 specified in 9VAC25-31-120 B 1. For all stormwater permit applicants taking flow-
264 weighted composites, quantitative data must be reported for all pollutants specified in
265 9VAC25-31-120 except pH, temperature, cyanide, total phenols, residual chlorine, oil
266 and grease, fecal coliform, and fecal streptococcus. The department may allow or
267 establish appropriate site-specific sampling procedures or requirements, including
268 sampling locations, the season in which the sampling takes place, the minimum
269 duration between the previous measurable storm event and the storm event sampled,
270 the minimum or maximum level of precipitation required for an appropriate storm
271 event, the form of precipitation sampled (snow melt or rain fall), protocols for collecting
272 samples under 40 CFR Part 136, and additional time for submitting data on a case-
273 by-case basis. An applicant is expected to know or have reason to believe that a
274 pollutant is present in an effluent based on an evaluation of the expected use,
275 production, or storage of the pollutant, or on any previous analyses for the pollutant.
276 (For example, any pesticide manufactured by a facility may be expected to be present
277 in contaminated stormwater run-off from the facility.)

278 c. Every applicant must report quantitative data for every outfall for the following
279 pollutants:

- 280 (1) Biochemical oxygen demand (BOD₅);
- 281 (2) Chemical oxygen demand;
- 282 (3) Total organic carbon;

- 283 (4) Total suspended solids;
284 (5) Ammonia (as N);
285 (6) Temperature (both winter and summer); and
286 (7) pH.
- 287 d. The department may waive the reporting requirements for individual point sources
288 or for a particular industry category for one or more of the pollutants listed in
289 subdivision 7 c of this subsection if the applicant has demonstrated that such a waiver
290 is appropriate because information adequate to support issuance of a permit can be
291 obtained with less stringent requirements.
- 292 e. Each applicant with processes in one or more primary industry category (see 40
293 CFR Part 122 Appendix A) contributing to a discharge must report quantitative data
294 for the following pollutants in each outfall containing process wastewater, except as
295 indicated in subdivisions 7 e (3), (4), and (5) of this subsection:
- 296 (1) The organic toxic pollutants in the fractions designated in Table I of 40 CFR Part
297 122 Appendix D for the applicant's industrial category or categories unless the
298 applicant qualifies as a small business under subdivision 8 of this subsection. Table II
299 of 40 CFR Part 122 Appendix D lists the organic toxic pollutants in each fraction. The
300 fractions result from the sample preparation required by the analytical procedure which
301 uses gas chromatography/mass spectrometry. A determination that an applicant falls
302 within a particular industrial category for the purposes of selecting fractions for testing
303 is not conclusive as to the applicant's inclusion in that category for any other purposes.
- 304 (2) The pollutants listed in Table III of 40 CFR Part 122 Appendix D (the toxic metals,
305 cyanide, and total phenols).
- 306 (3) Subdivision H 7 e (1) of this section and the corresponding portions of the VPDES
307 Application Form 2C are suspended as they apply to coal mines.
- 308 (4) Subdivision H 7 e (1) of this section and the corresponding portions of Item V-C of
309 the VPDES Application Form 2C are suspended as they apply to:
- 310 (a) Testing and reporting for all four organic fractions in the Greige Mills Subcategory
311 of the Textile Mills industry (subpart C-Low water use processing of 40 CFR Part 410),
312 and testing and reporting for the pesticide fraction in all other subcategories of this
313 industrial category.
- 314 (b) Testing and reporting for the volatile, base/neutral and pesticide fractions in the
315 Base and Precious Metals Subcategory of the Ore Mining and Dressing industry (40
316 CFR Part 440, Subpart B) and testing and reporting for all four fractions in all other
317 subcategories of this industrial category.
- 318 (c) Testing and reporting for all four GC/MS fractions in the Porcelain Enameling
319 industry.
- 320 (5) Subdivision H 7 e (1) of this section and the corresponding portions of Item V-C of
321 the VPDES Application Form 2C are suspended as they apply to:
- 322 (a) Testing and reporting for the pesticide fraction in the Tall Oil Rosin Subcategory
323 (subpart D) and Rosin-Based Derivatives Subcategory (subpart F) of the Gum and
324 Wood Chemicals industry (40 CFR Part 454), and testing and reporting for the
325 pesticide and base-neutral fractions in all other subcategories of this industrial
326 category.
- 327 (b) Testing and reporting for the pesticide fraction in the leather tanning and finishing,
328 paint and ink formulation, and photographic supplies industrial categories.

- 329 (c) Testing and reporting for the acid, base/neutral, and pesticide fractions in the
330 petroleum refining industrial category.
- 331 (d) Testing and reporting for the pesticide fraction in the Papergrade Sulfite
332 Subcategories (subparts J and U) of the Pulp and Paper industry (40 CFR Part 430);
333 testing and reporting for the base/neutral and pesticide fractions in the following
334 subcategories: Deink (subpart Q), Dissolving Kraft (subpart F), and Paperboard from
335 Waste Paper (subpart E); testing and reporting for the volatile, base/neutral, and
336 pesticide fractions in the following subcategories: BCT Bleached Kraft (subpart H),
337 Semi-Chemical (subparts B and C), and Nonintegrated-Fine Papers (subpart R); and
338 testing and reporting for the acid, base/neutral, and pesticide fractions in the following
339 subcategories: Fine Bleached Kraft (subpart I), Dissolving Sulfite Pulp (subpart K),
340 Groundwood-Fine Papers (subpart O), Market Bleached Kraft (subpart G), Tissue
341 from Wastepaper (subpart T), and Nonintegrated-Tissue Papers (subpart S).
- 342 (e) Testing and reporting for the base/neutral fraction in the Once-Through Cooling
343 Water, Fly Ash and Bottom Ash Transport Water process waste streams of the Steam
344 Electric Power Plant industrial category.
- 345 f. Each applicant must indicate whether it knows or has reason to believe that any of
346 the pollutants in Table IV of 40 CFR Part 122 Appendix D (certain conventional and
347 nonconventional pollutants) is discharged from each outfall. If an applicable effluent
348 limitations guideline either directly limits the pollutant or, by its express terms, indirectly
349 limits the pollutant through limitations on an indicator, the applicant must report
350 quantitative data. For every pollutant discharged that is not so limited in an effluent
351 limitations guideline, the applicant must either report quantitative data or briefly
352 describe the reasons the pollutant is expected to be discharged.
- 353 g. Each applicant must indicate whether it knows or has reason to believe that any of
354 the pollutants listed in Table II or Table III of 40 CFR Part 122 Appendix D (the toxic
355 pollutants and total phenols) for which quantitative data are not otherwise required
356 under subdivision 7 e of this subsection, is discharged from each outfall. For every
357 pollutant expected to be discharged in concentrations of 10 ppb or greater the
358 applicant must report quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol,
359 and 2-methyl-4,6 dinitrophenol, where any of these four pollutants are expected to be
360 discharged in concentrations of 100 ppb or greater the applicant must report
361 quantitative data. For every pollutant expected to be discharged in concentrations less
362 than 10 ppb, or in the case of acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-
363 4,6 dinitrophenol, in concentrations less than 100 ppb, the applicant must either submit
364 quantitative data or briefly describe the reasons the pollutant is expected to be
365 discharged. An applicant qualifying as a small business under subdivision 8 of this
366 subsection is not required to analyze for pollutants listed in Table II of 40 CFR Part
367 122 Appendix D (the organic toxic pollutants).
- 368 h. Each applicant must indicate whether it knows or has reason to believe that any of
369 the pollutants in Table V of 40 CFR Part 122 Appendix D (certain hazardous
370 substances and asbestos) are discharged from each outfall. For every pollutant
371 expected to be discharged, the applicant must briefly describe the reasons the
372 pollutant is expected to be discharged, and report any quantitative data it has for any
373 pollutant.
- 374 i. Each applicant must report qualitative data, generated using a screening procedure
375 not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin
376 (TCDD) if it:

- 377 (1) Uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-
 378 trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl,
 379 2,2-dichloropropionate (Erbon); O,O-dimethyl O-(2,4,5-trichlorophenyl)
 380 phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP);
 381 or
- 382 (2) Knows or has reason to believe that TCDD is or may be present in an effluent.
- 383 j. Where quantitative data are required in subdivisions H 7 a through i of this section,
 384 existing data may be used, if available, in lieu of sampling done solely for the purpose
 385 of the application, provided that all data requirements are met; sampling was
 386 performed, collected, and analyzed no more than four and one-half years prior to
 387 submission; all data are representative of the discharge; and all available
 388 representative data are considered in the values reported.
- 389 8. An applicant which qualifies as a small business under one of the following criteria is
 390 exempt from the requirements in subdivision 7 e (1) or 7 f of this subsection to submit
 391 quantitative data for the pollutants listed in Table II of 40 CFR Part 122 Appendix D (the
 392 organic toxic pollutants):
- 393 a. For coal mines, a probable total annual production of less than 100,000 tons per
 394 year; or
- 395 b. For all other applicants, gross total annual sales averaging less than \$100,000 per
 396 year (in second quarter 1980 dollars).
- 397 9. A listing of any toxic pollutant that the applicant currently uses or manufactures as an
 398 intermediate or final product or byproduct. The department may waive or modify this
 399 requirement for any applicant if the applicant demonstrates that it would be unduly
 400 burdensome to identify each toxic pollutant and the department has adequate information
 401 to issue the permit.
- 402 10. Reserved.
- 403 11. An identification of any biological toxicity tests that the applicant knows or has reason
 404 to believe have been made within the last three years on any of the applicant's discharges
 405 or on a receiving water in relation to a discharge.
- 406 12. If a contract laboratory or consulting firm performed any of the analyses required by
 407 subdivision 7 of this subsection, the identity of each laboratory or firm and the analyses
 408 performed.
- 409 13. In addition to the information reported on the application form, applicants shall provide
 410 to the department, at its request, such other information, including pertinent plans,
 411 specifications, maps and such other relevant information as may be required, in scope
 412 and details satisfactory to the department, as the department may reasonably require to
 413 assess the discharges of the facility and to determine whether to issue a VPDES permit.
 414 The additional information may include additional quantitative data and bioassays to
 415 assess the relative toxicity of discharges to aquatic life and requirements to determine the
 416 cause of the toxicity.
- 417 I. Application requirements for manufacturing, commercial, mining and silvicultural facilities
 418 which discharge only nonprocess wastewater. Except for stormwater discharges, all
 419 manufacturing, commercial, mining, and silvicultural dischargers applying for VPDES permits that
 420 discharge only nonprocess wastewater not regulated by an effluent limitations guideline or new
 421 source performance standard shall provide the following information to the department using
 422 application forms provided by the department:
- 423 1. Outfall number, latitude and longitude to the nearest 15 seconds, and the name of the
 424 receiving water;

- 425 2. Date of expected commencement of discharge;
- 426 3. An identification of the general type of waste discharged, or expected to be discharged
- 427 upon commencement of operations, including sanitary wastes, restaurant or cafeteria
- 428 wastes, or noncontact cooling water. An identification of cooling water additives (if any)
- 429 that are used or expected to be used upon commencement of operations, along with their
- 430 composition if existing composition is available;
- 431 4. a. Quantitative data for the pollutants or parameters listed below, unless testing is
- 432 waived by the department. The quantitative data may be data collected over the past 365
- 433 days, if they remain representative of current operations, and must include maximum daily
- 434 value, average daily value, and number of measurements taken. The applicant must
- 435 collect and analyze samples in accordance with 40 CFR Part 136. When analysis of pH,
- 436 temperature, residual chlorine, oil and grease, or fecal coliform (including E. coli), and
- 437 Enterococci (previously known as fecal streptococcus) and volatile organics is required in
- 438 subdivisions I 4 a (1) through (11) of this section, grab samples must be collected for those
- 439 pollutants. For all other pollutants, a 24-hour composite sample, using a minimum of four
- 440 grab samples, must be used unless specified otherwise at 40 CFR Part 136. For a
- 441 composite sample, only one analysis of the composite of aliquots is required. New
- 442 dischargers must include estimates for the pollutants or parameters listed below instead
- 443 of actual sampling data, along with the source of each estimate. All levels must be reported
- 444 or estimated as concentration and as total mass, except for flow, pH, and temperature.
- 445 (1) Biochemical oxygen demand (BOD₅).
- 446 (2) Total suspended solids (TSS).
- 447 (3) Fecal coliform (if believed present or if sanitary waste is or will be discharged).
- 448 (4) Total residual chlorine (if chlorine is used).
- 449 (5) Oil and grease.
- 450 (6) Chemical oxygen demand (COD) (if noncontact cooling water is or will be
- 451 discharged).
- 452 (7) Total organic carbon (TOC) (if noncontact cooling water is or will be discharged).
- 453 (8) Ammonia (as N).
- 454 (9) Discharge flow.
- 455 (10) pH.
- 456 (11) Temperature (winter and summer).
- 457 b. The department may waive the testing and reporting requirements for any of the
- 458 pollutants or flow listed in subdivision 4 a of this subsection if the applicant submits a
- 459 request for such a waiver before or with his application that demonstrates that
- 460 information adequate to support issuance of a permit can be obtained through less
- 461 stringent requirements.
- 462 c. If the applicant is a new discharger, he must submit the information required in
- 463 subdivision 4 a of this subsection by providing quantitative data in accordance with
- 464 that section no later than two years after commencement of discharge. However, the
- 465 applicant need not submit testing results that he has already performed and reported
- 466 under the discharge monitoring requirements of his VPDES permit.
- 467 d. The requirements of subdivisions 4 a and 4 c of this subsection that an applicant
- 468 must provide quantitative data or estimates of certain pollutants do not apply to
- 469 pollutants present in a discharge solely as a result of their presence in intake water.
- 470 However, an applicant must report such pollutants as present. Net credit may be

- 471 provided for the presence of pollutants in intake water if the requirements of 9VAC25-
472 31-230 G are met;
- 473 5. A description of the frequency of flow and duration of any seasonal or intermittent
474 discharge (except for stormwater run-off, leaks, or spills);
- 475 6. A brief description of any treatment system used or to be used;
- 476 7. Any additional information the applicant wishes to be considered, such as influent data
477 for the purpose of obtaining net credits pursuant to 9VAC25-31-230 G;
- 478 8. Signature of certifying official under 9VAC25-31-110; and
- 479 9. Pertinent plans, specifications, maps and such other relevant information as may be
480 required, in scope and details satisfactory to the department.
- 481 J. Application requirements for new and existing concentrated animal feeding operations and
482 aquatic animal production facilities. New and existing concentrated animal feeding operations and
483 concentrated aquatic animal production facilities shall provide the following information to the
484 department, using the application form provided by the department:
- 485 1. For concentrated animal feeding operations:
- 486 a. The name of the owner or operator;
- 487 b. The facility location and mailing address;
- 488 c. Latitude and longitude of the production area (entrance to the production area);
- 489 d. A topographic map of the geographic area in which the CAFO is located showing
490 the specific location of the production area, in lieu of the requirements of subdivision
491 G 7 of this section;
- 492 e. Specific information about the number and type of animals, whether in open
493 confinement or housed under roof (beef cattle, broilers, layers, swine weighing 55
494 pounds or more, swine weighing less than 55 pounds, mature dairy cows, dairy heifers,
495 veal calves, sheep and lambs, horses, ducks, turkeys, other);
- 496 f. The type of containment and storage (anaerobic lagoon, roofed storage shed,
497 storage ponds, underfloor pits, above ground storage tanks, below ground storage
498 tanks, concrete pad, impervious soil pad, other) and total capacity for manure, litter,
499 and process wastewater storage (tons/gallons);
- 500 g. The total number of acres under control of the applicant available for land application
501 of manure, litter, or process wastewater;
- 502 h. Estimated amounts of manure, litter, and process wastewater generated per year
503 (tons/gallons); and
- 504 i. For CAFOs required to seek coverage under a permit after December 31, 2009, a
505 nutrient management plan that at a minimum satisfies the requirements specified in
506 subsection E of 9VAC25-31-200 and subdivision C 5 of 9VAC25-31-130, including, for
507 all CAFOs subject to 40 CFR Part 412 Subpart C or Subpart D, the requirements of
508 40 CFR 412.4(c), as applicable.
- 509 2. For concentrated aquatic animal production facilities:
- 510 a. The maximum daily and average monthly flow from each outfall;
- 511 b. The number of ponds, raceways, and similar structures;
- 512 c. The name of the receiving water and the source of intake water;
- 513 d. For each species of aquatic animals, the total yearly and maximum harvestable
514 weight;
- 515 e. The calendar month of maximum feeding and the total mass of food fed during that
516 month; and

517 f. Pertinent plans, specifications, maps and such other relevant information as may be
518 required, in scope and details satisfactory to the department.

519 K. Application requirements for new and existing POTWs and treatment works treating
520 domestic sewage. Unless otherwise indicated, all POTWs and other dischargers designated by
521 the department must provide to the department, at a minimum, the information in this subsection
522 using an application form provided by the department. Permit applicants must submit all
523 information available at the time of permit application. The information may be provided by
524 referencing information previously submitted to the department. The department may waive any
525 requirement of this subsection if it has access to substantially identical information. The
526 department may also waive any requirement of this subsection that is not of material concern for
527 a specific permit, if approved by the regional administrator. The waiver request to the regional
528 administrator must include the department's justification for the waiver. A regional administrator's
529 disapproval of the department's proposed waiver does not constitute final agency action but does
530 provide notice to the department and permit applicant that EPA may object to any department-
531 issued permit issued in the absence of the required information.

532 1. All applicants must provide the following information:

533 a. Name, mailing address, and location of the facility for which the application is
534 submitted;

535 b. Name, mailing address, telephone number, and electronic mail address of the
536 applicant and indication as to whether the applicant is the facility's owner, operator, or
537 both;

538 c. Identification of all environmental permits or construction approvals received or
539 applied for (including dates) under any of the following programs:

540 (1) Hazardous Waste Management program under the Resource Conservation and
541 Recovery Act (RCRA), Subpart C;

542 (2) Underground Injection Control program under the Safe Drinking Water Act
543 (SDWA);

544 (3) NPDES program under the Clean Water Act (CWA);

545 (4) Prevention of Significant Deterioration (PSD) program under the Clean Air Act;

546 (5) Nonattainment program under the Clean Air Act;

547 (6) National Emission Standards for Hazardous Air Pollutants (NESHAPS)
548 preconstruction approval under the Clean Air Act;

549 (7) Ocean dumping permits under the Marine Protection Research and Sanctuaries
550 Act;

551 (8) Dredge or fill permits under § 404 of the CWA; and

552 (9) Other relevant environmental permits, including state permits;

553 d. The name and population of each municipal entity served by the facility, including
554 unincorporated connector districts. Indicate whether each municipal entity owns or
555 maintains the collection system and whether the collection system is separate sanitary
556 or combined storm and sanitary, if known;

557 e. Information concerning whether the facility is located in Indian country and whether
558 the facility discharges to a receiving stream that flows through Indian country;

559 f. The facility's design flow rate (the wastewater flow rate the plant was built to handle),
560 annual average daily flow rate, and maximum daily flow rate for each of the previous
561 three years;

- 562 g. Identification of types of collection systems used by the treatment works (i.e.,
563 separate sanitary sewers or combined storm and sanitary sewers) and an estimate of
564 the percent of sewer line that each type comprises;
- 565 h. The following information for outfalls to surface waters and other discharge or
566 disposal methods:
- 567 (1) For effluent discharges to surface waters, the total number and types of outfalls
568 (e.g., treated effluent, combined sewer overflows, bypasses, constructed emergency
569 overflows);
- 570 (2) For wastewater discharged to surface impoundments:
- 571 (a) The location of each surface impoundment;
- 572 (b) The average daily volume discharged to each surface impoundment; and
- 573 (c) Whether the discharge is continuous or intermittent;
- 574 (3) For wastewater applied to the land:
- 575 (a) The location of each land application site;
- 576 (b) The size of each land application site, in acres;
- 577 (c) The average daily volume applied to each land application site, in gallons per day;
578 and
- 579 (d) Whether land application is continuous or intermittent;
- 580 (4) For effluent sent to another facility for treatment prior to discharge:
- 581 (a) The means by which the effluent is transported;
- 582 (b) The name, mailing address, contact person, phone number, and electronic mail
583 address of the organization transporting the discharge, if the transport is provided by
584 a party other than the applicant;
- 585 (c) The name, mailing address, contact person, phone number, electronic mail
586 address, and VPDES permit number (if any) of the receiving facility; and
- 587 (d) The average daily flow rate from this facility into the receiving facility, in millions of
588 gallons per day; and
- 589 (5) For wastewater disposed of in a manner not included in subdivisions 1 h (1) through
590 (4) of this subsection (e.g., underground percolation, underground injection):
- 591 (a) A description of the disposal method, including the location and size of each
592 disposal site, if applicable;
- 593 (b) The annual average daily volume disposed of by this method, in gallons per day;
594 and
- 595 (c) Whether disposal through this method is continuous or intermittent; and
- 596 i. An indication of whether applicant is operating under or requesting to operate under
597 a variance as specified in subsection N of this section, if known at the time of
598 application.
- 599 2. All applicants with a design flow greater than or equal to 0.1 mgd must provide the
600 following information:
- 601 a. The current average daily volume of inflow and infiltration, in gallons per day, and
602 steps the facility is taking to minimize inflow and infiltration;
- 603 b. A topographic map (or other map if a topographic map is unavailable) extending at
604 least one mile beyond property boundaries of the treatment plant, including all unit
605 processes, and showing:
- 606 (1) Treatment plant area and unit processes;

- 607 (2) The major pipes or other structures through which wastewater enters the treatment
 608 plant and the pipes or other structures through which treated wastewater is discharged
 609 from the treatment plant. Include outfalls from bypass piping, if applicable;
- 610 (3) Each well where fluids from the treatment plant are injected underground;
- 611 (4) Wells, springs, and other surface water bodies listed in public records or otherwise
 612 known to the applicant within 1/4 mile of the treatment works' property boundaries;
- 613 (5) Sewage sludge management facilities (including on-site treatment, storage, and
 614 disposal sites); and
- 615 (6) Location at which waste classified as hazardous under RCRA enters the treatment
 616 plant by truck, rail, or dedicated pipe;
- 617 c. Process flow diagram or schematic:
- 618 (1) A diagram showing the processes of the treatment plant, including all bypass piping
 619 and all backup power sources or redundancy in the system. This includes a water
 620 balance showing all treatment units, including disinfection, and showing daily average
 621 flow rates at influent and discharge points, and approximate daily flow rates between
 622 treatment units; and
- 623 (2) A narrative description of the diagram; and
- 624 d. The following information regarding scheduled improvements:
- 625 (1) The outfall number of each outfall affected;
- 626 (2) A narrative description of each required improvement;
- 627 (3) Scheduled or actual dates of completion for the following:
- 628 (a) Commencement of construction;
- 629 (b) Completion of construction;
- 630 (c) Commencement of discharge; and
- 631 (d) Attainment of operational level; and
- 632 (4) A description of permits and clearances concerning other federal or state
 633 requirements.
- 634 3. Each applicant must provide the following information for each outfall, including bypass
 635 points, through which effluent is discharged, as applicable:
- 636 a. The following information about each outfall:
- 637 (1) Outfall number;
- 638 (2) State, county, and city or town in which outfall is located;
- 639 (3) Latitude and longitude, to the nearest second;
- 640 (4) Distance from shore and depth below surface;
- 641 (5) Average daily flow rate, in million gallons per day;
- 642 (6) The following information for each outfall with a seasonal or periodic discharge:
- 643 (a) Number of times per year the discharge occurs;
- 644 (b) Duration of each discharge;
- 645 (c) Flow of each discharge; and
- 646 (d) Months in which discharge occurs; and
- 647 (7) Whether the outfall is equipped with a diffuser and the type (e.g., high-rate) of
 648 diffuser used.
- 649 b. The following information, if known, for each outfall through which effluent is
 650 discharged to surface waters:

- 651 (1) Name of receiving water;
- 652 (2) Name of watershed/river/stream system and United States Soil Conservation
653 Service 14-digit watershed code;
- 654 (3) Name of State Management/River Basin and United States Geological Survey 8-
655 digit hydrologic cataloging unit code; and
- 656 (4) Critical flow of receiving stream and total hardness of receiving stream at critical
657 low flow (if applicable).
- 658 c. The following information describing the treatment provided for discharges from
659 each outfall to surface waters:
- 660 (1) The highest level of treatment (e.g., primary, equivalent to secondary, secondary,
661 advanced, other) that is provided for the discharge for each outfall and:
- 662 (a) Design biochemical oxygen demand (BOD₅ or CBOD₅) removal (percent);
- 663 (b) Design suspended solids (SS) removal (percent); and, where applicable;
- 664 (c) Design phosphorus (P) removal (percent);
- 665 (d) Design nitrogen (N) removal (percent); and
- 666 (e) Any other removals that an advanced treatment system is designed to achieve.
- 667 (2) A description of the type of disinfection used, and whether the treatment plant
668 dechlorinates (if disinfection is accomplished through chlorination).
- 669 4. Effluent monitoring for specific parameters.
- 670 a. As provided in subdivisions 4 b through 4 k of this subsection, all applicants must
671 submit to the department effluent monitoring information for samples taken from each
672 outfall through which effluent is discharged to surface waters, except for CSOs. The
673 department may allow applicants to submit sampling data for only one outfall on a
674 case-by-case basis, where the applicant has two or more outfalls with substantially
675 identical effluent. The department may also allow applicants to composite samples
676 from one or more outfalls that discharge into the same mixing zone. For POTWs
677 applying prior to commencement of discharge, data shall be submitted no later than
678 24 months after the commencement of discharge;
- 679 b. All applicants must sample and analyze for the following pollutants:
- 680 (1) Biochemical oxygen demand (BOD₅ or CBOD₅);
- 681 (2) Fecal coliform;
- 682 (3) Design flow rate;
- 683 (4) pH;
- 684 (5) Temperature; and
- 685 (6) Total suspended solids.
- 686 c. All applicants with a design flow greater than or equal to 0.1 mgd must sample and
687 analyze for the following pollutants:
- 688 (1) Ammonia (as N);
- 689 (2) Chlorine (total residual, TRC);
- 690 (3) Dissolved oxygen;
- 691 (4) Nitrate/Nitrite;
- 692 (5) Kjeldahl nitrogen;
- 693 (6) Oil and grease;
- 694 (7) Phosphorus; and

- 695 (8) Total dissolved solids.
- 696 d. Facilities that do not use chlorine for disinfection, do not use chlorine elsewhere in
- 697 the treatment process, and have no reasonable potential to discharge chlorine in their
- 698 effluent may delete chlorine.
- 699 e. All POTWs with a design flow rate equal to or greater than one million gallons per
- 700 day, all POTWs with approved pretreatment programs or POTWs required to develop
- 701 a pretreatment program, and other POTWs, as required by the department must
- 702 sample and analyze for the pollutants listed in Table 2 of 40 CFR Part 122 Appendix
- 703 J, and for any other pollutants for which the department or EPA have established water
- 704 quality standards applicable to the receiving waters.
- 705 f. The department may require sampling for additional pollutants, as appropriate, on a
- 706 case-by-case basis.
- 707 g. Applicants must provide data from a minimum of three samples taken within 4-1/2
- 708 years prior to the date of the permit application. Samples must be representative of
- 709 the seasonal variation in the discharge from each outfall. Existing data may be used,
- 710 if available, in lieu of sampling done solely for the purpose of this application. The
- 711 department may require additional samples, as appropriate, on a case-by-case basis.
- 712 h. All existing data for pollutants specified in subdivisions 4 b through 4 f of this
- 713 subsection that is collected within 4-1/2 years of the application must be included in
- 714 the pollutant data summary submitted by the applicant. If, however, the applicant
- 715 samples for a specific pollutant on a monthly or more frequent basis, it is only
- 716 necessary, for such pollutant, to summarize all data collected within one year of the
- 717 application.
- 718 i. Applicants must collect samples of effluent and analyze such samples for pollutants
- 719 in accordance with analytical methods approved under 40 CFR Part 136 unless an
- 720 alternative is specified in the existing VPDES permit. When analysis of pH,
- 721 temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform
- 722 (including E. coli), or volatile organics is required in subdivisions K 4 b, c, and e of this
- 723 section, grab samples must be collected for those pollutants. For all other pollutants,
- 724 24-hour composite samples must be used. For a composite sample, only one analysis
- 725 of the composite of aliquots is required.
- 726 j. The effluent monitoring data provided must include at least the following information
- 727 for each parameter:
- 728 (1) Maximum daily discharge, expressed as concentration or mass, based upon actual
- 729 sample values;
- 730 (2) Average daily discharge for all samples, expressed as concentration or mass, and
- 731 the number of samples used to obtain this value;
- 732 (3) The analytical method used; and
- 733 (4) The threshold level (i.e., method detection limit, minimum level, or other designated
- 734 method endpoints) for the analytical method used.
- 735 k. Unless otherwise required by the department, metals must be reported as total
- 736 recoverable.
- 737 5. Effluent monitoring for whole effluent toxicity.
- 738 a. All applicants must provide an identification of any whole effluent toxicity tests
- 739 conducted during the 4-1/2 years prior to the date of the application on any of the
- 740 applicant's discharges or on any receiving water near the discharge. For POTWs

- 741 applying prior to commencement of discharge, data shall be submitted no later than
742 24 months after the commencement of discharge.
- 743 b. As provided in subdivisions 5 c through i of this subsection, the following applicants
744 must submit to the department the results of valid whole effluent toxicity tests for acute
745 or chronic toxicity for samples taken from each outfall through which effluent is
746 discharged to surface waters, except for combined sewer overflows:
- 747 (1) All POTWs with design flow rates greater than or equal to one million gallons per
748 day;
- 749 (2) All POTWs with approved pretreatment programs or POTWs required to develop
750 a pretreatment program;
- 751 (3) Other POTWs, as required by the department, based on consideration of the
752 following factors:
- 753 (a) The variability of the pollutants or pollutant parameters in the POTW effluent (based
754 on chemical-specific information, the type of treatment plant, and types of industrial
755 contributors);
- 756 (b) The ratio of effluent flow to receiving stream flow;
- 757 (c) Existing controls on point or nonpoint sources, including total maximum daily load
758 calculations for the receiving stream segment and the relative contribution of the
759 POTW;
- 760 (d) Receiving stream characteristics, including possible or known water quality
761 impairment, and whether the POTW discharges to a coastal water, or a water
762 designated as an outstanding natural resource water; or
- 763 (e) Other considerations (including the history of toxic impacts and compliance
764 problems at the POTW) that the department determines could cause or contribute to
765 adverse water quality impacts.
- 766 c. Where the POTW has two or more outfalls with substantially identical effluent
767 discharging to the same receiving stream segment, the department may allow
768 applicants to submit whole effluent toxicity data for only one outfall on a case-by-case
769 basis. The department may also allow applicants to composite samples from one or
770 more outfalls that discharge into the same mixing zone.
- 771 d. Each applicant required to perform whole effluent toxicity testing pursuant to
772 subdivision 5 b of this subsection must provide:
- 773 (1) Results of a minimum of four quarterly tests for a year, from the year preceding the
774 permit application; or
- 775 (2) Results from four tests performed at least annually in the 4-1/2 year period prior to
776 the application, provided the results show no appreciable toxicity using a safety factor
777 determined by the department.
- 778 e. Applicants must conduct tests with multiple species (no less than two species, e.g.,
779 fish, invertebrate, plant) and test for acute or chronic toxicity, depending on the range
780 of receiving water dilution. The department recommends that applicants conduct acute
781 or chronic testing based on the following dilutions: (i) acute toxicity testing if the dilution
782 of the effluent is greater than 100:1 at the edge of the mixing zone or (ii) chronic toxicity
783 testing if the dilution of the effluent is less than or equal to 100:1 at the edge of the
784 mixing zone.
- 785 f. Each applicant required to perform whole effluent toxicity testing pursuant to
786 subdivision 5 b of this subsection must provide the number of chronic or acute whole
787 effluent toxicity tests that have been conducted since the last permit reissuance.

- 788 g. Applicants must provide the results using the form provided by the department, or
 789 test summaries if available and comprehensive, for each whole effluent toxicity test
 790 conducted pursuant to subdivision 5 b of this subsection for which such information
 791 has not been reported previously to the department.
- 792 h. Whole effluent toxicity testing conducted pursuant to subdivision 5 b of this
 793 subsection must be conducted using methods approved under 40 CFR Part 136, as
 794 directed by the department.
- 795 i. For whole effluent toxicity data submitted to the department within 4-1/2 years prior
 796 to the date of the application, applicants must provide the dates on which the data
 797 were submitted and a summary of the results.
- 798 j. Each POTW required to perform whole effluent toxicity testing pursuant to
 799 subdivision 5 b of this subsection must provide any information on the cause of toxicity
 800 and written details of any toxicity reduction evaluation conducted, if any whole effluent
 801 toxicity test conducted within the past 4-1/2 years revealed toxicity.
- 802 6. Applicants must submit the following information about industrial discharges to the
 803 POTW:
- 804 a. Number of significant industrial users (SIUs) and nonsignificant categorical
 805 industrial users (NSCIUs), including SIUs and NSCIUs that truck or haul waste,
 806 discharging to the POTW; and
- 807 b. POTWs with one or more SIUs shall provide the following information for each SIU,
 808 as defined in 9VAC25-31-10, that discharges to the POTW:
- 809 (1) Name and mailing address;
- 810 (2) Description of all industrial processes that affect or contribute to the SIU's
 811 discharge;
- 812 (3) Principal products and raw materials of the SIU that affect or contribute to the SIU's
 813 discharge;
- 814 (4) Average daily volume of wastewater discharged, indicating the amount attributable
 815 to process flow and nonprocess flow;
- 816 (5) Whether the SIU is subject to local limits;
- 817 (6) Whether the SIU is subject to categorical standards and, if so, under which
 818 category and subcategory; and
- 819 (7) Whether any problems at the POTW (e.g., upsets, pass through, interference) have
 820 been attributed to the SIU in the past 4-1/2 years.
- 821 c. The information required in subdivisions 6 a and b of this subsection may be waived
 822 by the department for POTWs with pretreatment programs if the applicant has
 823 submitted either of the following that contain information substantially identical to that
 824 required in subdivisions 6 a and b of this subsection:
- 825 (1) An annual report submitted within one year of the application; or
 826 (2) A pretreatment program.
- 827 7. Discharges from hazardous waste generators and from waste cleanup or remediation
 828 sites. POTWs receiving Resource Conservation and Recovery Act (RCRA),
 829 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), or
 830 RCRA Corrective Action wastes or wastes generated at another type of cleanup or
 831 remediation site must provide the following information:

- 832 a. If the POTW receives, or has been notified that it will receive, by truck, rail, or
 833 dedicated pipe any wastes that are regulated as RCRA hazardous wastes pursuant to
 834 40 CFR Part 261, the applicant must report the following:
- 835 (1) The method by which the waste is received (i.e., whether by truck, rail, or dedicated
 836 pipe); and
- 837 (2) The hazardous waste number and amount received annually of each hazardous
 838 waste.
- 839 b. If the POTW receives, or has been notified that it will receive, wastewaters that
 840 originate from remedial activities, including those undertaken pursuant to CERCLA
 841 and § 3004(u) or 3008(h) of RCRA, the applicant must report the following:
- 842 (1) The identity and description of the site or facility at which the wastewater originates;
- 843 (2) The identities of the wastewater's hazardous constituents, as listed in Appendix
 844 VIII of 40 CFR Part 261, if known; and
- 845 (3) The extent of treatment, if any, the wastewater receives or will receive before
 846 entering the POTW.
- 847 c. Applicants are exempt from the requirements of subdivision 7 b of this subsection if
 848 they receive no more than 15 kilograms per month of hazardous wastes, unless the
 849 wastes are acute hazardous wastes as specified in 40 CFR 261.30(d) and 261.33(e).
- 850 8. Each applicant with combined sewer systems must provide the following information:
- 851 a. The following information regarding the combined sewer system:
- 852 (1) A map indicating the location of the following:
- 853 (a) All CSO discharge points;
- 854 (b) Sensitive use areas potentially affected by CSOs (e.g., beaches, drinking water
 855 supplies, shellfish beds, sensitive aquatic ecosystems, and outstanding national
 856 resource waters); and
- 857 (c) Waters supporting threatened and endangered species potentially affected by
 858 CSOs; and
- 859 (2) A diagram of the combined sewer collection system that includes the following
 860 information:
- 861 (a) The location of major sewer trunk lines, both combined and separate sanitary;
- 862 (b) The locations of points where separate sanitary sewers feed into the combined
 863 sewer system;
- 864 (c) In-line and off-line storage structures;
- 865 (d) The locations of flow-regulating devices; and
- 866 (e) The locations of pump stations.
- 867 b. The following information for each CSO discharge point covered by the permit
 868 application:
- 869 (1) The following information on each outfall:
- 870 (a) Outfall number;
- 871 (b) State, county, and city or town in which outfall is located;
- 872 (c) Latitude and longitude, to the nearest second;
- 873 (d) Distance from shore and depth below surface;
- 874 (e) Whether the applicant monitored any of the following in the past year for this CSO:
- 875 (i) rainfall, (ii) CSO flow volume, (iii) CSO pollutant concentrations, (iv) receiving water
 876 quality, or (v) CSO frequency; and

- 877 (f) The number of storm events monitored in the past year;
 878 (2) The following information about CSO overflows from each outfall:
 879 (a) The number of events in the past year;
 880 (b) The average duration per event, if available;
 881 (c) The average volume per CSO event, if available; and
 882 (d) The minimum rainfall that caused a CSO event, if available, in the last year;
 883 (3) The following information about receiving waters:
 884 (a) Name of receiving water;
 885 (b) Name of watershed/stream system and the United States Soil Conservation
 886 Service watershed (14-digit) code, if known; and
 887 (c) Name of State Management/River Basin and the United States Geological Survey
 888 hydrologic cataloging unit (8-digit) code, if known; and
 889 (4) A description of any known water quality impacts on the receiving water caused by
 890 the CSO (e.g., permanent or intermittent beach closings, permanent or intermittent
 891 shellfish bed closings, fish kills, fish advisories, other recreational loss, or exceedance
 892 of any applicable state water quality standard).
- 893 9. All applicants must provide the name, mailing address, telephone number, electronic
 894 mail address, and responsibilities of all contractors responsible for any operational or
 895 maintenance aspects of the facility.
- 896 10. All applications must be signed by a certifying official in compliance with 9VAC25-31-
 897 110.
- 898 11. Pertinent plans, specifications, maps and such other relevant information as may be
 899 required, in scope and details satisfactory to the department.
- 900 L. Application requirements for new sources and new discharges. New manufacturing,
 901 commercial, mining and silvicultural dischargers applying for VPDES permits (except for new
 902 discharges of facilities subject to the requirements of subsection I of this section or new
 903 discharges of stormwater associated with industrial activity that are subject to the requirements
 904 of 9VAC25-31-120 B 1 and this subsection) shall provide the following information to the
 905 department, using the application forms provided by the department:
- 906 1. The expected outfall location in latitude and longitude to the nearest 15 seconds and
 907 the name of the receiving water;
- 908 2. The expected date of commencement of discharge;
- 909 3. a. Description of the treatment that the wastewater will receive, along with all operations
 910 contributing wastewater to the effluent, average flow contributed by each operation, and
 911 the ultimate disposal of any solid or liquid wastes not discharged;
- 912 b. A line drawing of the water flow through the facility with a water balance as described
 913 in subdivision H 2;
- 914 c. If any of the expected discharges will be intermittent or seasonal, a description of
 915 the frequency, duration and maximum daily flow rate of each discharge occurrence
 916 (except for stormwater run-off, spillage, or leaks);
- 917 4. If a new source performance standard promulgated under § 306 of the CWA or an
 918 effluent limitation guideline applies to the applicant and is expressed in terms of production
 919 (or other measure of operation), a reasonable measure of the applicant's expected actual
 920 production reported in the units used in the applicable effluent guideline or new source
 921 performance standard for each of the first three years. Alternative estimates may also be
 922 submitted if production is likely to vary;

923 5. The requirements in subdivisions I 4 a, b, and c of this section that an applicant must
 924 provide estimates of certain pollutants expected to be present do not apply to pollutants
 925 present in a discharge solely as a result of their presence in intake water; however, an
 926 applicant must report such pollutants as present. Net credits may be provided for the
 927 presence of pollutants in intake water if the requirements of 9VAC25-31-230 G are met.
 928 All levels (except for discharge flow, temperature, and pH) must be estimated as
 929 concentration and as total mass.

930 a. Each applicant must report estimated daily maximum, daily average, and source of
 931 information for each outfall for the following pollutants or parameters. The department
 932 may waive the reporting requirements for any of these pollutants and parameters if the
 933 applicant submits a request for such a waiver before or with his application which
 934 demonstrates that information adequate to support issuance of the permit can be
 935 obtained through less stringent reporting requirements:

936 (1) Biochemical oxygen demand (BOD).

937 (2) Chemical oxygen demand (COD).

938 (3) Total organic carbon (TOC).

939 (4) Total suspended solids (TSS).

940 (5) Flow.

941 (6) Ammonia (as N).

942 (7) Temperature (winter and summer).

943 (8) pH.

944 b. Each applicant must report estimated daily maximum, daily average, and source of
 945 information for each outfall for the following pollutants, if the applicant knows or has
 946 reason to believe they will be present or if they are limited by an effluent limitation
 947 guideline or new source performance standard either directly or indirectly through
 948 limitations on an indicator pollutant: all pollutants in Table IV of 40 CFR Part 122
 949 Appendix D (certain conventional and nonconventional pollutants).

950 c. Each applicant must report estimated daily maximum, daily average and source of
 951 information for the following pollutants if he knows or has reason to believe that they
 952 will be present in the discharges from any outfall:

953 (1) The pollutants listed in Table III of 40 CFR Part 122 Appendix D (the toxic metals,
 954 in the discharge from any outfall, Total cyanide, and total phenols);

955 (2) The organic toxic pollutants in Table II of 40 CFR Part 122 Appendix D (except bis
 956 (chloromethyl) ether, dichlorofluoromethane and trichlorofluoromethane). This
 957 requirement is waived for applicants with expected gross sales of less than \$100,000
 958 per year for the next three years, and for coal mines with expected average production
 959 of less than 100,000 tons of coal per year.

960 d. The applicant is required to report that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD)
 961 may be discharged if he uses or manufactures one of the following compounds, or if
 962 he knows or has reason to believe that TCDD will or may be present in an effluent:

963 (1) 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) (CAS #93-76-5);

964 (2) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) (CAS #93-72-1);

965 (3) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS #136-25-4);

966 (4) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel) (CAS #299-84-
 967 3);

968 (5) 2,4,5-trichlorophenol (TCP) (CAS #95-95-4); or

- 969 (6) Hexachlorophene (HCP) (CAS #70-30-4);
 970 e. Each applicant must report any pollutants listed in Table V of 40 CFR Part 122
 971 Appendix D (certain hazardous substances) if he believes they will be present in any
 972 outfall (no quantitative estimates are required unless they are already available).
 973 f. No later than 24 months after the commencement of discharge from the proposed
 974 facility, the applicant is required to submit the information required in subsection H of
 975 this section. However, the applicant need not complete those portions of subsection H
 976 of this section requiring tests that have already been performed and reported under
 977 the discharge monitoring requirements of the VPDES permit;
- 978 6. Each applicant must report the existence of any technical evaluation concerning his
 979 wastewater treatment, along with the name and location of similar plants of which he has
 980 knowledge;
- 981 7. Any optional information the permittee wishes to have considered;
- 982 8. Signature of certifying official under 9VAC25-31-110; and
- 983 9. Pertinent plans, specifications, maps, and such other relevant information as may be
 984 required, in scope and details satisfactory to the department.
- 985 M. Variance requests by non-POTWs. A discharger which is not a publicly owned treatment
 986 works (POTW) may request a variance from otherwise applicable effluent limitations under any
 987 of the following statutory or regulatory provisions within the times specified in this subsection:
 988 1. Fundamentally different factors.
- 989 a. A request for a variance based on the presence of fundamentally different factors
 990 from those on which the effluent limitations guideline was based shall be filed as
 991 follows:
- 992 (1) For a request from best practicable control technology currently available (BPT),
 993 by the close of the public comment period for the draft permit; or
- 994 (2) For a request from best available technology economically achievable (BAT) or
 995 best conventional pollutant control technology (BCT), by no later than:
- 996 (a) July 3, 1989, for a request based on an effluent limitation guideline promulgated
 997 before February 4, 1987, to the extent July 3, 1989, is not later than that provided
 998 under previously promulgated regulations; or
- 999 (b) 180 days after the date on which an effluent limitation guideline is published in the
 1000 Federal Register for a request based on an effluent limitation guideline promulgated
 1001 on or after February 4, 1987.
- 1002 b. The request shall explain how the requirements of the applicable regulatory or
 1003 statutory criteria have been met.
- 1004 2. A request for a variance from the BAT requirements for CWA § 301(b)(2)(F) pollutants
 1005 (commonly called nonconventional pollutants) pursuant to § 301(c) of the CWA because
 1006 of the economic capability of the owner or operator, or pursuant to § 301(g) of the CWA
 1007 (provided however that a § 301(g) variance may only be requested for ammonia; chlorine;
 1008 color; iron; total phenols (when determined by the administrator to be a pollutant covered
 1009 by § 301(b)(2)(F) of the CWA) and any other pollutant which the administrator lists under
 1010 § 301(g)(4) of the CWA) must be made as follows:
- 1011 a. For those requests for a variance from an effluent limitation based upon an effluent
 1012 limitation guideline by:
- 1013 (1) Submitting an initial request to the regional administrator, as well as to the
 1014 department, stating the name of the discharger, the permit number, the outfall number,
 1015 the applicable effluent guideline, and whether the discharger is requesting a § 301(c)

- 1016 or 301(g) of the CWA modification, or both. This request must have been filed not later
1017 than 270 days after promulgation of an applicable effluent limitation guideline; and
- 1018 (2) Submitting a completed request no later than the close of the public comment
1019 period for the draft permit demonstrating that: (i) all reasonable ascertainable issues
1020 have been raised and all reasonably available arguments and materials supporting
1021 their position have been submitted; and (ii) that the applicable requirements of 40 CFR
1022 Part 125 have been met. Notwithstanding this provision, the complete application for
1023 a request under § 301(g) of the CWA shall be filed 180 days before EPA must make
1024 a decision (unless the Regional Division Director establishes a shorter or longer
1025 period); or
- 1026 b. For those requests for a variance from effluent limitations not based on effluent
1027 limitation guidelines, the request need only comply with subdivision 2 a (2) of this
1028 subsection and need not be preceded by an initial request under subdivision 2 a (1) of
1029 this subsection.
- 1030 3. A modification under § 302(b)(2) of the CWA of requirements under § 302(a) of the
1031 CWA for achieving water quality related effluent limitations may be requested no later than
1032 the close of the public comment period for the draft permit on the permit from which the
1033 modification is sought.
- 1034 4. A variance for alternate effluent limitations for the thermal component of any discharge
1035 must be filed with a timely application for a permit under this section, except that if thermal
1036 effluent limitations are established on a case-by-case basis or are based on water quality
1037 standards the request for a variance may be filed by the close of the public comment
1038 period for the draft permit. A copy of the request shall be sent simultaneously to the
1039 department.
- 1040 N. Variance requests by POTWs. A discharger which is a publicly owned treatment works
1041 (POTW) may request a variance from otherwise applicable effluent limitations under any of the
1042 following statutory provisions as specified in this paragraph:
- 1043 1. A request for a modification under § 301(h) of the CWA of requirements of §
1044 301(b)(1)(B) of the CWA for discharges into marine waters must be filed in accordance
1045 with the requirements of 40 CFR Part 125, Subpart G.
- 1046 2. A modification under § 302(b)(2) of the CWA of the requirements under § 302(a) of the
1047 CWA for achieving water quality based effluent limitations shall be requested no later than
1048 the close of the public comment period for the draft permit on the permit from which the
1049 modification is sought.
- 1050 O. Expedited variance procedures and time extensions.
- 1051 1. Notwithstanding the time requirements in subsections M and N of this section, the
1052 department may notify a permit applicant before a draft permit is issued that the draft
1053 permit will likely contain limitations which are eligible for variances. In the notice the
1054 department may require the applicant as a condition of consideration of any potential
1055 variance request to submit a request explaining how the requirements of 40 CFR Part 125
1056 applicable to the variance have been met and may require its submission within a specified
1057 reasonable time after receipt of the notice. The notice may be sent before the permit
1058 application has been submitted. The draft or final permit may contain the alternative
1059 limitations that may become effective upon final grant of the variance.
- 1060 2. A discharger who cannot file a timely complete request required under subdivision M 2
1061 a (2) or M 2 b of this section may request an extension. The extension may be granted or
1062 denied at the discretion of the department. Extensions shall be no more than six months
1063 in duration.

1064 P. Recordkeeping. Except for information required by subdivision D 2 of this section, which
 1065 shall be retained for a period of at least five years from the date the application is signed (or longer
 1066 as required by Part VI (9VAC25-31-420 et seq.) of this chapter), applicants shall keep records of
 1067 all data used to complete permit applications and any supplemental information submitted under
 1068 this section for a period of at least three years from the date the application is signed.

1069 Q. Sewage sludge management. All TWTDS subject to subdivision D 2 a of this section must
 1070 provide the information in this subsection to the department using an application form approved
 1071 by the department. New applicants must submit all information available at the time of permit
 1072 application. The information may be provided by referencing information previously submitted to
 1073 the department. The department may waive any requirement of this subsection if it has access to
 1074 substantially identical information. The department may also waive any requirement of this
 1075 subsection that is not of material concern for a specific permit, if approved by the regional
 1076 administrator. The waiver request to the regional administrator must include the department's
 1077 justification for the waiver. A regional administrator's disapproval of the department's proposed
 1078 waiver does not constitute final agency action, but does provide notice to the department and the
 1079 permit applicant that EPA may object to any department issued permit issued in the absence of
 1080 the required information.

- 1081 1. All applicants must submit the following information:
- 1082 a. The name, mailing address, and location of the TWTDS for which the application is
 - 1083 submitted;
 - 1084 b. Whether the facility is a Class I Sludge Management Facility;
 - 1085 c. The design flow rate (in million gallons per day);
 - 1086 d. The total population served;
 - 1087 e. The TWTDS's status as federal, state, private, public, or other entity;
 - 1088 f. The name, mailing address, telephone number, and electronic mail address of the
 - 1089 applicant; and
 - 1090 g. Indication whether the applicant is the owner, operator, or both.
- 1091 2. All applicants must submit the facility's VPDES permit number, if applicable, and a listing
- 1092 of all other federal, state, and local permits or construction approvals received or applied
- 1093 for under any of the following programs:
- 1094 a. Hazardous Waste Management program under the Resource Conservation and
 - 1095 Recovery Act (RCRA);
 - 1096 b. UIC program under the Safe Drinking Water Act (SDWA);
 - 1097 c. NPDES program under the Clean Water Act (CWA);
 - 1098 d. Prevention of Significant Deterioration (PSD) program under the Clean Air Act;
 - 1099 e. Nonattainment program under the Clean Air Act;
 - 1100 f. National Emission Standards for Hazardous Air Pollutants (NESHAPS)
 - 1101 preconstruction approval under the Clean Air Act;
 - 1102 g. Dredge or fill permits under § 404 of the CWA;
 - 1103 h. Other relevant environmental permits, including state or local permits.
- 1104 3. All applicants must identify any generation, treatment, storage, land application of
- 1105 biosolids, or disposal of sewage sludge that occurs in Indian country.
- 1106 4. All applicants must submit a topographic map (or other map if a topographic map is
- 1107 unavailable) extending one mile beyond property boundaries of the facility and showing
- 1108 the following information:

- 1109 a. All sewage sludge management facilities, including on-site treatment, storage, and
1110 disposal sites; and
- 1111 b. Wells, springs, and other surface water bodies that are within 1/4 mile of the property
1112 boundaries and listed in public records or otherwise known to the applicant.
- 1113 5. All applicants must submit a line drawing or a narrative description that identifies all
1114 sewage sludge management practices employed during the term of the permit, including
1115 all units used for collecting, dewatering, storing, or treating sewage sludge; the destination
1116 of all liquids and solids leaving each such unit; and all processes used for pathogen
1117 reduction and vector attraction reduction.
- 1118 6. All applicants must submit an odor control plan that contains at minimum:
- 1119 a. Methods used to minimize odor in producing biosolids;
- 1120 b. Methods used to identify malodorous biosolids before land application (at the
1121 generating facility);
- 1122 c. Methods used to identify and abate malodorous biosolids that have been delivered
1123 to the field, prior to land application; and
- 1124 d. Methods used to abate malodor from biosolids if land applied.
- 1125 7. The applicant must submit biosolids monitoring data for the pollutants for which limits
1126 in biosolids have been established in Part VI (9VAC25-31-420 et seq.) of this chapter for
1127 the applicant's use or disposal practices on the date of permit application with the following
1128 conditions:
- 1129 a. When applying for authorization to land apply a biosolids source not previously
1130 included in a VPDES or Virginia Pollution Abatement Permit, the biosolids shall be
1131 sampled and analyzed for PCBs. The sample results shall be submitted with the permit
1132 application or request to add the source.
- 1133 b. The department may require sampling for additional pollutants, as appropriate, on
1134 a case-by-case basis.
- 1135 c. Applicants must provide data from a minimum of three samples taken within 4-1/2
1136 years prior to the date of the permit application. Samples must be representative of
1137 the biosolids and should be taken at least one month apart. Existing data may be used
1138 in lieu of sampling done solely for the purpose of this application.
- 1139 d. Applicants must collect and analyze samples in accordance with analytical methods
1140 specified in 9VAC25-31-490, 40 CFR Part 503 ~~(March 26, 2007)~~, and 40 CFR Part
1141 136 ~~(March 26, 2007)~~.
- 1142 e. The monitoring data provided must include at least the following information for each
1143 parameter:
- 1144 (1) Average monthly concentration for all samples (mg/kg dry weight), based upon
1145 actual sample values;
- 1146 (2) The analytical method used; and
- 1147 (3) The method detection level.
- 1148 8. If the applicant is a person who prepares biosolids or sewage sludge, as defined in
1149 9VAC25-31-500, the applicant must provide the following information:
- 1150 a. If the applicant's facility generates biosolids or sewage sludge, the total dry metric
1151 tons per 365-day period generated at the facility.
- 1152 b. If the applicant's facility receives biosolids or sewage sludge from another facility,
1153 the following information for each facility from which biosolids or sewage sludge is
1154 received:

- 1155 (1) The name, mailing address, and location of the other facility;
 1156 (2) The total dry metric tons per 365-day period received from the other facility; and
 1157 (3) A description of any treatment processes occurring at the other facility, including
 1158 blending activities and treatment to reduce pathogens or vector attraction
 1159 characteristics.
- 1160 c. If the applicant's facility changes the quality of biosolids or sewage sludge through
 1161 blending, treatment, or other activities, the following information:
- 1162 (1) Whether the Class A pathogen reduction requirements in 9VAC25-31-710 A or the
 1163 Class B pathogen reduction requirements in 9VAC25-31-710 B are met, and a
 1164 description of any treatment processes used to reduce pathogens in sewage sludge;
 1165 (2) Whether any of the vector attraction reduction options of 9VAC25-31-720 B 1
 1166 through 8 are met, and a description of any treatment processes used to reduce vector
 1167 attraction properties in sewage sludge; and
 1168 (3) A description of any other blending, treatment, or other activities that change the
 1169 quality of sewage sludge.
- 1170 d. If biosolids from the applicant's facility meets the ceiling concentrations in 9VAC25-
 1171 31-540 B Table 1, the pollutant concentrations in 9VAC25-31-540 B Table 3, the Class
 1172 A pathogen requirements in 9VAC25-31-710 A, and one of the vector attraction
 1173 reduction requirements in 9VAC25-31-720 B 1 through 8, and if the biosolids is applied
 1174 to the land, the applicant must provide the total dry metric tons per 365-day period of
 1175 sewage sludge subject to this subsection that is applied to the land.
- 1176 e. If biosolids from the applicant's facility is sold or given away in a bag or other
 1177 container for application to the land, and the biosolids is not subject to subdivision 8 d
 1178 of this subsection, the applicant must provide the following information:
- 1179 (1) The total dry metric tons per 365-day period of biosolids subject to this subsection
 1180 that is sold or given away in a bag or other container for application to the land; and
 1181 (2) A copy of all labels or notices that accompany the biosolids being sold or given
 1182 away.
- 1183 f. If biosolids or sewage sludge from the applicant's facility is provided to another
 1184 person who prepares biosolids, as defined in 9VAC25-31-500, and the biosolids is not
 1185 subject to subdivision 8 d of this subsection, the applicant must provide the following
 1186 information for each facility receiving the biosolids or sewage sludge:
- 1187 (1) The name, mailing address, and electronic mail address of the receiving facility;
 1188 (2) The total dry metric tons per 365-day period of biosolids or sewage sludge subject
 1189 to this subsection that the applicant provides to the receiving facility;
 1190 (3) A description of any treatment processes occurring at the receiving facility,
 1191 including blending activities and treatment to reduce pathogens or vector attraction
 1192 characteristic;
 1193 (4) A copy of the notice and necessary information that the applicant is required to
 1194 provide the receiving facility under 9VAC25-31-530 G; and
 1195 (5) If the receiving facility places biosolids in bags or containers for sale or give-away
 1196 for application to the land, a copy of any labels or notices that accompany the biosolids.
- 1197 9. If biosolids from the applicant's facility is applied to the land in bulk form and is not
 1198 subject to subdivision 8 d, e, or f of this subsection, the applicant must provide the following
 1199 information:

- 1200 a. Written permission of landowners on the most current form approved by the
1201 department.
- 1202 b. The total dry metric tons per 365-day period of biosolids subject to this subsection
1203 that is applied to the land.
- 1204 c. If any land application sites are located in states other than the state where the
1205 biosolids is prepared, a description of how the applicant will notify the permitting
1206 authority for the state where the land application sites are located.
- 1207 d. The following information for each land application site that has been identified at
1208 the time of permit application:
- 1209 (1) The DEQ control number, if previously assigned, identifying the land application
1210 field or site. If a DEQ control number has not been assigned, provide the site
1211 identification code used by the permit applicant to report activities and the site's
1212 location;
- 1213 (2) The site's latitude and longitude in decimal degrees to three decimal places and
1214 method of determination;
- 1215 (3) A legible topographic map and aerial photograph, including legend, of proposed
1216 application areas to scale as needed to depict the following features:
- 1217 (a) Property boundaries;
- 1218 (b) Surface water courses;
- 1219 (c) Water supply wells and springs;
- 1220 (d) Roadways;
- 1221 (e) Rock outcrops;
- 1222 (f) Slopes;
- 1223 (g) Frequently flooded areas (National Resources Conservation Service (NRCS)
1224 designation);
- 1225 (h) Occupied dwellings within 400 feet of the property boundaries and all existing
1226 extended dwelling and property line setback distances;
- 1227 (i) Publicly accessible properties and occupied buildings within 400 feet of the property
1228 boundaries and the associated extended setback distances; and
- 1229 (j) The gross acreage of the fields where biosolids will be applied;
- 1230 (4) County map or other map of sufficient detail to show general location of the site
1231 and proposed transport vehicle haul routes to be utilized from the treatment plant;
- 1232 (5) County tax maps labeled with Tax Parcel ID or IDs for each farm to be included in
1233 the permit, which may include multiple fields, to depict properties within 400 feet of the
1234 field boundaries;
- 1235 (6) A USDA soil survey map, if available, of proposed sites for land application of
1236 biosolids;
- 1237 (7) The name, mailing address, telephone number, and electronic mail address of each
1238 site owner, if different from the applicant;
- 1239 (8) The name, mailing address, telephone number, and electronic mail address of the
1240 person who applies biosolids to the site, if different from the applicant;
- 1241 (9) Whether the site is agricultural land, forest, a public contact site, or a reclamation
1242 site, as such site types are defined in 9VAC25-31-500;
- 1243 (10) Description of agricultural practices including a list of proposed crops to be grown;

- 1244 (11) Whether either of the vector attraction reduction options of 9VAC25-31-720 B 9
 1245 or 10 is met at the site, and a description of any procedures employed at the time of
 1246 use to reduce vector attraction properties in biosolids;
- 1247 (12) Pertinent calculations justifying storage and land area requirements for biosolids
 1248 application including an annual biosolids balance incorporating such factors as
 1249 precipitation, evapotranspiration, soil percolation rates, wastewater loading, and
 1250 monthly storage (input and drawdown); and
- 1251 (13) Other information that describes how the site will be managed, as specified by
 1252 the department.
- 1253 e. The following information for each land application site that has been identified at
 1254 the time of permit application, if the applicant intends to apply bulk biosolids subject to
 1255 the cumulative pollutant loading rates in 9VAC25-31-540 B Table 2 to the site:
- 1256 (1) Whether the applicant has contacted the permitting authority in the state where the
 1257 bulk biosolids subject to 9VAC25-31-540 B Table 2 will be applied, to ascertain
 1258 whether bulk biosolids subject to 9VAC25-31-540 B Table 2 has been applied to the
 1259 site on or since July 20, 1993, and if so, the name of the permitting authority and the
 1260 name, phone number, and electronic mail address, if available, of a contact person at
 1261 the permitting authority; and
- 1262 (2) Identification of facilities other than the applicant's facility that have sent, or are
 1263 sending, biosolids subject to the cumulative pollutant loading rates in 9VAC25-31-540
 1264 B Table 2 to the site since July 20, 1993, if, based on the inquiry in subdivision 9 e (1)
 1265 of this subsection, bulk biosolids subject to cumulative pollutant loading rates in
 1266 9VAC25-31-540 B Table 2 has been applied to the site since July 20, 1993.
- 1267 10. Biosolids storage facilities not located at the site of the wastewater treatment plant.
 1268 Plans and specifications for biosolids storage facilities not located at the site of the
 1269 wastewater treatment plant generating the biosolids, including routine and on-site storage,
 1270 shall be submitted for issuance of a certificate to construct and a certificate to operate in
 1271 accordance with the Sewage Collection and Treatment Regulations (9VAC25-790) and
 1272 shall depict the following information:
- 1273 a. Site layout on a recent 7.5 minute topographic quadrangle or other appropriate
 1274 scaled map;
- 1275 b. Location of any required soil, geologic, and hydrologic test holes or borings;
- 1276 c. Location of the following field features within 0.25 miles of the site boundary (indicate
 1277 on map) with the approximate distances from the site boundary:
- 1278 (1) Water wells (operating or abandoned);
- 1279 (2) Surface waters;
- 1280 (3) Springs;
- 1281 (4) Public water supplies;
- 1282 (5) Sinkholes;
- 1283 (6) Underground and surface mines;
- 1284 (7) Mine pool (or other) surface water discharge points;
- 1285 (8) Mining spoil piles and mine dumps;
- 1286 (9) Quarries;
- 1287 (10) Sand and gravel pits;
- 1288 (11) Gas and oil wells;
- 1289 (12) Diversion ditches;

- 1290 (13) Occupied dwellings, including industrial and commercial establishments;
 1291 (14) Landfills and dumps;
 1292 (15) Other unlined impoundments;
 1293 (16) Septic tanks and drainfields; and
 1294 (17) Injection wells;
 1295 d. Topographic map (10-foot contour preferred) of sufficient detail to clearly show the
 1296 following information:
 1297 (1) Maximum and minimum percent slopes;
 1298 (2) Depressions on the site that may collect water;
 1299 (3) Drainage ways that may attribute to rainfall run-on to or run-off from this site; and
 1300 (4) Portions of the site, if any, that are located within the 100-year floodplain;
 1301 e. Data and specifications for the liner proposed for seepage control;
 1302 f. Scaled plan view and cross-sectional view of the facilities showing inside and outside
 1303 slopes of all embankments and details of all appurtenances;
 1304 g. Calculations justifying impoundment capacity; and
 1305 h. Groundwater monitoring plans for the facilities if required by the department. The
 1306 groundwater monitoring plan shall include pertinent geohydrological data to justify
 1307 upgradient and downgradient well location and depth.
- 1308 11. Staging. Generic plans are required for staging of biosolids.
- 1309 12. A biosolids management plan shall be provided that includes the following minimum
 1310 site specific information at the time of permit application:
 1311 a. A comprehensive, general description of the operation shall be provided, including
 1312 biosolids source or sources, quantities, flow diagram illustrating treatment works
 1313 biosolids flows and solids handling units, site description, methodology of biosolids
 1314 handling for application periods, including storage and nonapplication period storage,
 1315 and alternative management methods when storage is not provided.
 1316 b. A nutrient management plan approved by the Department of Conservation and
 1317 Recreation as required for application sites prior to department authorization under the
 1318 following conditions:
 1319 (1) Sites operated by an owner or lessee of a confined animal feeding operation, as
 1320 defined in subsection A of § 62.1-44.17:1 of the Code of Virginia, or confined poultry
 1321 feeding operation, as defined in subsection A of § 62.1-44.17:1.1 of the Code of
 1322 Virginia;
 1323 (2) Sites where land application is proposed more frequently than once every three
 1324 years at greater than 50% of the annual agronomic rate;
 1325 (3) Mined or disturbed land sites where land application is proposed at greater than
 1326 agronomic rates; or
 1327 (4) Other sites based on site-specific conditions that increase the risk that land
 1328 application may adversely impact state waters.
- 1329 13. Biosolids transport.
 1330 a. General description of transport vehicles to be used;
 1331 b. Procedures for biosolids offloading at the biosolids facilities and the land application
 1332 site together with spill prevention, cleanup (including vehicle cleaning), field
 1333 reclamation, and emergency spill notification and cleanup measures; and
 1334 c. Voucher system used for documentation and recordkeeping.

- 1335 14. Field operations.
- 1336 a. Storage.
- 1337 (1) Routine storage at facilities not located at the site of the wastewater treatment plant
- 1338 – supernatant handling and disposal, biosolids handling, and loading of transport
- 1339 vehicles, equipment cleaning, freeboard maintenance, and inspections for structural
- 1340 integrity;
- 1341 (2) On-site storage – procedures for department approval and implementation;
- 1342 (3) Staging – procedures to be followed including either designated site locations
- 1343 provided in the "Design Information" or the specific site criteria for such locations
- 1344 including the liner/cover requirements and the time limit assigned to such use; and
- 1345 (4) Field reestablishment of offloading (staging) areas.
- 1346 b. Application methodology.
- 1347 (1) Description and specifications on spreader vehicles;
- 1348 (2) Procedures for calibrating equipment for various biosolids contents to ensure
- 1349 uniform distribution and appropriate loading rates on a day-to-day basis; and
- 1350 (3) Procedures used to ensure that operations address the following constraints:
- 1351 application of biosolids to frozen ground, pasture/hay fields, crops for direct human
- 1352 consumption and saturated or ice-covered or snow-covered ground; establishment of
- 1353 setback distances, slopes, prohibited access for beef and dairy animals, and soil pH
- 1354 requirements; and proper site specific biosolids loading rates on a field-by-field basis.
- 1355 15. An applicant for a permit authorizing the land application of biosolids shall provide to
- 1356 the department, and to each locality in which the applicant proposes to land apply
- 1357 biosolids, written evidence of financial responsibility. Evidence of financial responsibility
- 1358 shall be provided in accordance with requirements specified in Article 6 (9VAC25-32-770
- 1359 et seq.) of Part IX (9VAC25-32-303 et seq.) of the Virginia Pollution Abatement (VPA)
- 1360 Permit Regulation.
- 1361 16. If sewage sludge from the applicant's facility is placed on a surface disposal site, the
- 1362 applicant must provide the following information:
- 1363 a. The total dry metric tons of sewage sludge from the applicant's facility that is placed
- 1364 on surface disposal sites per 365-day period.
- 1365 b. The following information for each surface disposal site receiving sewage sludge
- 1366 from the applicant's facility that the applicant does not own or operate:
- 1367 (1) The site name or number, contact person, mailing address, telephone number, and
- 1368 electronic mail address for the surface disposal site; and
- 1369 (2) The total dry metric tons from the applicant's facility per 365-day period placed on
- 1370 the surface disposal site.
- 1371 c. The following information for each active sewage sludge unit at each surface
- 1372 disposal site that the applicant owns or operates:
- 1373 (1) The name or number and the location of the active sewage sludge unit;
- 1374 (2) The unit's latitude and longitude to the nearest second, and method of
- 1375 determination;
- 1376 (3) If not already provided, a topographic map (or other map if a topographic map is
- 1377 unavailable) that shows the unit's location;
- 1378 (4) The total dry metric tons placed on the active sewage sludge unit per 365-day
- 1379 period;

- 1380 (5) The total dry metric tons placed on the active sewage sludge unit over the life of
1381 the unit;
- 1382 (6) A description of any liner for the active sewage sludge unit, including whether it
1383 has a maximum permeability of 1×10^{-7} cm/sec;
- 1384 (7) A description of any leachate collection system for the active sewage sludge unit,
1385 including the method used for leachate disposal, and any federal, state, and local
1386 permit number(s) for leachate disposal;
- 1387 (8) If the active sewage sludge unit is less than 150 meters from the property line of
1388 the surface disposal site, the actual distance from the unit boundary to the site property
1389 line;
- 1390 (9) The remaining capacity (dry metric tons) for the active sewage sludge unit;
- 1391 (10) The date on which the active sewage sludge unit is expected to close, if such a
1392 date has been identified;
- 1393 (11) The following information for any other facility that sends sewage sludge to the
1394 active sewage sludge unit:
- 1395 (a) The name, contact person, mailing address, and electronic mail address of the
1396 facility; and
- 1397 (b) Available information regarding the quality of the sewage sludge received from the
1398 facility, including any treatment at the facility to reduce pathogens or vector attraction
1399 characteristics;
- 1400 (12) Whether any of the vector attraction reduction options of 9VAC25-31-720 B 9
1401 through 11 is met at the active sewage sludge unit, and a description of any
1402 procedures employed at the time of disposal to reduce vector attraction properties in
1403 sewage sludge;
- 1404 (13) The following information, as applicable to any groundwater monitoring occurring
1405 at the active sewage sludge unit:
- 1406 (a) A description of any groundwater monitoring occurring at the active sewage sludge
1407 unit;
- 1408 (b) Any available groundwater monitoring data, with a description of the well locations
1409 and approximate depth to groundwater;
- 1410 (c) A copy of any groundwater monitoring plan that has been prepared for the active
1411 sewage sludge unit;
- 1412 (d) A copy of any certification that has been obtained from a qualified groundwater
1413 scientist that the aquifer has not been contaminated; and
- 1414 (14) If site-specific pollutant limits are being sought for the sewage sludge placed on
1415 this active sewage sludge unit, information to support such a request.
- 1416 17. If sewage sludge from the applicant's facility is fired in a sewage sludge incinerator,
1417 the applicant must provide the following information:
- 1418 a. The total dry metric tons of sewage sludge from the applicant's facility that is fired
1419 in sewage sludge incinerators per 365-day period.
- 1420 b. The following information for each sewage sludge incinerator firing the applicant's
1421 sewage sludge that the applicant does not own or operate:
- 1422 (1) The name or number, contact person, mailing address, telephone number, and
1423 electronic mail address of the sewage sludge incinerator; and
- 1424 (2) The total dry metric tons from the applicant's facility per 365-day period fired in the
1425 sewage sludge incinerator.

- 1426 18. If sewage sludge from the applicant's facility is sent to a municipal solid waste landfill
 1427 (MSWLF), the applicant must provide the following information for each MSWLF to which
 1428 sewage sludge is sent:
- 1429 a. The name, contact person, mailing address, electronic mail address, location, and
 1430 all applicable permit numbers of the MSWLF;
 - 1431 b. The total dry metric tons per 365-day period sent from this facility to the MSWLF;
 - 1432 c. A determination of whether the sewage sludge meets applicable requirements for
 1433 disposal of sewage sludge in a MSWLF, including the results of the paint filter liquids
 1434 test and any additional requirements that apply on a site-specific basis; and
 - 1435 d. Information, if known, indicating whether the MSWLF complies with criteria set forth
 1436 in the Solid Waste Management Regulations, 9VAC20-81.
- 1437 19. All applicants must provide the name, mailing address, telephone number, electronic
 1438 mail address, and responsibilities of all contractors responsible for any operational or
 1439 maintenance aspects of the facility related to biosolids or sewage sludge generation,
 1440 treatment, use, or disposal.
- 1441 20. At the request of the department, the applicant must provide any other information
 1442 necessary to determine the appropriate standards for permitting under Part VI (9VAC25-
 1443 31-420 et seq.) of this chapter, and must provide any other information necessary to
 1444 assess the biosolids use and sewage sludge disposal practices, determine whether to
 1445 issue a permit, or identify appropriate permit requirements; and pertinent plans,
 1446 specifications, maps and such other relevant information as may be required, in scope
 1447 and details satisfactory to the department.
- 1448 21. All applications must be signed by a certifying official in compliance with 9VAC25-31-
 1449 110.
- 1450 R. Applications for facilities with cooling water intake structures.
- 1451 1. Application requirements. New facilities with new or modified cooling water intake
 1452 structures. New facilities with cooling water intake structures as defined in 9VAC25-31-
 1453 165 must report the information required under subdivisions 2, 3, and 4 of this subsection
 1454 and under 9VAC25-31-165. Requests for alternative requirements under 9VAC25-31-165
 1455 must be submitted with the permit application.
 - 1456 2. Source water physical data. These include:
 - 1457 a. A narrative description and scaled drawings showing the physical configuration of
 1458 all source water bodies used by the facility, including area dimensions, depths, salinity
 1459 and temperature regimes, and other documentation that supports the determination of
 1460 the water body type where each cooling water intake structure is located;
 - 1461 b. Identification and characterization of the source water body's hydrological and
 1462 geomorphologic features, as well as the methods used to conduct any physical studies
 1463 to determine the intake's area of influence within the water body and the results of
 1464 such studies; and
 - 1465 c. Location maps.
 - 1466 3. Cooling water intake structure data. These include:
 - 1467 a. A narrative description of the configuration of each cooling water intake structure
 1468 and where it is located in the water body and in the water column;
 - 1469 b. Latitude and longitude in degrees, minutes, and seconds for each cooling water
 1470 intake structure;

- 1471 c. A narrative description of the operation of each cooling water intake structure,
 1472 including design intake flow, daily hours of operation, number of days of the year in
 1473 operation and seasonal changes, if applicable;
- 1474 d. A flow distribution and water balance diagram that includes all sources of water to
 1475 the facility, recirculation flows and discharges; and
- 1476 e. Engineering drawings of the cooling water intake structure.
- 1477 4. Source water baseline biological characterization data. This information is required to
 1478 characterize the biological community in the vicinity of the cooling water intake structure
 1479 and to characterize the operation of the cooling water intake structures. The department
 1480 may also use this information in subsequent permit renewal proceedings to determine if
 1481 the design and construction technology plan as required in 9VAC25-31-165 should be
 1482 revised. This supporting information must include existing data if available. Existing data
 1483 may be supplemented with data from newly conducted field studies. The information must
 1484 include:
- 1485 a. A list of the data in subdivisions 4 b through 4 f of this subsection that is not available
 1486 and efforts made to identify sources of the data;
- 1487 b. A list of species (or relevant taxa) for all life stages and their relative abundance in
 1488 the vicinity of the cooling water intake structure;
- 1489 c. Identification of the species and life stages that would be most susceptible to
 1490 impingement and entrainment. Species evaluated should include the forage base as
 1491 well as those most important in terms of significance to commercial and recreational
 1492 fisheries;
- 1493 d. Identification and evaluation of the primary period of reproduction, larval
 1494 recruitment, and period of peak abundance for relevant taxa;
- 1495 e. Data representative of the seasonal and daily activities (e.g., feeding and water
 1496 column migration) of biological organisms in the vicinity of the cooling water intake
 1497 structure;
- 1498 f. Identification of all threatened, endangered, and other protected species that might
 1499 be susceptible to impingement and entrainment at the cooling water intake structures;
- 1500 g. Documentation of any public participation or consultation with federal or state
 1501 agencies undertaken in development of the plan; and
- 1502 h. If information requested in this subdivision 4 is supplemented with data collected
 1503 using field studies, supporting documentation for the source water baseline biological
 1504 characterization must include a description of all methods and quality assurance
 1505 procedures for sampling, and data analysis including a description of the study area;
 1506 taxonomic identification of sampled and evaluated biological assemblages (including
 1507 all life stages of fish and shellfish); and sampling and data analysis methods. The
 1508 sampling and/or data analysis methods used must be appropriate for a quantitative
 1509 survey and based on consideration of methods used in other biological studies
 1510 performed within the same source water body. The study area should include, at a
 1511 minimum, the area of influence of the cooling water intake structure.

1512 **9VAC25-32-25. Applicability of incorporated references based on the dates that they**
 1513 **became effective.**

1514 Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in
 1515 Title 40 of the Code of Federal Regulations is referenced and incorporated in this chapter that
 1516 regulation shall be as it exists and has been published in the July 1, 20172023, update. ~~The final~~
 1517 ~~rule published in the Federal Register on August 28, 2017 (82 FR 40836), which amends 40 CFR~~
 1518 ~~Part 136, is also incorporated by reference in this chapter.~~

1519 9VAC25-210-90. Conditions applicable to all VWP permits.

1520 A. Duty to comply. The permittee shall comply with all conditions and limitations of the VWP
1521 permit. Nothing in this chapter shall be construed to relieve the permittee of the duty to comply
1522 with all applicable federal and state statutes, regulations, toxic standards, and prohibitions. Any
1523 VWP permit violation or noncompliance is a violation of the Clean Water Act and State Water
1524 Control Law and is grounds for enforcement action, VWP permit termination, VWP permit
1525 revocation, VWP permit modification, or denial of an application for a VWP permit extension or
1526 reissuance.

1527 B. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement
1528 action that it would have been necessary to halt or reduce the activity for which a VWP permit has
1529 been granted in order to maintain compliance with the conditions of the VWP permit.

1530 C. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any
1531 impacts in violation of the VWP permit that may have a reasonable likelihood of adversely
1532 affecting human health or the environment.

1533 D. Inspection and entry. Upon presentation of credentials, the permittee shall allow the
1534 department or any duly authorized agent of the department, at reasonable times and under
1535 reasonable circumstances, to conduct the actions listed in this section. For the purpose of this
1536 section, the time for inspection shall be deemed reasonable during regular business hours.
1537 Nothing contained herein shall make an inspection time unreasonable during an emergency.

1538 1. Enter upon permittee's property, public or private, and have access to, inspect and copy
1539 any records that must be kept as part of the VWP permit conditions;

1540 2. Inspect any facilities, operations or practices (including monitoring and control
1541 equipment) regulated or required under the VWP permit; and

1542 3. Sample or monitor any substance, parameter, or activity for the purpose of ensuring
1543 compliance with the conditions of the VWP permit or as otherwise authorized by law.

1544 E. Duty to provide information. Plans, maps, conceptual reports, and other relevant
1545 information shall be submitted as required by the department prior to commencing construction.

1546 F. Monitoring and records requirements.

1547 1. Monitoring of parameters, other than pollutants, shall be conducted according to
1548 approved analytical methods as specified in the VWP permit. Analysis of pollutants will be
1549 conducted according to 40 CFR Part 136 as published in the 40 CFR July 1, ~~2017~~ 2023,
1550 update and ~~82 FR 40836 (August 28, 2017)~~.

1551 2. Samples and measurements taken for the purpose of monitoring shall be representative
1552 of the monitored activity.

1553 3. The permittee shall retain records of all monitoring information, including all calibration
1554 and maintenance records and all original strip chart or electronic recordings for continuous
1555 monitoring instrumentation, copies of all reports required by the VWP permit, and records
1556 of all data used to complete the application for the VWP permit, for a period of at least
1557 three years from the date of permit expiration. This period may be extended by request of
1558 the department at any time.

1559 4. Records of monitoring information shall include as appropriate:

1560 a. The date, exact place and time of sampling or measurements;

1561 b. The name of the individuals who performed the sampling or measurements;

1562 c. The date and time the analyses were performed;

1563 d. The name of the individuals who performed the analyses;

- 1564 e. The analytical techniques or methods supporting the information such as
 1565 observations, readings, calculations, and bench data used;
 1566 f. The results of such analyses; and
 1567 g. Chain of custody documentation.

1568 G. Duty to reapply. Any permittee desiring to continue a previously permitted activity after the
 1569 expiration date of the VWP permit shall apply for and obtain a new permit or, if applicable, shall
 1570 request an extension in accordance with 9VAC25-210-180.

1571 **9VAC25-610-130. Conditions applicable to all groundwater permits.**

1572 A. Duty to comply. The permittee shall comply with all conditions of the permit. Nothing in this
 1573 chapter shall be construed to relieve the groundwater withdrawal permit holder of the duty to
 1574 comply with all applicable federal and state statutes and prohibitions. At a minimum, a person
 1575 must obtain a well construction permit or a well site approval letter from the Virginia Department
 1576 of Health prior to the construction of any well for any withdrawal authorized by the Department of
 1577 Environmental Quality. Any permit violation is a violation of the law and is grounds for enforcement
 1578 action, permit termination, revocation, modification, or denial of a permit application.

1579 B. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement
 1580 action that it would have been necessary to halt or reduce the activity for which a permit has been
 1581 granted in order to maintain compliance with the conditions of the permit.

1582 C. Duty to mitigate. The permittee shall take all reasonable steps to:

- 1583 1. Avoid all adverse impacts to lawful groundwater users which could result from the
 1584 withdrawal; and
- 1585 2. Where impacts cannot be avoided, provide mitigation of the adverse impact as
 1586 described in 9VAC25-610-110 D 3 g.

1587 D. Inspection and entry. Upon presentation of credentials, the permittee shall allow the
 1588 department or any duly authorized agent of the department, at reasonable times and under
 1589 reasonable circumstances, to conduct actions listed in this section. For the purpose of this section,
 1590 the time for inspection shall be deemed reasonable during regular business hours. Nothing
 1591 contained herein shall make an inspection time unreasonable during an emergency.

- 1592 1. Entry upon any permittee's property, public or private, and have access to, inspect and
 1593 copy any records that must be kept as part of the permit conditions;
- 1594 2. Inspect any facilities, operations or practices (including monitoring and control
 1595 equipment) regulated or required under the permit; and
- 1596 3. Sample or monitor any substance, parameter or activity for the purpose of assuring
 1597 compliance with the conditions of the permit or as otherwise authorized by law.

1598 E. Duty to provide information. The permittee shall furnish to the department, within a
 1599 reasonable time, any information that the department may request to determine whether cause
 1600 exists for modifying or revoking, reissuing, or terminating the permit, or to determine compliance
 1601 with the permit. The permittee shall also furnish to the department, upon request, copies of
 1602 records required to be kept by the permittee.

1603 F. Monitoring and records requirements.

- 1604 1. Monitoring of parameters, other than pollutants, shall be conducted according to
 1605 approved analytical methods as specified in the permit. Analysis of pollutants will be
 1606 conducted according to 40 CFR Part 136 as published in the 40 CFR July 1, ~~2017~~ 2023,
 1607 update and 82 FR 40836 (August 28, 2017).
- 1608 2. Samples and measurements taken for the purpose of monitoring shall be representative
 1609 of the monitored activity.

1610 3. The permittee shall retain records of all monitoring information, including all calibration
 1611 and maintenance records and all original strip chart or electronic recordings for continuous
 1612 monitoring instrumentation, copies of all reports required by the permit, and records of all
 1613 data used to complete the application for the permit, for a period of at least three years
 1614 from the date of the expiration of a granted permit. This period may be extended by request
 1615 of the department at any time.

1616 4. Records of monitoring information shall include as appropriate:

1617 a. The date, exact place and time of sampling or measurements;

1618 b. The name of the individuals who performed the sampling or measurements;

1619 c. The date the analyses were performed;

1620 d. The name of the individuals who performed the analyses;

1621 e. The analytical techniques or methods supporting the information such as
 1622 observations, readings, calculations, and bench data used;

1623 f. The results of such analyses; and

1624 g. Chain of custody documentation.

1625 G. Permit action.

1626 1. A permit may be modified or revoked as set forth in Part VI (9VAC25-610-290 et seq.)
 1627 of this chapter.

1628 2. If a permittee files a request for permit modification or revocation, or files a notification
 1629 of planned changes, or anticipated noncompliance, the permit terms and conditions shall
 1630 remain effective until the department makes a final case decision. This provision shall not
 1631 be used to extend the expiration date of the effective permit.

1632 3. Permits may be modified or revoked upon the request of the permittee, or upon
 1633 department initiative, to reflect the requirements of any changes in the statutes or
 1634 regulations.

1635 **9VAC25-660-100. VWP general permit.**

1636 VWP GENERAL PERMIT NO. WP1 FOR IMPACTS LESS THAN ONE-HALF ACRE
 1637 UNDER THE VIRGINIA WATER PROTECTION PERMIT AND THE VIRGINIA STATE
 1638 WATER CONTROL LAW

1639 Effective date: August 2, 2016

1640 Expiration date: August 1, 2026

1641 In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State
 1642 Water Control Law and regulations adopted pursuant thereto, the board has determined that there
 1643 is a reasonable assurance that this VWP general permit, if complied with, will protect instream
 1644 beneficial uses, will not violate applicable water quality standards, and will not cause or contribute
 1645 to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP
 1646 general permit, the board has not taken into consideration the structural stability of any proposed
 1647 activities.

1648 The permanent or temporary impact of less than one-half acre of nontidal wetlands or open
 1649 water and up to 300 linear feet of nontidal stream bed shall be subject to the provisions of the
 1650 VWP general permit set forth herein; any requirements in coverage granted under this VWP
 1651 general permit; the Clean Water Act, as amended; and the State Water Control Law and
 1652 regulations adopted pursuant to it.

1653 Part I. Special Conditions.

1654 A. Authorized activities.

1655 1. The activities authorized by this chapter shall not cause more than the permanent or
 1656 temporary impacts to less than one-half acre of nontidal wetlands or open water and up
 1657 to 300 linear feet of nontidal stream bed. Additional permit requirements as stipulated by
 1658 the department in the coverage letter, if any, shall be enforceable conditions of this permit.

1659 2. Any changes to the authorized permanent impacts to surface waters shall require a
 1660 notice of planned change in accordance with 9VAC25-660-80. An application or request
 1661 for modification to coverage or another VWP permit application may be required.

1662 3. Any changes to the authorized temporary impacts to surface waters shall require written
 1663 notification to and approval from the Department of Environmental Quality in accordance
 1664 with 9VAC25-660-80 prior to initiating the impacts and restoration to preexisting conditions
 1665 in accordance with the conditions of this permit.

1666 4. Modification to compensation requirements may be approved at the request of the
 1667 permittee when a decrease in the amount of authorized surface waters impacts occurs,
 1668 provided that the adjusted compensation meets the initial compensation goals.

1669 B. Overall conditions.

1670 1. The activities authorized by this VWP general permit shall be executed in a manner so
 1671 as to minimize adverse impacts on instream beneficial uses as defined in § 62.1-10 (b) of
 1672 the Code of Virginia.

1673 2. No activity may substantially disrupt the movement of aquatic life indigenous to the
 1674 water body, including those species that normally migrate through the area, unless the
 1675 primary purpose of the activity is to impound water. Pipes and culverts placed in streams
 1676 must be installed to maintain low flow conditions and shall be countersunk at both inlet
 1677 and outlet ends of the pipe or culvert, unless otherwise specifically approved by the
 1678 Department of Environmental Quality on a case-by-case basis, and as follows: The
 1679 requirement to countersink does not apply to extensions or maintenance of existing pipes
 1680 and culverts that are not countersunk, floodplain pipes and culverts being placed above
 1681 ordinary high water, pipes and culverts being placed on bedrock, or pipes and culverts
 1682 required to be placed on slopes 5.0% or greater. Bedrock encountered during construction
 1683 must be identified and approved in advance of a design change where the countersunk
 1684 condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be
 1685 countersunk three inches below the natural stream bed elevations, and pipes and culverts
 1686 greater than 24 inches shall be countersunk at least six inches below the natural stream
 1687 bed elevations. Hydraulic capacity shall be determined based on the reduced capacity
 1688 due to the countersunk position. In all stream crossings appropriate measures shall be
 1689 implemented to minimize any disruption of aquatic life movement.

1690 3. Wet or uncured concrete shall be prohibited from entry into flowing surface waters,
 1691 unless the area is contained within a cofferdam and the work is performed in the dry or
 1692 unless otherwise approved by the Department of Environmental Quality. Excess or waste
 1693 concrete shall not be disposed of in flowing surface waters or washed into flowing surface
 1694 waters.

1695 4. All fill material shall be clean and free of contaminants in toxic concentrations or
 1696 amounts in accordance with all applicable laws and regulations.

1697 5. Erosion and sedimentation controls shall be designed in accordance with the Virginia
 1698 Erosion and Sediment Control Handbook, Third Edition, 1992. These controls shall be
 1699 placed prior to clearing and grading and maintained in good working order to minimize

- 1700 impacts to state waters. These controls shall remain in place until the area is stabilized
1701 and shall then be removed.
- 1702 6. Exposed slopes and streambanks shall be stabilized immediately upon completion of
1703 work in each permitted impact area. All denuded areas shall be properly stabilized in
1704 accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition,
1705 1992.
- 1706 7. All construction, construction access (e.g., cofferdams, sheetpiling, and causeways)
1707 and demolition activities associated with the project shall be accomplished in a manner
1708 that minimizes construction or waste materials from entering surface waters to the
1709 maximum extent practicable, unless authorized by this VWP general permit.
- 1710 8. No machinery may enter flowing waters, unless authorized by this VWP general permit
1711 or approved prior to entry by the Department of Environmental Quality.
- 1712 9. Heavy equipment in temporarily impacted wetland areas shall be placed on mats,
1713 geotextile fabric, or other suitable material to minimize soil disturbance to the maximum
1714 extent practicable. Equipment and materials shall be removed immediately upon
1715 completion of work.
- 1716 10. All nonimpacted surface waters and compensatory mitigation areas within 50 feet of
1717 authorized activities and within the project or right-of-way limits shall be clearly flagged or
1718 marked for the life of the construction activity at that location to preclude unauthorized
1719 disturbances to these surface waters and compensatory mitigation areas during
1720 construction. The permittee shall notify contractors that no activities are to occur in these
1721 marked surface waters.
- 1722 11. Temporary disturbances to surface waters during construction shall be avoided and
1723 minimized to the maximum extent practicable. All temporarily disturbed wetland areas
1724 shall be restored to preexisting conditions within 30 days of completing work at each
1725 respective temporary impact area, which shall include reestablishing preconstruction
1726 elevations and contours with topsoil from the impact area where practicable and planting
1727 or seeding with appropriate wetland vegetation according to cover type (i.e., emergent,
1728 scrub-shrub, or forested). The permittee shall take all appropriate measures to promote
1729 and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation
1730 through the second year post-disturbance. All temporarily impacted streams and
1731 streambanks shall be restored to their preconstruction elevations and contours with topsoil
1732 from the impact area where practicable within 30 days following the construction at that
1733 stream segment. Streambanks shall be seeded or planted with the same vegetation cover
1734 type originally present, including any necessary, supplemental erosion control grasses.
1735 Invasive species identified on the Department of Conservation and Recreation's Virginia
1736 Invasive Plant Species List shall not be used to the maximum extent practicable or without
1737 prior approval from the Department of Environmental Quality.
- 1738 12. Materials (including fill, construction debris, and excavated and woody materials)
1739 temporarily stockpiled in wetlands shall be placed on mats or geotextile fabric, immediately
1740 stabilized to prevent entry into state waters, managed such that leachate does not enter
1741 state waters, and completely removed within 30 days following completion of that
1742 construction activity. Disturbed areas shall be returned to preconstruction elevations and
1743 contours with topsoil from the impact area where practicable; restored within 30 days
1744 following removal of the stockpile; and restored with the same vegetation cover type
1745 originally present, including any necessary, supplemental erosion control grasses.
1746 Invasive species identified on the Department of Conservation and Recreation's Virginia
1747 Invasive Plant Species List shall not be used to the maximum extent practicable or without
1748 prior approval from the Department of Environmental Quality.

- 1749 13. Continuous flow of perennial springs shall be maintained by the installation of spring
1750 boxes, french drains, or other similar structures.
- 1751 14. The permittee shall employ measures to prevent spills of fuels or lubricants into state
1752 waters.
- 1753 15. The permittee shall conduct his activities in accordance with the time-of-year
1754 restrictions recommended by the Virginia Department of Wildlife Resources, the Virginia
1755 Marine Resources Commission, or other interested and affected agencies, as contained,
1756 when applicable, in a Department of Environmental Quality VWP general permit coverage
1757 letter, and shall ensure that all contractors are aware of the time-of-year restrictions
1758 imposed.
- 1759 16. Water quality standards shall not be violated as a result of the construction activities.
- 1760 17. If stream channelization or relocation is required, all work in surface waters shall be
1761 done in the dry, unless otherwise authorized by the Department of Environmental Quality,
1762 and all flows shall be diverted around the channelization or relocation area until the new
1763 channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and
1764 outlet ends of the new channel during excavation. Once the new channel has been
1765 stabilized, flow shall be routed into the new channel by first removing the downstream plug
1766 and then the upstream plug. The rerouted stream flow must be fully established before
1767 construction activities in the old stream channel can begin.
- 1768 C. Road crossings.
- 1769 1. Access roads and associated bridges, pipes, and culverts shall be constructed to
1770 minimize the adverse effects on surface waters to the maximum extent practicable.
1771 Access roads constructed above preconstruction elevations and contours in surface
1772 waters must be bridged, piped, or culverted to maintain surface flows.
- 1773 2. Installation of road crossings shall occur in the dry via the implementation of cofferdams,
1774 sheetpiling, stream diversions, or other similar structures.
- 1775 D. Utility lines.
- 1776 1. All utility line work in surface waters shall be performed in a manner that minimizes
1777 disturbance, and the area must be returned to its preconstruction elevations and contours
1778 with topsoil from the impact area where practicable and restored within 30 days of
1779 completing work in the area, unless otherwise authorized by the Department of
1780 Environmental Quality. Restoration shall be the seeding or planting of the same vegetation
1781 cover type originally present, including any necessary, supplemental erosion control
1782 grasses. Invasive species identified on the Department of Conservation and Recreation's
1783 Virginia Invasive Plant Species List shall not be used to the maximum extent practicable
1784 or without prior approval from the Department of Environmental Quality.
- 1785 2. Material resulting from trench excavation may be temporarily sidcast into wetlands not
1786 to exceed a total of 90 days, provided the material is not placed in a manner such that it
1787 is dispersed by currents or other forces.
- 1788 3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g.,
1789 backfilling with extensive gravel layers creating a french drain effect). For example, utility
1790 lines may be backfilled with clay blocks to ensure that the trench does not drain surface
1791 waters through which the utility line is installed.
- 1792 E. Stream modification and stream bank protection.
- 1793 1. Riprap bank stabilization shall be of an appropriate size and design in accordance with
1794 the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.

- 1795 2. Riprap apron for all outfalls shall be designed in accordance with the Virginia Erosion
1796 and Sediment Control Handbook, Third Edition, 1992.
- 1797 3. For stream bank protection activities, the structure and backfill shall be placed as close
1798 to the stream bank as practicable. No material shall be placed in excess of the minimum
1799 necessary for erosion protection.
- 1800 4. All stream bank protection control structures shall be located to eliminate or minimize
1801 impacts to vegetated wetlands to the maximum extent practicable.
- 1802 5. Asphalt and materials containing asphalt or other toxic substances shall not be used in
1803 the construction of submerged sills or breakwaters.
- 1804 6. Redistribution of existing stream substrate for the purpose of erosion control is
1805 prohibited.
- 1806 7. No material removed from the stream bottom shall be disposed of in surface waters,
1807 unless otherwise authorized by this VWP general permit.

1808 F. Stormwater management facilities.

- 1809 1. Stormwater management facilities shall be installed in accordance with best
1810 management practices and watershed protection techniques (e.g., vegetated buffers,
1811 siting considerations to minimize adverse effects to aquatic resources, bioengineering
1812 methods incorporated into the facility design to benefit water quality and minimize adverse
1813 effects to aquatic resources) that provide for long-term aquatic resources protection and
1814 enhancement, to the maximum extent practicable.
- 1815 2. Compensation for unavoidable impacts shall not be allowed within maintenance areas
1816 of stormwater management facilities.
- 1817 3. Maintenance activities within stormwater management facilities shall not require
1818 additional permit coverage or compensation, provided that the maintenance activities do
1819 not exceed the original contours of the facility, as approved and constructed, and are
1820 accomplished in designated maintenance areas as indicated in the facility maintenance
1821 or design plan or when unavailable, an alternative plan approved by the Department of
1822 Environmental Quality.

1823 Part II. Construction and Compensation Requirements, Monitoring, and Reporting.

1824 A. Minimum compensation requirements.

- 1825 1. The permittee shall provide any required compensation for impacts in accordance with
1826 the conditions in this VWP general permit, the coverage letter, and the chapter
1827 promulgating the general permit.
- 1828 2. Compensation options that may be considered under this VWP general permit include
1829 the purchase of mitigation bank credits or the purchase of in-lieu fee program credits with
1830 a primary service area that covers the impact site in accordance with § 62.1-44.15:23 of
1831 the Code of Virginia, 9VAC25-660-70, and the associated provisions of 9VAC25-210-116.
- 1832 3. The final compensation plan shall be submitted to and approved by the department
1833 prior to a construction activity in permitted impacts areas. The department shall review
1834 and provide written comments on the final plan within 30 days of receipt or it shall be
1835 deemed approved. The final plan as approved by the department shall be an enforceable
1836 requirement of any coverage under this VWP general permit. Deviations from the
1837 approved final plan shall be submitted and approved in advance by the department.

1838 B. Impact site construction monitoring.

1839 1. Construction activities authorized by this permit that are within impact areas shall be
 1840 monitored and documented. The monitoring shall consist of:

1841 a. Preconstruction photographs taken at each impact area prior to initiation of activities
 1842 within impact areas. Photographs remain on the project site and shall depict the impact
 1843 area and the nonimpacted surface waters immediately adjacent to and downgradient
 1844 of each impact area. Each photograph shall be labeled to include the following
 1845 information: permit number, impact area number, date and time of the photograph,
 1846 name of the person taking the photograph, photograph orientation, and photograph
 1847 subject description.

1848 b. Site inspections shall be conducted by the permittee or the permittee's qualified
 1849 designee once every calendar month during activities within impact areas. Monthly
 1850 inspections shall be conducted in the following areas: all authorized permanent and
 1851 temporary impact areas; all avoided surface waters, including wetlands, stream
 1852 channels, and open water; surface water areas within 50 feet of any land disturbing
 1853 activity and within the project or right-of-way limits; and all on-site permanent
 1854 preservation areas required under this permit. Observations shall be recorded on the
 1855 inspection form provided by the Department of Environmental Quality. The form shall
 1856 be completed in its entirety for each monthly inspection and shall be kept on site and
 1857 made available for review by the Department of Environmental Quality staff upon
 1858 request during normal business hours. Inspections are not required during periods of
 1859 no activity within impact areas.

1860 2. Monitoring of water quality parameters shall be conducted during permanent relocation
 1861 of perennial streams through new channels in the manner noted below. The permittee
 1862 shall report violations of water quality standards to the Department of Environmental
 1863 Quality in accordance with the procedures in 9VAC25-660-100 Part II C. Corrective
 1864 measures and additional monitoring may be required if water quality standards are not
 1865 met. Reporting shall not be required if water quality standards are not violated.

1866 a. A sampling station shall be located upstream and immediately downstream of the
 1867 relocated channel.

1868 b. Temperature, pH, and dissolved oxygen (D.O.) measurements shall be taken every
 1869 30 minutes for at least two hours at each station prior to opening the new channels
 1870 and immediately before opening new channels.

1871 c. Temperature, pH, and D.O. readings shall be taken after opening the channels and
 1872 every 30 minutes for at least three hours at each station.

1873 C. Reporting.

1874 1. Written communications required by this VWP general permit shall be submitted to the
 1875 appropriate Department of Environmental Quality office. The VWP general permit tracking
 1876 number shall be included on all correspondence.

1877 2. The Department of Environmental Quality shall be notified in writing prior to the start of
 1878 construction activities at the first authorized impact area.

1879 3. A construction status update form provided by the Department of Environmental Quality
 1880 shall be completed and submitted to the Department of Environmental Quality twice per
 1881 year for the duration of coverage under a VWP general permit. Forms completed in June
 1882 shall be submitted by or on July 10, and forms completed in December shall be submitted
 1883 by or on January 10. The form shall include reference to the VWP permit tracking number
 1884 and one of the following statements for each authorized surface water impact location:

1885 a. Construction activities have not yet started;

1886 b. Construction activities have started;

- 1887 c. Construction activities have started but are currently inactive; or
 1888 d. Construction activities are complete.
- 1889 4. The Department of Environmental Quality shall be notified in writing within 30 days
 1890 following the completion of all activities in all authorized impact areas.
- 1891 5. The permittee shall notify the Department of Environmental Quality in writing when
 1892 unusual or potentially complex conditions are encountered that require debris removal or
 1893 involve a potentially toxic substance. Measures to remove the obstruction, material, or
 1894 toxic substance or to change the location of a structure are prohibited until approved by
 1895 the Department of Environmental Quality.
- 1896 6. The permittee shall report fish kills or spills of oil or fuel immediately upon discovery. If
 1897 spills or fish kills occur between the hours of 8:15 a.m. to 5 p.m., Monday through Friday,
 1898 the appropriate Department of Environmental Quality regional office shall be notified;
 1899 otherwise, the Department of Emergency Management shall be notified at 1-800-468-
 1900 8892.
- 1901 7. Violations of state water quality standards shall be reported to the appropriate
 1902 Department of Environmental Quality office no later than the end of the business day
 1903 following discovery.
- 1904 8. The permittee shall notify the Department of Environmental Quality no later than the
 1905 end of the third business day following the discovery of additional impacts to surface
 1906 waters including wetlands, stream channels, and open water that are not authorized by
 1907 the Department of Environmental Quality or to any required preservation areas. The
 1908 notification shall include photographs, estimated acreage or linear footage of impacts, and
 1909 a description of the impacts.
- 1910 9. Submittals required by this VWP general permit shall contain the following signed
 1911 certification statement:
- 1912 "I certify under penalty of law that this document and all attachments were prepared under
 1913 my direction or supervision in accordance with a system designed to assure that qualified
 1914 personnel properly gather and evaluate the information submitted. Based on my inquiry of
 1915 the person or persons who manage the system, or those persons directly responsible for
 1916 gathering the information, the information submitted is, to the best of my knowledge and
 1917 belief, true, accurate, and complete. I am aware that there are significant penalties for
 1918 submitting false information, including the possibility of fine and imprisonment for knowing
 1919 violation."

1920 Part III. Conditions Applicable to All VWP General Permits.

- 1921 A. Duty to comply. The permittee shall comply with all conditions, limitations, and other
 1922 requirements of the VWP general permit; any requirements in coverage granted under this VWP
 1923 general permit; the Clean Water Act, as amended; and the State Water Control Law and
 1924 regulations adopted pursuant to it. Any VWP general permit violation or noncompliance is a
 1925 violation of the Clean Water Act and State Water Control Law and is grounds for (i) enforcement
 1926 action, (ii) VWP general permit coverage termination for cause, (iii) VWP general permit coverage
 1927 revocation, (iv) denial of application for coverage, or (v) denial of an application for a modification
 1928 to VWP general permit coverage. Nothing in this VWP general permit shall be construed to relieve
 1929 the permittee of the duty to comply with all applicable federal and state statutes, regulations, and
 1930 toxic standards and prohibitions.

1931 B. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent
 1932 impacts in violation of the VWP general permit which may have a reasonable likelihood of
 1933 adversely affecting human health or the environment.

1934 C. Reopener. This VWP general permit may be reopened to modify its conditions when the
 1935 circumstances on which the previous VWP general permit was based have materially and
 1936 substantially changed, or special studies conducted by the department or the permittee show
 1937 material and substantial change since the time the VWP general permit was issued and thereby
 1938 constitute cause for revoking and reissuing the VWP general permit.

1939 D. Compliance with state and federal law. Compliance with this VWP general permit
 1940 constitutes compliance with the VWP permit requirements of the State Water Control Law.
 1941 Nothing in this VWP general permit shall be construed to preclude the institution of any legal
 1942 action under or relieve the permittee from any responsibilities, liabilities, or other penalties
 1943 established pursuant to any other state law or regulation or under the authority preserved by §
 1944 510 of the Clean Water Act.

1945 E. Property rights. Coverage under this VWP general permit does not convey property rights
 1946 in either real or personal property or any exclusive privileges, nor does it authorize injury to private
 1947 property, any invasion of personal property rights, or any infringement of federal, state, or local
 1948 laws or regulations.

1949 F. Severability. The provisions of this VWP general permit are severable.

1950 G. Inspection and entry. Upon presentation of credentials, the permittee shall allow the
 1951 department or any duly authorized agent of the department, at reasonable times and under
 1952 reasonable circumstances, to enter upon the permittee's property, public or private, and have
 1953 access to inspect and copy any records that must be kept as part of the VWP general permit
 1954 conditions; to inspect any facilities, operations, or practices (including monitoring and control
 1955 equipment) regulated or required under the VWP general permit; and to sample or monitor any
 1956 substance, parameter, or activity for the purpose of assuring compliance with the conditions of
 1957 the VWP general permit or as otherwise authorized by law. For the purpose of this section, the
 1958 time for inspection shall be deemed reasonable during regular business hours. Nothing contained
 1959 herein shall make an inspection time unreasonable during an emergency.

1960 H. Transferability of VWP general permit coverage. VWP general permit coverage may be
 1961 transferred to another permittee when all of the criteria listed in this subsection are met. On the
 1962 date of the VWP general permit coverage transfer, the transferred VWP general permit coverage
 1963 shall be as fully effective as if it had been granted directly to the new permittee.

1964 1. The current permittee notifies the department of the proposed transfer of the general
 1965 permit coverage and provides a written agreement between the current and new
 1966 permittees containing a specific date of transfer of VWP general permit responsibility,
 1967 coverage, and liability to the new permittee, or that the current permittee will retain such
 1968 responsibility, coverage, or liability, including liability for compliance with the requirements
 1969 of enforcement activities related to the authorized activity.

1970 2. The department does not within 15 days notify the current and new permittees of the
 1971 board's intent to modify or revoke and reissue the VWP general permit.

1972 I. Notice of planned change. VWP general permit coverage may be modified subsequent to
 1973 issuance in accordance with 9VAC25-660-80.

1974 J. VWP general permit coverage termination for cause. VWP general permit coverage is
 1975 subject to termination for cause by the department after public notice and opportunity for a hearing
 1976 in accordance with 9VAC25-210-180. Reasons for termination for cause are as follows:

1977 1. Noncompliance by the permittee with any provision of this chapter, any condition of the
 1978 VWP general permit, or any requirement in general permit coverage;

- 1979 2. The permittee's failure in the application or during the process of granting VWP general
 1980 permit coverage to disclose fully all relevant facts or the permittee's misrepresentation of
 1981 any relevant facts at any time;
- 1982 3. The permittee's violation of a special or judicial order;
- 1983 4. A determination by the department that the authorized activity endangers human health
 1984 or the environment and can be regulated to acceptable levels by a modification to the
 1985 VWP general permit coverage or a termination;
- 1986 5. A change in any condition that requires either a temporary or permanent reduction or
 1987 elimination of any activity controlled by the VWP general permit; or
- 1988 6. A determination that the authorized activity has ceased and that the compensation for
 1989 unavoidable adverse impacts has been successfully completed.
- 1990 K. The department may terminate VWP general permit coverage without cause when the
 1991 permittee is no longer a legal entity due to death or dissolution or when a company is no longer
 1992 authorized to conduct business in the Commonwealth. The termination shall be effective 30 days
 1993 after notice of the proposed termination is sent to the last known address of the permittee or
 1994 registered agent, unless the permittee objects within that time. If the permittee does object during
 1995 that period, the department shall follow the applicable procedures for termination under 9VAC25-
 1996 210-180 and § 62.1-44.15:25 of the Code of Virginia.
- 1997 L. VWP general permit coverage termination by consent. The permittee shall submit a request
 1998 for termination by consent within 30 days of completing or canceling all authorized activities
 1999 requiring notification under 9VAC25-660-50 A and all compensatory mitigation requirements.
 2000 When submitted for project completion, the request for termination by consent shall constitute a
 2001 notice of project completion in accordance with 9VAC25-210-130 F. The director may accept this
 2002 termination of coverage on behalf of the department. The permittee shall submit the following
 2003 information:
- 2004 1. Name, mailing address, and telephone number;
- 2005 2. Name and location of the activity;
- 2006 3. The VWP general permit tracking number; and
- 2007 4. One of the following certifications:
- 2008 a. For project completion:
- 2009 "I certify under penalty of law that all activities and any required compensatory
 2010 mitigation authorized by the VWP general permit and general permit coverage have
 2011 been completed. I understand that by submitting this notice of termination I am no
 2012 longer authorized to perform activities in surface waters in accordance with the VWP
 2013 general permit and general permit coverage, and that performing activities in surface
 2014 waters is unlawful where the activity is not authorized by the VWP permit or coverage,
 2015 unless otherwise excluded from obtaining coverage. I also understand that the
 2016 submittal of this notice does not release me from liability for any violations of the VWP
 2017 general permit or coverage."
- 2018 b. For project cancellation:
- 2019 "I certify under penalty of law that the activities and any required compensatory
 2020 mitigation authorized by the VWP general permit and general permit coverage will not
 2021 occur. I understand that by submitting this notice of termination I am no longer
 2022 authorized to perform activities in surface waters in accordance with the VWP general
 2023 permit and general permit coverage, and that performing activities in surface waters is
 2024 unlawful where the activity is not authorized by the VWP permit or coverage, unless
 2025 otherwise excluded from obtaining coverage. I also understand that the submittal of

2026 this notice does not release me from liability for any violations of the VWP general
 2027 permit or coverage, nor does it allow me to resume the authorized activities without
 2028 reapplication and coverage."

2029 c. For events beyond permittee control, the permittee shall provide a detailed
 2030 explanation of the events, to be approved by the Department of Environmental Quality,
 2031 and the following certification statement:

2032 "I certify under penalty of law that the activities or the required compensatory mitigation
 2033 authorized by the VWP general permit and general permit coverage have changed as
 2034 the result of events beyond my control (see attached). I understand that by submitting
 2035 this notice of termination I am no longer authorized to perform activities in surface
 2036 waters in accordance with the VWP general permit and general permit coverage, and
 2037 that performing activities in surface waters is unlawful where the activity is not
 2038 authorized by the VWP permit or coverage, unless otherwise excluded from obtaining
 2039 coverage. I also understand that the submittal of this notice does not release me from
 2040 liability for any violations of the VWP general permit or coverage, nor does it allow me
 2041 to resume the authorized activities without reapplication and coverage."

2042 M. Civil and criminal liability. Nothing in this VWP general permit shall be construed to relieve
 2043 the permittee from civil and criminal penalties for noncompliance.

2044 N. Oil and hazardous substance liability. Nothing in this VWP general permit shall be
 2045 construed to preclude the institution of legal action or relieve the permittee from any
 2046 responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of
 2047 the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

2048 O. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement
 2049 action that it would have been necessary to halt or reduce the activity for which VWP general
 2050 permit coverage has been granted in order to maintain compliance with the conditions of the VWP
 2051 general permit or coverage.

2052 P. Duty to provide information.

2053 1. The permittee shall furnish to the department information that the department may
 2054 request to determine whether cause exists for modifying, revoking, or terminating VWP
 2055 permit coverage or to determine compliance with the VWP general permit or general
 2056 permit coverage. The permittee shall also furnish to the department, upon request, copies
 2057 of records required to be kept by the permittee.

2058 2. Plans, maps, conceptual reports, and other relevant information shall be submitted as
 2059 required by the department prior to commencing construction.

2060 Q. Monitoring and records requirements.

2061 1. Monitoring of parameters, other than pollutants, shall be conducted according to
 2062 approved analytical methods as specified in the VWP general permit. Analysis of
 2063 pollutants will be conducted according to 40 CFR Part 136 ~~(2000)~~ as published in the July
 2064 1, 2023 update, Guidelines Establishing Test Procedures for the Analysis of Pollutants.

2065 2. Samples and measurements taken for the purpose of monitoring shall be representative
 2066 of the monitored activity.

2067 3. The permittee shall retain records of all monitoring information, including all calibration
 2068 and maintenance records and all original strip chart or electronic recordings for continuous
 2069 monitoring instrumentation, copies of all reports required by the VWP general permit, and
 2070 records of all data used to complete the application for coverage under the VWP general
 2071 permit, for a period of at least three years from the date of general permit expiration. This
 2072 period may be extended by request of the department at any time.

2073 4. Records of monitoring information shall include, as appropriate:

- 2074 a. The date, exact place, and time of sampling or measurements;
 2075 b. The name of the individuals who performed the sampling or measurements;
 2076 c. The date and time the analyses were performed;
 2077 d. The name of the individuals who performed the analyses;
 2078 e. The analytical techniques or methods supporting the information such as
 2079 observations, readings, calculations, and bench data used;
 2080 f. The results of such analyses; and
 2081 g. Chain of custody documentation.

2082 R. Unauthorized discharge of pollutants. Except in compliance with this VWP general permit,
 2083 it shall be unlawful for the permittee to:

- 2084 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or
 2085 deleterious substances;
 2086 2. Excavate in a wetland;
 2087 3. Otherwise alter the physical, chemical, or biological properties of state waters and make
 2088 them detrimental to the public health, to animal or aquatic life, or to the uses of such waters
 2089 for domestic or industrial consumption, for recreation, or for other uses; or
 2090 4. On and after October 1, 2001, conduct the following activities in a wetland:
 2091 a. New activities to cause draining that significantly alter or degrade existing wetland
 2092 acreage or functions;
 2093 b. Filling or dumping;
 2094 c. Permanent flooding or impounding; or
 2095 d. New activities that cause significant alteration or degradation of existing wetland
 2096 acreage or functions.

2097 S. Duty to reapply. Any permittee desiring to continue a previously authorized activity after the
 2098 expiration date of the VWP general permit shall comply with the provisions in 9VAC25-660-27.

2099 **9VAC25-670-100. VWP general permit.**

2100 VWP GENERAL PERMIT NO. WP2 FOR FACILITIES AND ACTIVITIES OF UTILITIES
 2101 AND PUBLIC SERVICE COMPANIES REGULATED BY THE FEDERAL ENERGY
 2102 REGULATORY COMMISSION OR THE STATE CORPORATION COMMISSION AND
 2103 OTHER UTILITY LINE ACTIVITIES UNDER THE VIRGINIA WATER PROTECTION
 2104 PERMIT AND THE VIRGINIA STATE WATER CONTROL LAW

2105 Effective date: August 2, 2016

2106 Expiration date: August 1, 2026

2107 In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State
 2108 Water Control Law and regulations adopted pursuant thereto, the board has determined that there
 2109 is a reasonable assurance that this VWP general permit, if complied with, will protect instream
 2110 beneficial uses, will not violate applicable water quality standards, and will not cause or contribute
 2111 to a significant impairment of surface waters or fish and wildlife resources. In issuing this VWP
 2112 general permit, the board has not taken into consideration the structural stability of any proposed
 2113 activities.

2114 The permanent or temporary impact of up to one acre of nontidal wetlands or open water and
 2115 up to 1,500 linear feet of nontidal stream bed shall be subject to the provisions of the VWP general
 2116 permit set forth herein; any requirements in coverage granted under this VWP general permit; the

2117 Clean Water Act, as amended; and the State Water Control Law and regulations adopted
2118 pursuant to it.

2119 Part I. Special Conditions.

2120 A. Authorized activities.

2121 1. The activities authorized by this chapter shall not cause more than the permanent or
2122 temporary impacts of up to one acre of nontidal wetlands or open water and up to 1,500
2123 linear feet of nontidal stream bed. Additional permit requirements as stipulated by the
2124 department in the coverage letter, if any, shall be enforceable conditions of this permit.

2125 2. Any changes to the authorized permanent impacts to surface waters shall require a
2126 notice of planned change in accordance with 9VAC25-670-80. An application or request
2127 for modification to coverage or another VWP permit application may be required.

2128 3. Any changes to the authorized temporary impacts to surface waters shall require written
2129 notification to and approval from the Department of Environmental Quality in accordance
2130 with 9VAC25-670-80 prior to initiating the impacts and restoration to preexisting conditions
2131 in accordance with the conditions of this permit.

2132 4. Modification to compensation requirements may be approved at the request of the
2133 permittee when a decrease in the amount of authorized surface waters impacts occurs,
2134 provided that the adjusted compensation meets the initial compensation goals.

2135 B. Overall conditions.

2136 1. The activities authorized by this VWP general permit shall be executed in a manner so
2137 as to minimize adverse impacts on instream beneficial uses as defined in § 62.1-10 (b) of
2138 the Code of Virginia.

2139 2. No activity may substantially disrupt the movement of aquatic life indigenous to the
2140 water body, including those species which normally migrate through the area, unless the
2141 primary purpose of the activity is to impound water. Pipes and culverts placed in streams
2142 must be installed to maintain low flow conditions and shall be countersunk at both inlet
2143 and outlet ends of the pipe or culvert, unless otherwise specifically approved by the
2144 Department of Environmental Quality on a case-by-case basis, and as follows: The
2145 requirement to countersink does not apply to extensions or maintenance of existing pipes
2146 and culverts that are not countersunk, floodplain pipes and culverts being placed above
2147 ordinary high water, pipes and culverts being placed on bedrock, or pipes and culverts
2148 required to be placed on slopes 5.0% or greater. Bedrock encountered during construction
2149 must be identified and approved in advance of a design change where the countersunk
2150 condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be
2151 countersunk three inches below the natural stream bed elevations, and pipes and culverts
2152 greater than 24 inches shall be countersunk at least six inches below the natural stream
2153 bed elevations. Hydraulic capacity shall be determined based on the reduced capacity
2154 due to the countersunk position. In all stream crossings appropriate measures shall be
2155 implemented to minimize any disruption of aquatic life movement.

2156 3. Wet or uncured concrete shall be prohibited from entry into flowing surface waters,
2157 unless the area is contained within a cofferdam and the work is performed in the dry or
2158 unless otherwise approved by the Department of Environmental Quality. Excess or waste
2159 concrete shall not be disposed of in flowing surface waters or washed into flowing surface
2160 waters.

2161 4. All fill material shall be clean and free of contaminants in toxic concentrations or
2162 amounts in accordance with all applicable laws and regulations.

- 2163 5. Erosion and sedimentation controls shall be designed in accordance with the Virginia
2164 Erosion and Sediment Control Handbook, Third Edition, 1992. These controls shall be
2165 placed prior to clearing and grading and maintained in good working order to minimize
2166 impacts to state waters. These controls shall remain in place until the area is stabilized
2167 and shall then be removed.
- 2168 6. Exposed slopes and streambanks shall be stabilized immediately upon completion of
2169 work in each permitted area. All denuded areas shall be properly stabilized in accordance
2170 with the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.
- 2171 7. All construction, construction access (e.g., cofferdams, sheetpiling, and causeways)
2172 and demolition activities associated with the project shall be accomplished in such a
2173 manner that minimizes construction or waste materials from entering surface waters to the
2174 maximum extent practicable, unless authorized by this VWP general permit.
- 2175 8. No machinery may enter flowing waters, unless authorized by this VWP general permit
2176 or approved prior to entry by the Department of Environmental Quality.
- 2177 9. Heavy equipment in temporarily impacted wetland areas shall be placed on mats,
2178 geotextile fabric, or other suitable material, to minimize soil disturbance to the maximum
2179 extent practicable. Equipment and materials shall be removed immediately upon
2180 completion of work.
- 2181 10. All nonimpacted surface waters and compensatory mitigation areas within 50 feet of
2182 authorized activities and within the project or right-of-way limits shall be clearly flagged or
2183 marked for the life of the construction activity at that location to preclude any unauthorized
2184 disturbances to these surface waters and compensatory mitigation areas during
2185 construction. The permittee shall notify contractors that no activities are to occur in these
2186 marked surface waters.
- 2187 11. Temporary disturbances to surface waters during construction shall be avoided and
2188 minimized to the maximum extent practicable. All temporarily disturbed wetland areas
2189 shall be restored to preexisting conditions within 30 days of completing work at each
2190 respective temporary impact area, which shall include reestablishing preconstruction
2191 elevations and contours with topsoil from the impact area where practicable and planting
2192 or seeding with appropriate wetland vegetation according to cover type (i.e., emergent,
2193 scrub-shrub, or forested). The permittee shall take all appropriate measures to promote
2194 and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation
2195 through the second year post-disturbance. All temporarily impacted streams and
2196 streambanks shall be restored to their preconstruction elevations and contours with topsoil
2197 from the impact area where practicable within 30 days following the construction at that
2198 stream segment. Streambanks shall be seeded or planted with the same vegetation cover
2199 type originally present, including any necessary, supplemental erosion control grasses.
2200 Invasive species identified on the Department of Conservation and Recreation's Virginia
2201 Invasive Plant Species List shall not be used to the maximum extent practicable or without
2202 prior approval from the Department of Environmental Quality.
- 2203 12. Materials (including fill, construction debris, and excavated and woody materials)
2204 temporarily stockpiled in wetlands shall be placed on mats or geotextile fabric, immediately
2205 stabilized to prevent entry into state waters, managed such that leachate does not enter
2206 state waters, and completely removed within 30 days following completion of that
2207 construction activity. Disturbed areas shall be returned to preconstruction elevations and
2208 contours with topsoil from the impact areas where practicable; restored within 30 days
2209 following removal of the stockpile; and restored with the same vegetation cover type
2210 originally present, including any necessary, supplemental erosion control grasses.
2211 Invasive species identified on the Department of Conservation and Recreation's Virginia

2212 Invasive Plant Species List shall not be used to the maximum extent practicable or without
2213 prior approval from the Department of Environmental Quality.

2214 13. Continuous flow of perennial springs shall be maintained by the installation of spring
2215 boxes, french drains, or other similar structures.

2216 14. The permittee shall employ measures to prevent spills of fuels or lubricants into state
2217 waters.

2218 15. The permittee shall conduct his activities in accordance with the time-of-year
2219 restrictions recommended by the Virginia Department of Wildlife Resources, the Virginia
2220 Marine Resources Commission, or other interested and affected agencies, as contained,
2221 when applicable, in a Department of Environmental Quality VWP general permit coverage
2222 letter, and shall ensure that all contractors are aware of the time-of-year restrictions
2223 imposed.

2224 16. Water quality standards shall not be violated as a result of the construction activities.

2225 17. If stream channelization or relocation is required, all work in surface waters shall be
2226 done in the dry, unless otherwise authorized by the Department of Environmental Quality,
2227 and all flows shall be diverted around the channelization or relocation area until the new
2228 channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and
2229 outlet ends of the new channel during excavation. Once the new channel has been
2230 stabilized, flow shall be routed into the new channel by first removing the downstream plug
2231 and then the upstream plug. The rerouted stream flow must be fully established before
2232 construction activities in the old stream channel can begin.

2233 C. Road crossings.

2234 1. Access roads and associated bridges, pipes, and culverts shall be constructed to
2235 minimize the adverse effects on surface waters to the maximum extent practicable.
2236 Access roads constructed above preconstruction elevations and contours in surface
2237 waters must be bridged, piped, or culverted to maintain surface flows.

2238 2. Installation of road crossings shall occur in the dry via the implementation of cofferdams,
2239 sheetpiling, stream diversions, or similar structures.

2240 D. Utility lines.

2241 1. All utility line work in surface waters shall be performed in a manner that minimizes
2242 disturbance, and the area must be returned to its preconstruction elevations and contours
2243 with topsoil from the impact area where practicable and restored within 30 days of
2244 completing work in the area, unless otherwise authorized by the Department of
2245 Environmental Quality. Restoration shall be the seeding or planting of the same vegetation
2246 cover type originally present, including any necessary, supplemental erosion control
2247 grasses. Invasive species identified on the Department of Conservation and Recreation's
2248 Virginia Invasive Plant Species List shall not be used to the maximum extent practicable
2249 or without prior approval from the Department of Environmental Quality.

2250 2. Material resulting from trench excavation may be temporarily sidecast into wetlands,
2251 not to exceed 90 days, provided the material is not placed in a manner such that it is
2252 dispersed by currents or other forces.

2253 3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g.,
2254 backfilling with extensive gravel layers creating a trench drain effect.). For example, utility
2255 lines may be backfilled with clay blocks to ensure that the trench does not drain surface
2256 waters through which the utility line is installed.

2257 E. Stream modification and stream bank protection.

- 2258 1. Riprap bank stabilization shall be of an appropriate size and design in accordance with
2259 the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.
- 2260 2. Riprap apron for all outfalls shall be designed in accordance with the Virginia Erosion
2261 and Sediment Control Handbook, Third Edition, 1992.
- 2262 3. For stream bank protection activities, the structure and backfill shall be placed as close
2263 to the stream bank as practicable. No material shall be placed in excess of the minimum
2264 necessary for erosion protection.
- 2265 4. All stream bank protection structures shall be located to eliminate or minimize impacts
2266 to vegetated wetlands to the maximum extent practicable.
- 2267 5. Asphalt and materials containing asphalt or other toxic substances shall not be used in
2268 the construction of submerged sills or breakwaters.
- 2269 6. Redistribution of existing stream substrate for the purpose of erosion control is
2270 prohibited.
- 2271 7. No material removed from the stream bottom shall be disposed of in surface waters,
2272 unless otherwise authorized by this VWP general permit.

2273 Part II. Construction and Compensation Requirements, Monitoring, and Reporting.

2274 A. Minimum compensation requirements.

- 2275 1. The permittee shall provide any required compensation for impacts in accordance with
2276 the conditions in this VWP general permit, the coverage letter, and the chapter
2277 promulgating the general permit. For all compensation that requires a protective
2278 mechanism, including preservation of surface waters or buffers, the permittee shall record
2279 the approved protective mechanism in the chain of title to the property, or an equivalent
2280 instrument for government-owned lands, and proof of recordation shall be submitted to
2281 the Department of Environmental Quality prior to commencing impacts in surface waters.
- 2282 2. Compensation options that may be considered under this VWP general permit shall
2283 meet the criteria in § 62.1-44.15:23 of the Code of Virginia, 9VAC25-210-116, and
2284 9VAC25-670-70.
- 2285 3. The permittee-responsible compensation site or sites depicted in the conceptual
2286 compensation plan submitted with the application shall constitute the compensation site.
2287 A site change may require a modification to coverage.
- 2288 4. For compensation involving the purchase of mitigation bank credits or the purchase of
2289 in-lieu fee program credits, the permittee shall not initiate work in permitted impact areas
2290 until documentation of the mitigation bank credit purchase or of the in-lieu fee program
2291 credit purchase has been submitted to and received by the Department of Environmental
2292 Quality.
- 2293 5. The final compensation plan shall be submitted to and approved by the department
2294 prior to a construction activity in permitted impact areas. The department shall review and
2295 provide written comments on the final plan within 30 days of receipt or it shall be deemed
2296 approved. The final plan as approved by the department shall be an enforceable
2297 requirement of any coverage under this VWP general permit. Deviations from the
2298 approved final plan shall be submitted and approved in advance by the department.
- 2299 a. The final permittee-responsible wetlands compensation plan shall include:
- 2300 (1) The complete information on all components of the conceptual compensation plan.
- 2301 (2) A summary of the type and acreage of existing wetland impacts anticipated during
2302 the construction of the compensation site and the proposed compensation for these

- 2303 impacts; a site access plan; a monitoring plan, including proposed success criteria,
 2304 monitoring goals, and the location of photo-monitoring stations, monitoring wells,
 2305 vegetation sampling points, and reference wetlands or streams, if available; an
 2306 abatement and control plan for undesirable plant species; an erosion and
 2307 sedimentation control plan; a construction schedule; and the final protective
 2308 mechanism for the protection of the compensation site or sites, including all surface
 2309 waters and buffer areas within its boundaries.
- 2310 (3) The approved protective mechanism. The protective mechanism shall be recorded
 2311 in the chain of title to the property, or an equivalent instrument for government-owned
 2312 lands, and proof of recordation shall be submitted to the Department of Environmental
 2313 Quality prior to commencing impacts in surface waters.
- 2314 b. The final permittee-responsible stream compensation plan shall include:
- 2315 (1) The complete information on all components of the conceptual compensation plan.
- 2316 (2) An evaluation, discussion, and plan drawing or drawings of existing conditions on
 2317 the proposed compensation stream, including the identification of functional and
 2318 physical deficiencies for which the measures are proposed, and summary of
 2319 geomorphologic measurements (e.g., stream width, entrenchment ratio, width-depth
 2320 ratio, sinuosity, slope, substrate, etc.); a site access plan; a monitoring plan, including
 2321 a monitoring and reporting schedule, monitoring design and methodologies for
 2322 success, proposed success criteria, location of photo-monitoring stations, vegetation
 2323 sampling points, survey points, bank pins, scour chains, and reference streams; an
 2324 abatement and control plan for undesirable plant species; an erosion and
 2325 sedimentation control plan, if appropriate; a construction schedule; a plan-view
 2326 drawing depicting the pattern and all compensation measures being employed; a
 2327 profile drawing; cross-sectional drawing or drawings of the proposed compensation
 2328 stream; and the final protective mechanism for the protection of the compensation site
 2329 or sites, including all surface waters and buffer areas within its boundaries.
- 2330 (3) The approved protective mechanism. The protective mechanism shall be recorded
 2331 in the chain of title to the property, or an equivalent instrument for government-owned
 2332 lands, and proof of recordation shall be submitted to the Department of Environmental
 2333 Quality prior to commencing impacts in surface waters.
- 2334 6. The following criteria shall apply to permittee-responsible wetland or stream
 2335 compensation:
- 2336 a. The vegetation used shall be native species common to the area, shall be suitable
 2337 for growth in local wetland or riparian conditions, and shall be from areas within the
 2338 same or adjacent U.S. Department of Agriculture Plant Hardiness Zone or Natural
 2339 Resources Conservation Service Land Resource Region as that of the project site.
 2340 Planting of woody plants shall occur when vegetation is normally dormant, unless
 2341 otherwise approved in the final wetlands or stream compensation plan or plans.
- 2342 b. All work in permitted impact areas shall cease if compensation site construction has
 2343 not commenced within 180 days of commencement of project construction, unless
 2344 otherwise authorized by the department.
- 2345 c. The Department of Environmental Quality shall be notified in writing prior to the
 2346 initiation of construction activities at the compensation site.
- 2347 d. Point sources of stormwater runoff shall be prohibited from entering a wetland
 2348 compensation site prior to treatment by appropriate best management practices.
 2349 Appropriate best management practices may include sediment traps, grassed

2350 waterways, vegetated filter strips, debris screens, oil and grease separators, or
2351 forebays.

2352 e. The success of the compensation shall be based on meeting the success criteria
2353 established in the approved final compensation plan.

2354 f. If the wetland or stream compensation area fails to meet the specified success
2355 criteria in a particular monitoring year, other than the final monitoring year, the reasons
2356 for this failure shall be determined and a corrective action plan shall be submitted to
2357 the Department of Environmental Quality for approval with or before that year's
2358 monitoring report. The corrective action plan shall contain at a minimum the proposed
2359 actions, a schedule for those actions, and a monitoring plan, and shall be implemented
2360 by the permittee in accordance with the approved schedule. Should significant
2361 changes be necessary to ensure success, the required monitoring cycle shall begin
2362 again, with monitoring year one being the year that the changes are complete, as
2363 confirmed by the Department of Environmental Quality. If the wetland or stream
2364 compensation area fails to meet the specified success criteria by the final monitoring
2365 year or if the wetland or stream compensation area has not met the stated restoration
2366 goals, reasons for this failure shall be determined and a corrective action plan,
2367 including proposed actions, a schedule, and a monitoring plan, shall be submitted with
2368 the final year monitoring report for Department of Environmental Quality approval.
2369 Corrective action shall be implemented by the permittee in accordance with the
2370 approved schedule. Annual monitoring shall be required to continue until two
2371 sequential, annual reports indicate that all criteria have been successfully satisfied and
2372 the site has met the overall restoration goals (e.g., that corrective actions were
2373 successful).

2374 g. The surveyed wetland boundary for the compensation site shall be based on the
2375 results of the hydrology, soils, and vegetation monitoring data and shall be shown on
2376 the site plan. Calculation of total wetland acreage shall be based on that boundary at
2377 the end of the monitoring cycle. Data shall be submitted by December 31 of the final
2378 monitoring year.

2379 h. Herbicides or algicides shall not be used in or immediately adjacent to the
2380 compensation site or sites without prior authorization by the department. All vegetation
2381 removal shall be done by manual means, unless authorized by the Department of
2382 Environmental Quality in advance.

2383 B. Impact site construction monitoring.

2384 1. Construction activities authorized by this permit that are within impact areas shall be
2385 monitored and documented. The monitoring shall consist of:

2386 a. Preconstruction photographs taken at each impact area prior to initiation of activities
2387 within impact areas. Photographs shall remain on the project site and depict the impact
2388 area and the nonimpacted surface waters immediately adjacent to and downgradient
2389 of each impact area. Each photograph shall be labeled to include the following
2390 information: permit number, impact area number, date and time of the photograph,
2391 name of the person taking the photograph, photograph orientation, and photograph
2392 subject description.

2393 b. Site inspections shall be conducted by the permittee or the permittee's qualified
2394 designee once every calendar month during activities within impact areas. Monthly
2395 inspections shall be conducted in the following areas: all authorized permanent and
2396 temporary impact areas; all avoided surface waters, including wetlands, stream
2397 channels, and open water; surface water areas within 50 feet of any land disturbing
2398 activity and within the project or right-of-way limits; and all on-site permanent

2399 preservation areas required under this permit. Observations shall be recorded on the
 2400 inspection form provided by the Department of Environmental Quality. The form shall
 2401 be completed in its entirety for each monthly inspection and shall be kept on site and
 2402 made available for review by the Department of Environmental Quality staff upon
 2403 request during normal business hours. Inspections are not required during periods of
 2404 no activity within impact areas.

2405 2. Monitoring of water quality parameters shall be conducted during permanent relocation
 2406 of perennial streams through new channels in the manner noted below. The permittee
 2407 shall report violations of water quality standards to the Department of Environmental
 2408 Quality in accordance with the procedures in 9VAC25-670-100 Part II E. Corrective
 2409 measures and additional monitoring may be required if water quality standards are not
 2410 met. Reporting shall not be required if water quality standards are not violated.

2411 a. A sampling station shall be located upstream and immediately downstream of the
 2412 relocated channel.

2413 b. Temperature, pH, and dissolved oxygen (D.O.) measurements shall be taken every
 2414 30 minutes for at least two hours at each station prior to opening the new channels
 2415 and immediately before opening new channels.

2416 c. Temperature, pH, and D.O. readings shall be taken after opening the channels and
 2417 every 30 minutes for at least three hours at each station.

2418 C. Permittee-responsible wetland compensation site monitoring.

2419 1. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial
 2420 surveys, shall be conducted for the entire compensation site or sites including invert
 2421 elevations for all water elevation control structures and spot elevations throughout the site
 2422 or sites. Aerial surveys shall include the variation from actual ground conditions, such as
 2423 +/- 0.2 feet. Either type of survey shall be certified by a licensed surveyor or by a registered
 2424 professional engineer to conform to the design plans. The survey shall be submitted within
 2425 60 days of completing compensation site construction. Changes or deviations in the as-
 2426 built survey or aerial survey shall be shown on the survey and explained in writing.

2427 2. Photographs shall be taken at the compensation site or sites from the permanent
 2428 markers identified in the final compensation plan, and established to ensure that the same
 2429 locations and view directions at the site or sites are monitored in each monitoring period.
 2430 These photographs shall be taken after the initial planting and at a time specified in the
 2431 final compensation plan during every monitoring year.

2432 3. Compensation site monitoring shall begin on the first day of the first complete growing
 2433 season (monitoring year 1) after wetland compensation site construction activities,
 2434 including planting, have been completed. Monitoring shall be required for monitoring years
 2435 1, 2, 3, and 5, unless otherwise approved by the Department of Environmental Quality. In
 2436 all cases, if all success criteria have not been met in the fifth monitoring year, then
 2437 monitoring shall be required for each consecutive year until two annual sequential reports
 2438 indicate that all criteria have been successfully satisfied.

2439 4. The establishment of wetland hydrology shall be measured during the growing season,
 2440 with the location and number of monitoring wells, and frequency of monitoring for each
 2441 site, set forth in the final monitoring plan. Hydrology monitoring well data shall be
 2442 accompanied by precipitation data, including rainfall amounts, either from on site, or from
 2443 the closest weather station. Once the wetland hydrology success criteria have been
 2444 satisfied for a particular monitoring year, weekly monitoring may be discontinued for the
 2445 remainder of that monitoring year following Department of Environmental Quality approval.
 2446 After a period of three monitoring years, the permittee may request that hydrology
 2447 monitoring be discontinued, providing that adequate hydrology has been established and

- 2448 maintained. Hydrology monitoring shall not be discontinued without written approval from
 2449 the Department of Environmental Quality.
- 2450 5. The presence of hydric soils or soils under hydric conditions shall be evaluated in
 2451 accordance with the final compensation plan.
- 2452 6. The establishment of wetland vegetation shall be in accordance with the final
 2453 compensation plan. Monitoring shall take place in August, September, or October during
 2454 the growing season of each monitoring year, unless authorized in the monitoring plan.
- 2455 7. The presence of undesirable plant species shall be documented.
- 2456 8. All wetland compensation monitoring reports shall be submitted in accordance with
 2457 9VAC25-670-100 Part II E 6.
- 2458 D. Permittee-responsible stream compensation and monitoring.
- 2459 1. Riparian buffer restoration activities shall be detailed in the final compensation plan and
 2460 shall include, as appropriate, the planting of a variety of native species currently growing
 2461 in the site area, including appropriate seed mixtures and woody species that are bare root,
 2462 balled, or burlapped. A minimum buffer width of 50 feet, measured from the top of the
 2463 stream bank at bankfull elevation landward on both sides of the stream, shall be required
 2464 where practical.
- 2465 2. The installation of root wads, vanes, and other instream structures, shaping of the
 2466 stream banks, and channel relocation shall be completed in the dry whenever practicable.
- 2467 3. Livestock access to the stream and designated riparian buffer shall be limited to the
 2468 greatest extent practicable.
- 2469 4. Stream channel restoration activities shall be conducted in the dry or during low flow
 2470 conditions. When site conditions prohibit access from the streambank or upon prior
 2471 authorization from the Department of Environmental Quality, heavy equipment may be
 2472 authorized for use within the stream channel.
- 2473 5. Photographs shall be taken at the compensation site from the vicinity of the permanent
 2474 photo-monitoring stations identified in the final compensation plan. The photograph
 2475 orientation shall remain constant during all monitoring events. At a minimum, photographs
 2476 shall be taken from the center of the stream, facing downstream, with a sufficient number
 2477 of photographs to view the entire length of the restoration site. Photographs shall
 2478 document the completed restoration conditions. Photographs shall be taken prior to site
 2479 activities, during instream and riparian compensation construction activities, within one
 2480 week of completion of activities, and during at least one day of each monitoring year to
 2481 depict restored conditions.
- 2482 6. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial
 2483 surveys, shall be conducted for the entire compensation site or sites. Aerial surveys shall
 2484 include the variation from actual ground conditions, such as +/- 0.2 feet. The survey shall
 2485 be certified by the licensed surveyor or by a registered, professional engineer to conform
 2486 to the design plans. The survey shall be submitted within 60 days of completing
 2487 compensation site construction. Changes or deviations from the final compensation plans
 2488 in the as-built survey or aerial survey shall be shown on the survey and explained in
 2489 writing.
- 2490 7. Compensation site monitoring shall begin on day one of the first complete growing
 2491 season (monitoring year 1) after stream compensation site construction activities,
 2492 including planting, have been completed. Monitoring shall be required for monitoring years
 2493 1 and 2, unless otherwise approved by the Department of Environmental Quality. In all
 2494 cases, if all success criteria have not been met in the final monitoring year, then monitoring

2495 shall be required for each consecutive year until two annual sequential reports indicate
2496 that all criteria have been successfully satisfied.

2497 8. All stream compensation site monitoring reports shall be submitted in accordance with
2498 9VAC25-670-100 Part II E 6.

2499 E. Reporting.

2500 1. Written communications required by this VWP general permit shall be submitted to the
2501 appropriate Department of Environmental Quality office. The VWP general permit tracking
2502 number shall be included on all correspondence.

2503 2. The Department of Environmental Quality shall be notified in writing prior to the start of
2504 construction activities at the first permitted impact area.

2505 3. A construction status update form provided by the Department of Environmental Quality
2506 shall be completed and submitted to the Department of Environmental Quality twice per
2507 year for the duration of coverage under a VWP general permit. Forms completed in June
2508 shall be submitted by or on July 10, and forms completed in December shall be submitted
2509 by or on January 10. The form shall include reference to the VWP permit tracking number
2510 and one of the following statements for each authorized surface water impact location:

2511 a. Construction activities have not yet started;

2512 b. Construction activities have started;

2513 c. Construction activities have started but are currently inactive; or

2514 d. Construction activities are complete.

2515 4. The Department of Environmental Quality shall be notified in writing within 30 days
2516 following the completion of all activities in all authorized impact areas.

2517 5. The Department of Environmental Quality shall be notified in writing prior to the initiation
2518 of activities at the permittee-responsible compensation site. The notification shall include
2519 a projected schedule of activities and construction completion.

2520 6. All permittee-responsible compensation site monitoring reports shall be submitted
2521 annually by December 31, with the exception of the last year, in which case the report
2522 shall be submitted at least 60 days prior to the expiration of the general permit, unless
2523 otherwise approved by the Department of Environmental Quality.

2524 a. All wetland compensation site monitoring reports shall include, as applicable, the
2525 following:

2526 (1) General description of the site including a site location map identifying photo-
2527 monitoring stations, vegetative and soil monitoring stations, monitoring wells, and
2528 wetland zones.

2529 (2) Summary of activities completed during the monitoring year, including alterations
2530 or maintenance conducted at the site.

2531 (3) Description of monitoring methods.

2532 (4) Analysis of all hydrology information, including monitoring well data, precipitation
2533 data, and gauging data from streams or other open water areas, as set forth in the
2534 final compensation plan.

2535 (5) Evaluation of hydric soils or soils under hydric conditions, as appropriate.

2536 (6) Analysis of all vegetative community information, including woody and herbaceous
2537 species, both planted and volunteers, as set forth in the final compensation plan.

2538 (7) Photographs labeled with the permit number, the name of the compensation site,
2539 the photo-monitoring station number, the photograph orientation, the date and time of
2540 the photograph, the name of the person taking the photograph, and a brief description

- 2541 of the photograph subject. This information shall be provided as a separate attachment
 2542 to each photograph, if necessary. Photographs taken after the initial planting shall be
 2543 included in the first monitoring report after planting is complete.
- 2544 (8) Discussion of wildlife or signs of wildlife observed at the compensation site.
- 2545 (9) Comparison of site conditions from the previous monitoring year and reference site.
- 2546 (10) Discussion of corrective measures or maintenance activities to control
 2547 undesirable species, to repair damaged water control devices, or to replace damaged
 2548 planted vegetation.
- 2549 (11) Corrective action plan that includes proposed actions, a schedule, and monitoring
 2550 plan.
- 2551 b. All stream compensation site monitoring reports shall include, as applicable, the
 2552 following:
- 2553 (1) General description of the site including a site location map identifying photo-
 2554 monitoring stations and monitoring stations.
- 2555 (2) Summary of activities completed during the monitoring year, including alterations
 2556 or maintenance conducted at the site.
- 2557 (3) Description of monitoring methods.
- 2558 (4) Evaluation and discussion of the monitoring results in relation to the success
 2559 criteria and overall goals of compensation.
- 2560 (5) Photographs shall be labeled with the permit number, the name of the
 2561 compensation site, the photo-monitoring station number, the photograph orientation,
 2562 the date and time of the photograph, the name of the person taking the photograph,
 2563 and a brief description of the photograph subject. Photographs taken prior to
 2564 compensation site construction activities, during instream and riparian restoration
 2565 activities, and within one week of completion of activities shall be included in the first
 2566 monitoring report.
- 2567 (6) Discussion of alterations, maintenance, or major storm events resulting in
 2568 significant change in stream profile or cross section, and corrective actions conducted
 2569 at the stream compensation site.
- 2570 (7) Documentation of undesirable plant species and summary of abatement and
 2571 control measures.
- 2572 (8) Summary of wildlife or signs of wildlife observed at the compensation site.
- 2573 (9) Comparison of site conditions from the previous monitoring year and reference site,
 2574 and as-built survey, if applicable.
- 2575 (10) Corrective action plan that includes proposed actions, a schedule and monitoring
 2576 plan.
- 2577 (11) Additional submittals that were approved by the Department of Environmental
 2578 Quality in the final compensation plan.
- 2579 7. The permittee shall notify the Department of Environmental Quality in writing when
 2580 unusual or potentially complex conditions are encountered which require debris removal
 2581 or involve potentially toxic substance. Measures to remove the obstruction, material, or
 2582 toxic substance or to change the location of a structure are prohibited until approved by
 2583 the Department of Environmental Quality.
- 2584 8. The permittee shall report fish kills or spills of oil or fuel immediately upon discovery. If
 2585 spills or fish kills occur between the hours of 8:15 a.m. to 5 p.m., Monday through Friday,
 2586 the appropriate Department of Environmental Quality regional office shall be notified;

2587 otherwise, the Department of Emergency Management shall be notified at 1-800-468-
2588 8892.

2589 9. Violations of state water quality standards shall be reported to the appropriate
2590 Department of Environmental Quality office no later than the end of the business day
2591 following discovery.

2592 10. The permittee shall notify the Department of Environmental Quality no later than the
2593 end of the third business day following the discovery of additional impacts to surface
2594 waters including wetlands, stream channels, and open water that are not authorized by
2595 the Department of Environmental Quality or to any required preservation areas. The
2596 notification shall include photographs, estimated acreage or linear footage of impacts, and
2597 a description of the impacts.

2598 11. Submittals required by this VWP general permit shall contain the following signed
2599 certification statement:

2600 "I certify under penalty of law that this document and all attachments were prepared under
2601 my direction or supervision in accordance with a system designed to assure that qualified
2602 personnel properly gather and evaluate the information submitted. Based on my inquiry of
2603 the person or persons who manage the system, or those persons directly responsible for
2604 gathering the information, the information submitted is, to the best of my knowledge and
2605 belief, true, accurate, and complete. I am aware that there are significant penalties for
2606 submitting false information, including the possibility of fine and imprisonment for knowing
2607 violation."

2608 Part III. Conditions Applicable to All VWP General Permits.

2609 A. Duty to comply. The permittee shall comply with all conditions, limitations, and other
2610 requirements of the VWP general permit; any requirements in coverage granted under this VWP
2611 general permit; the Clean Water Act, as amended; and the State Water Control Law and
2612 regulations adopted pursuant to it. Any VWP general permit violation or noncompliance is a
2613 violation of the Clean Water Act and State Water Control Law and is grounds for (i) enforcement
2614 action, (ii) VWP general permit coverage termination for cause, (iii) VWP general permit coverage
2615 revocation, (iv) denial of application for coverage, or (v) denial of an application for a modification
2616 to VWP general permit coverage. Nothing in this VWP general permit shall be construed to relieve
2617 the permittee of the duty to comply with all applicable federal and state statutes, regulations, and
2618 toxic standards and prohibitions.

2619 B. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent
2620 impacts in violation of the VWP general permit which may have a reasonable likelihood of
2621 adversely affecting human health or the environment.

2622 C. Reopener. This VWP general permit may be reopened to modify its conditions when the
2623 circumstances on which the previous VWP general permit was based have materially and
2624 substantially changed, or special studies conducted by the department or the permittee show
2625 material and substantial change since the time the VWP general permit was issued and thereby
2626 constitute cause for revoking and reissuing the VWP general permit.

2627 D. Compliance with state and federal law. Compliance with this VWP general permit
2628 constitutes compliance with the VWP permit requirements of the State Water Control Law.
2629 Nothing in this VWP general permit shall be construed to preclude the institution of any legal
2630 action under or relieve the permittee from any responsibilities, liabilities, or other penalties
2631 established pursuant to any other state law or regulation or under the authority preserved by §
2632 510 of the Clean Water Act.

2633 E. Property rights. The issuance of this VWP general permit does not convey property rights
 2634 in either real or personal property or any exclusive privileges, nor does it authorize injury to private
 2635 property, any invasion of personal property rights, or any infringement of federal, state, or local
 2636 laws or regulations.

2637 F. Severability. The provisions of this VWP general permit are severable.

2638 G. Inspection and entry. Upon presentation of credentials, the permittee shall allow the
 2639 department or any duly authorized agent of the department, at reasonable times and under
 2640 reasonable circumstances, to enter upon the permittee's property, public or private, and have
 2641 access to inspect and copy any records that must be kept as part of the VWP general permit
 2642 conditions; to inspect any facilities, operations, or practices (including monitoring and control
 2643 equipment) regulated or required under the VWP general permit; and to sample or monitor any
 2644 substance, parameter, or activity for the purpose of assuring compliance with the conditions of
 2645 the VWP general permit or as otherwise authorized by law. For the purpose of this section, the
 2646 time for inspection shall be deemed reasonable during regular business hours. Nothing contained
 2647 herein shall make an inspection time unreasonable during an emergency.

2648 H. Transferability of VWP general permit coverage. VWP general permit coverage may be
 2649 transferred to another permittee when all of the criteria listed in this subsection are met. On the
 2650 date of the VWP general permit coverage transfer, the transferred VWP general permit coverage
 2651 shall be as fully effective as if it had been granted directly to the new permittee.

2652 1. The current permittee notifies the department of the proposed transfer of the general
 2653 permit coverage and provides a written agreement between the current and new
 2654 permittees containing a specific date of transfer of VWP general permit responsibility,
 2655 coverage, and liability to the new permittee, or that the current permittee will retain such
 2656 responsibility, coverage, or liability, including liability for compliance with the requirements
 2657 of enforcement activities related to the authorized activity.

2658 2. The department does not within the 15 days notify the current and new permittees of
 2659 the board's intent to modify or revoke and reissue the VWP general permit.

2660 I. Notice of planned change. VWP general permit coverage may be modified subsequent to
 2661 issuance in accordance with 9VAC25-670-80.

2662 J. VWP general permit coverage termination for cause. VWP general permit coverage is
 2663 subject to termination for cause by the department after public notice and opportunity for a hearing
 2664 in accordance with 9VAC25-210-180. Reasons for termination for cause are as follows:

2665 1. Noncompliance by the permittee with any provision of this chapter, any condition of the
 2666 VWP general permit, or any requirement in general permit coverage;

2667 2. The permittee's failure in the application or during the process of granting VWP general
 2668 permit coverage to disclose fully all relevant facts or the permittee's misrepresentation of
 2669 any relevant facts at any time;

2670 3. The permittee's violation of a special or judicial order;

2671 4. A determination by the department that the authorized activity endangers human health
 2672 or the environment and can be regulated to acceptable levels by a modification to the
 2673 VWP general permit coverage or a termination;

2674 5. A change in any condition that requires either a temporary or permanent reduction or
 2675 elimination of any activity controlled by the VWP general permit; or

2676 6. A determination that the authorized activity has ceased and that the compensation for
 2677 unavoidable adverse impacts has been successfully completed.

2678 K. The department may terminate VWP general permit coverage without cause when the
 2679 permittee is no longer a legal entity due to death or dissolution or when a company is no longer

2680 authorized to conduct business in the Commonwealth. The termination shall be effective 30 days
 2681 after notice of the proposed termination is sent to the last known address of the permittee or
 2682 registered agent, unless the permittee objects within that time. If the permittee does object during
 2683 that period, the department shall follow the applicable procedures for termination under 9VAC25-
 2684 210-180 and § 62.1-44.15:25 of the Code of Virginia.

2685 L. VWP general permit coverage termination by consent. The permittee shall submit a request
 2686 for termination by consent within 30 days of completing or canceling all authorized activities
 2687 requiring notification under 9VAC25-670-50 A and all compensatory mitigation requirements.
 2688 When submitted for project completion, the request for termination by consent shall constitute a
 2689 notice of project completion in accordance with 9VAC25-210-130 F. The director may accept this
 2690 termination of coverage on behalf of the department. The permittee shall submit the following
 2691 information:

- 2692 1. Name, mailing address, and telephone number;
- 2693 2. Name and location of the activity;
- 2694 3. The VWP general permit tracking number; and
- 2695 4. One of the following certifications:

2696 a. For project completion:

2697 "I certify under penalty of law that all activities and any required compensatory
 2698 mitigation authorized by the VWP general permit and general permit coverage have
 2699 been completed. I understand that by submitting this notice of termination I am no
 2700 longer authorized to perform activities in surface waters in accordance with the VWP
 2701 general permit and general permit coverage, and that performing activities in surface
 2702 waters is unlawful where the activity is not authorized by the VWP permit or coverage,
 2703 unless otherwise excluded from obtaining coverage. I also understand that the
 2704 submittal of this notice does not release me from liability for any violations of the VWP
 2705 general permit or coverage."

2706 b. For project cancellation:

2707 "I certify under penalty of law that the activities and any required compensatory
 2708 mitigation authorized by the VWP general permit and general permit coverage will not
 2709 occur. I understand that by submitting this notice of termination I am no longer
 2710 authorized to perform activities in surface waters in accordance with the VWP general
 2711 permit and general permit coverage, and that performing activities in surface waters is
 2712 unlawful where the activity is not authorized by the VWP permit or coverage, unless
 2713 otherwise excluded from obtaining coverage. I also understand that the submittal of
 2714 this notice does not release me from liability for any violations of the VWP general
 2715 permit or coverage, nor does it allow me to resume the authorized activities without
 2716 reapplication and coverage."

2717 c. For events beyond permittee control, the permittee shall provide a detailed
 2718 explanation of the events, to be approved by the Department of Environmental Quality,
 2719 and the following certification statement:

2720 "I certify under penalty of law that the activities or the required compensatory mitigation
 2721 authorized by the VWP general permit and general permit coverage have changed as
 2722 the result of events beyond my control (see attached). I understand that by submitting
 2723 this notice of termination I am no longer authorized to perform activities in surface
 2724 waters in accordance with the VWP general permit and general permit coverage, and
 2725 that performing activities in surface waters is unlawful where the activity is not
 2726 authorized by the VWP permit or coverage, unless otherwise excluded from obtaining
 2727 coverage. I also understand that the submittal of this notice does not release me from

2728 liability for any violations of the VWP general permit or coverage, nor does it allow me
2729 to resume the authorized activities without reapplication and coverage."

2730 M. Civil and criminal liability. Nothing in this VWP general permit shall be construed to relieve
2731 the permittee from civil and criminal penalties for noncompliance.

2732 N. Oil and hazardous substance liability. Nothing in this VWP general permit shall be
2733 construed to preclude the institution of legal action or relieve the permittee from any
2734 responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of
2735 the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

2736 O. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement
2737 action that it would have been necessary to halt or reduce the activity for which VWP general
2738 permit coverage has been granted in order to maintain compliance with the conditions of the VWP
2739 general permit or coverage.

2740 P. Duty to provide information.

2741 1. The permittee shall furnish to the department any information that the department may
2742 request to determine whether cause exists for modifying, revoking, or terminating VWP
2743 permit coverage or to determine compliance with the VWP general permit or general
2744 permit coverage. The permittee shall also furnish to the department, upon request, copies
2745 of records required to be kept by the permittee.

2746 2. Plans, maps, conceptual reports, and other relevant information shall be submitted as
2747 required by the department prior to commencing construction.

2748 Q. Monitoring and records requirements.

2749 1. Monitoring of parameters, other than pollutants, shall be conducted according to
2750 approved analytical methods as specified in the VWP general permit. Analysis of
2751 pollutants will be conducted according to 40 CFR Part 136-~~(2000)~~ as published in the July
2752 1, 2023 update, Guidelines Establishing Test Procedures for the Analysis of Pollutants.

2753 2. Samples and measurements taken for the purpose of monitoring shall be representative
2754 of the monitored activity.

2755 3. The permittee shall retain records of all monitoring information, including all calibration
2756 and maintenance records and all original strip chart or electronic recordings for continuous
2757 monitoring instrumentation, copies of all reports required by the VWP general permit, and
2758 records of all data used to complete the application for coverage under the VWP general
2759 permit, for a period of at least three years from the date of general permit expiration. This
2760 period may be extended by request of the department at any time.

2761 4. Records of monitoring information shall include, as appropriate:

2762 a. The date, exact place, and time of sampling or measurements;

2763 b. The name of the individuals who performed the sampling or measurements;

2764 c. The date and time the analyses were performed;

2765 d. The name of the individuals who performed the analyses;

2766 e. The analytical techniques or methods supporting the information such as
2767 observations, readings, calculations, and bench data used;

2768 f. The results of such analyses; and

2769 g. Chain of custody documentation.

2770 R. Unauthorized discharge of pollutants. Except in compliance with this VWP general permit,
2771 it shall be unlawful for the permittee to:

2772 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or
2773 deleterious substances;

- 2774 2. Excavate in a wetland;
- 2775 3. Otherwise alter the physical, chemical, or biological properties of state waters and make
- 2776 them detrimental to the public health, to animal or aquatic life, or to the uses of such waters
- 2777 for domestic or industrial consumption, for recreation, or for other uses; or
- 2778 4. On and after October 1, 2001, conduct the following activities in a wetland:
- 2779 a. New activities to cause draining that significantly alters or degrades existing wetland
- 2780 acreage or functions;
- 2781 b. Filling or dumping;
- 2782 c. Permanent flooding or impounding; or
- 2783 d. New activities that cause significant alteration or degradation of existing wetland
- 2784 acreage or functions.
- 2785 S. Duty to reapply. Any permittee desiring to continue a previously authorized activity after the
- 2786 expiration date of the VWP general permit shall comply with the provisions in 9VAC25-670-27.
- 2787 **9VAC25-680-100. VWP general permit.**

2788 VWP GENERAL PERMIT NO. WP3 FOR LINEAR TRANSPORTATION PROJECTS

2789 UNDER THE VIRGINIA WATER PROTECTION PERMIT AND THE VIRGINIA STATE

2790 WATER CONTROL LAW

- 2791 Effective date: August 2, 2016
- 2792 Expiration date: August 1, 2026

2793 In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State

2794 Water Control Law and regulations adopted pursuant thereto, the board has determined that there

2795 is a reasonable assurance that this VWP general permit, if complied with, will protect instream

2796 beneficial uses, will not violate applicable water quality standards, and will not cause or contribute

2797 to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP

2798 general permit, the board has not taken into consideration the structural stability of any proposed

2799 activities.

2800 The permanent or temporary impact of up to two acres of nontidal wetlands or open water and

2801 up to 1,500 linear feet of nontidal stream bed shall be subject to the provisions of the VWP general

2802 permit set forth herein; any requirements in coverage granted under this VWP general permit; the

2803 Clean Water Act, as amended; and the State Water Control Law and regulations adopted

2804 pursuant to it.

2805 Part I. Special Conditions.

2806 A. Authorized activities.

- 2807 1. The activities authorized by this chapter shall not cause more than the permanent or
- 2808 temporary impacts of up to two acres of nontidal wetlands or open water and up to 1,500
- 2809 linear feet of nontidal stream bed. Additional permit requirements as stipulated by the
- 2810 department in the coverage letter, if any, shall be enforceable conditions of this permit.
- 2811 2. Any changes to the authorized permanent impacts to surface waters shall require a
- 2812 notice of planned change in accordance with 9VAC25-680-80. An application or request
- 2813 for modification to coverage or another VWP permit application may be required.
- 2814 3. Any changes to the authorized temporary impacts to surface waters shall require written
- 2815 notification to and approval from the Department of Environmental Quality in accordance

- 2816 with 9VAC25-680-80 prior to initiating the impacts and restoration to preexisting conditions
2817 in accordance with the conditions of this permit.
- 2818 4. Modification to compensation requirements may be approved at the request of the
2819 permittee when a decrease in the amount of authorized surface waters impacts occurs,
2820 provided that the adjusted compensation meets the initial compensation goals.
- 2821 B. Overall conditions.
- 2822 1. The activities authorized by this VWP general permit shall be executed in a manner so
2823 as to minimize adverse impacts on instream beneficial uses as defined in § 62.1-10 (b) of
2824 the Code of Virginia.
- 2825 2. No activity may substantially disrupt the movement of aquatic life indigenous to the
2826 water body, including those species which normally migrate through the area, unless the
2827 primary purpose of the activity is to impound water. Pipes and culverts placed in streams
2828 must be installed to maintain low flow conditions and shall be countersunk at both inlet
2829 and outlet ends of the pipe or culvert, unless specifically approved by the Department of
2830 Environmental Quality on a case-by-case basis and as follows: The requirement to
2831 countersink does not apply to extensions or maintenance of existing pipes and culverts
2832 that are not countersunk, floodplain pipe and culverts being placed above ordinary high
2833 water, pipes and culverts being placed on bedrock, or pipes or culverts required to be
2834 placed on slopes 5.0% or greater. Bedrock encountered during construction must be
2835 identified and approved in advance of a design change where the countersunk condition
2836 cannot be met. Pipes and culverts 24 inches or less in diameter shall be countersunk three
2837 inches below the natural stream bed elevations, and pipes and culverts greater than 24
2838 inches shall be countersunk at least six inches below the natural stream bed elevations.
2839 Hydraulic capacity shall be determined based on the reduced capacity due to the
2840 countersunk position. In all stream crossings appropriate measures shall be implemented
2841 to minimize any disruption of aquatic life movement.
- 2842 3. Wet or uncured concrete shall be prohibited from entry into flowing surface waters,
2843 unless the area is contained within a cofferdam and the work is performed in the dry or
2844 unless otherwise approved by the Department of Environmental Quality. Excess or waste
2845 concrete shall not be disposed of in flowing surface waters or washed into flowing surface
2846 waters.
- 2847 4. All fill material shall be clean and free of contaminants in toxic concentrations or
2848 amounts in accordance with all applicable laws and regulations.
- 2849 5. Erosion and sedimentation controls shall be designed in accordance with the Virginia
2850 Erosion and Sediment Control Handbook, Third Edition, 1992. These controls shall be
2851 placed prior to clearing and grading and maintained in good working order to minimize
2852 impacts to state waters. These controls shall remain in place until the area is stabilized
2853 and shall then be removed.
- 2854 6. Exposed slopes and streambanks shall be stabilized immediately upon completion of
2855 work in each permitted impact area. All denuded areas shall be properly stabilized in
2856 accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition,
2857 1992.
- 2858 7. All construction, construction access (e.g., cofferdams, sheetpiling, and causeways)
2859 and demolition activities associated with the project shall be accomplished in a manner
2860 that minimizes construction or waste materials from entering surface waters to the
2861 maximum extent practicable, unless authorized by this VWP general permit.
- 2862 8. No machinery may enter flowing waters, unless authorized by this VWP general permit
2863 or approved prior to entry by the Department of Environmental Quality.

2864 9. Heavy equipment in temporarily impacted wetland areas shall be placed on mats,
2865 geotextile fabric, or other suitable material, to minimize soil disturbance to the maximum
2866 extent practicable. Equipment and materials shall be removed immediately upon
2867 completion of work.

2868 10. All nonimpacted surface waters and compensatory mitigation areas within 50 feet of
2869 authorized activities and within the project or right-of-way limits shall be clearly flagged or
2870 marked for the life of the construction activity at that location to preclude unauthorized
2871 disturbances to these surface waters and compensatory mitigation areas during
2872 construction. The permittee shall notify contractors that no activities are to occur in these
2873 marked surface waters.

2874 11. Temporary disturbances to surface waters during construction shall be avoided and
2875 minimized to the maximum extent practicable. All temporarily disturbed wetland areas
2876 shall be restored to preexisting conditions within 30 days of completing work at each
2877 respective temporary impact area, which shall include reestablishing preconstruction
2878 elevations and contours with topsoil from the impact area where practicable and planting
2879 or seeding with appropriate wetland vegetation according to cover type (i.e., emergent,
2880 scrub-shrub, or forested). The permittee shall take all appropriate measures to promote
2881 and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation
2882 through the second year post-disturbance. All temporarily impacted streams and
2883 streambanks shall be restored to their preconstruction elevations and contours with topsoil
2884 from the impact area where practicable within 30 days following the construction at that
2885 stream segment. Streambanks shall be seeded or planted with the same vegetation cover
2886 type originally present, including any necessary, supplemental erosion control grasses.
2887 Invasive species identified on the Department of Conservation and Recreation's Virginia
2888 Invasive Plant Species List shall not be used to the maximum extent practicable or without
2889 prior approval from the Department of Environmental Quality.

2890 12. Materials (including fill, construction debris, and excavated and woody materials)
2891 temporarily stockpiled in wetlands shall be placed on mats or geotextile fabric, immediately
2892 stabilized to prevent entry into state waters, managed such that leachate does not enter
2893 state waters, and completely removed within 30 days following completion of that
2894 construction activity. Disturbed areas shall be returned to preconstruction elevations and
2895 contours with topsoil from the impact area where practicable; restored within 30 days
2896 following removal of the stockpile; and restored with the same vegetation cover type
2897 originally present, including any necessary supplemental erosion control grasses. Invasive
2898 species identified on the Department of Conservation and Recreation's Virginia Invasive
2899 Plant Species List shall not be used to the maximum extent practicable or without prior
2900 approval from the Department of Environmental Quality.

2901 13. Continuous flow of perennial springs shall be maintained by the installation of spring
2902 boxes, french drains, or other similar structures.

2903 14. The permittee shall employ measures to prevent spills of fuels or lubricants into state
2904 waters.

2905 15. The permittee shall conduct his activities in accordance with the time-of-year
2906 restrictions recommended by the Virginia Department of Wildlife Resources, the Virginia
2907 Marine Resources Commission, or other interested and affected agencies, as contained,
2908 when applicable, in Department of Environmental Quality VWP general permit coverage,
2909 and shall ensure that all contractors are aware of the time-of-year restrictions imposed.

2910 16. Water quality standards shall not be violated as a result of the construction activities.

2911 17. If stream channelization or relocation is required, all work in surface waters shall be
2912 done in the dry, unless otherwise authorized by the Department of Environmental Quality,

2913 and all flows shall be diverted around the channelization or relocation area until the new
 2914 channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and
 2915 outlet ends of the new channel during excavation. Once the new channel has been
 2916 stabilized, flow shall be routed into the new channel by first removing the downstream plug
 2917 and then the upstream plug. The rerouted stream flow must be fully established before
 2918 construction activities in the old stream channel can begin.

2919 C. Road crossings.

2920 1. Access roads and associated bridges, pipes, and culverts shall be constructed to
 2921 minimize the adverse effects on surface waters to the maximum extent practicable.
 2922 Access roads constructed above preconstruction elevations and contours in surface
 2923 waters must be bridged, piped, or culverted to maintain surface flows.

2924 2. Installation of road crossings shall occur in the dry via the implementation of cofferdams,
 2925 sheetpiling, stream diversions, or similar structures.

2926 D. Utility lines.

2927 1. All utility line work in surface waters shall be performed in a manner that minimizes
 2928 disturbance, and the area must be returned to its preconstruction elevations and contours
 2929 with topsoil from the impact area where practicable and restored within 30 days of
 2930 completing work in the area, unless otherwise authorized by the Department of
 2931 Environmental Quality. Restoration shall be the seeding or planting of the same vegetation
 2932 cover type originally present, including any necessary supplemental erosion control
 2933 grasses. Invasive species identified on the Department of Conservation and Recreation's
 2934 Virginia Invasive Plant Species List shall not be used to the maximum extent practicable
 2935 or without prior approval from the Department of Environmental Quality.

2936 2. Material resulting from trench excavation may be temporarily sidecast into wetlands not
 2937 to exceed a total of 90 days, provided the material is not placed in a manner such that it
 2938 is dispersed by currents or other forces.

2939 3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g.,
 2940 backfilling with extensive gravel layers creating a french drain effect). For example, utility
 2941 lines may be backfilled with clay blocks to ensure that the trench does not drain surface
 2942 waters through which the utility line is installed.

2943 E. Stream modification and stream bank protection.

2944 1. Riprap bank stabilization shall be of an appropriate size and design in accordance with
 2945 the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.

2946 2. Riprap aprons for all outfalls shall be designed in accordance with the Virginia Erosion
 2947 and Sediment Control Handbook, Third Edition, 1992.

2948 3. For bank protection activities, the structure and backfill shall be placed as close to the
 2949 stream bank as practicable. No material shall be placed in excess of the minimum
 2950 necessary for erosion protection.

2951 4. All stream bank protection structures shall be located to eliminate or minimize impacts
 2952 to vegetated wetlands to the maximum extent practicable.

2953 5. Asphalt and materials containing asphalt or other toxic substances shall not be used in
 2954 the construction of submerged sills or breakwaters.

2955 6. Redistribution of existing stream substrate for the purpose of erosion control is
 2956 prohibited.

2957 7. No material removed from the stream bottom shall be disposed of in surface waters,
 2958 unless otherwise authorized by this VWP general permit.

2959 F. Dredging.

- 2960 1. Dredging depths shall be determined and authorized according to the proposed use
2961 and controlling depths outside the area to be dredged.
- 2962 2. Dredging shall be accomplished in a manner that minimizes disturbance of the bottom
2963 and minimizes turbidity levels in the water column.
- 2964 3. If evidence of impaired water quality, such as a fish kill, is observed during the dredging,
2965 dredging operations shall cease, and the Department of Environmental Quality shall be
2966 notified immediately.
- 2967 4. Barges used for the transportation of dredge material shall be filled in such a manner
2968 to prevent the overflow of dredged materials.
- 2969 5. Double handling of dredged material in state waters shall not be permitted.
- 2970 6. For navigation channels the following shall apply:
- 2971 a. A buffer of four times the depth of the dredge cut shall be maintained between the
2972 bottom edge of the design channel and the channelward limit of wetlands, or a buffer
2973 of 15 feet shall be maintained from the dredged cut and the channelward edge of
2974 wetlands, whichever is greater. This landward limit of buffer shall be flagged and
2975 inspected prior to construction.
- 2976 b. Side slope cuts of the dredging area shall not exceed a two-horizontal-to-one-
2977 vertical slope to prevent slumping of material into the dredged area.
- 2978 7. A dredged material management plan for the designated upland disposal site shall be
2979 submitted and approved 30 days prior to initial dredging activity.
- 2980 8. Pipeline outfalls and spillways shall be located at opposite ends of the dewatering area
2981 to allow for maximum retention and settling time. Filter fabric shall be used to line the
2982 dewatering area and to cover the outfall pipe to further reduce sedimentation to state
2983 waters.
- 2984 9. The dredge material dewatering area shall be of adequate size to contain the dredge
2985 material and to allow for adequate dewatering and settling out of sediment prior to
2986 discharge back into state waters.
- 2987 10. The dredge material dewatering area shall utilize an earthen berm or straw bales
2988 covered with filter fabric along the edge of the area to contain the dredged material, filter
2989 bags, or other similar filtering practices, any of which shall be properly stabilized prior to
2990 placing the dredged material within the containment area.
- 2991 11. Overtopping of the dredge material containment berms with dredge materials shall be
2992 strictly prohibited.
- 2993 G. Stormwater management facilities.
- 2994 1. Stormwater management facilities shall be installed in accordance with best
2995 management practices and watershed protection techniques (e.g., vegetated buffers,
2996 siting considerations to minimize adverse effects to aquatic resources, bioengineering
2997 methods incorporated into the facility design to benefit water quality and minimize adverse
2998 effects to aquatic resources) that provide for long-term aquatic resources protection and
2999 enhancement, to the maximum extent practicable.
- 3000 2. Compensation for unavoidable impacts shall not be allowed within maintenance areas
3001 of stormwater management facilities.
- 3002 3. Maintenance activities within stormwater management facilities shall not require
3003 additional permit coverage or compensation, provided that the maintenance activities do
3004 not exceed the original contours of the facility, as approved and constructed, and is
3005 accomplished in designated maintenance areas as indicated in the facility maintenance

3006 or design plan or when unavailable, an alternative plan approved by the Department of
 3007 Environmental Quality.

3008 Part II. Construction and Compensation Requirements, Monitoring and Reporting.

3009 A. Minimum compensation requirements.

3010 1. The permittee shall provide any required compensation for impacts in accordance with
 3011 the conditions in this VWP general permit, the coverage letter, and the chapter
 3012 promulgating the general permit. For all compensation that requires a protective
 3013 mechanism, including preservation of surface waters or buffers, the permittee shall record
 3014 the approved protective mechanism in the chain of title to the property, or an equivalent
 3015 instrument for government-owned lands, and proof of recordation shall be submitted to
 3016 the Department of Environmental Quality prior to commencing impacts in surface waters.

3017 2. Compensation options that may be considered under this VWP general permit shall
 3018 meet the criteria in § 62.1-44.15:23 of the Code of Virginia, 9VAC25-210-116, and
 3019 9VAC25-680-70.

3020 3. The permittee-responsible compensation site or sites depicted in the conceptual
 3021 compensation plan submitted with the application shall constitute the compensation site.
 3022 A site change may require a modification to coverage.

3023 4. For compensation involving the purchase of mitigation bank credits or the purchase of
 3024 in-lieu fee program credits, the permittee shall not initiate work in permitted impact areas
 3025 until documentation of the mitigation bank credit purchase or of the in-lieu fee program
 3026 credit purchase has been submitted to and received by the Department of Environmental
 3027 Quality.

3028 5. The final compensatory mitigation plan shall be submitted to and approved by the
 3029 department prior to a construction activity in permitted impact areas. The department shall
 3030 review and provide written comments on the final plan within 30 days of receipt or it shall
 3031 be deemed approved. The final plan as approved by the department shall be an
 3032 enforceable requirement of any coverage under this VWP general permit. Deviations from
 3033 the approved final plan shall be submitted and approved in advance by the department.

3034 a. The final permittee-responsible wetlands compensation plan shall include:

3035 (1) The complete information on all components of the conceptual compensation plan.

3036 (2) A summary of the type and acreage of existing wetland impacts anticipated during
 3037 the construction of the compensation site and the proposed compensation for these
 3038 impacts; a site access plan; a monitoring plan, including proposed success criteria,
 3039 monitoring goals, and the location of photo-monitoring stations, monitoring wells,
 3040 vegetation sampling points, and reference wetlands or streams, if available; an
 3041 abatement and control plan for undesirable plant species; an erosion and
 3042 sedimentation control plan; a construction schedule; and the final protective
 3043 mechanism for the protection of the compensation site or sites, including all surface
 3044 waters and buffer areas within its boundaries.

3045 (3) The approved protective mechanism. The protective mechanism shall be recorded
 3046 in the chain of title to the property, or an equivalent instrument for government-owned
 3047 lands, and proof of recordation shall be submitted to the Department of Environmental
 3048 Quality prior to commencing impacts in surface waters.

3049 b. The final permittee-responsible stream compensation plan shall include:

3050 (1) The complete information on all components of the conceptual compensation plan.

3051 (2) An evaluation, discussion, and plan drawing or drawings of existing conditions on
 3052 the proposed compensation stream, including the identification of functional and
 3053 physical deficiencies for which the measures are proposed, and summary of
 3054 geomorphologic measurements (e.g., stream width, entrenchment ratio, width-depth
 3055 ratio, sinuosity, slope, substrate, etc.); a site access plan; a monitoring plan, including
 3056 a monitoring and reporting schedule, monitoring design and methodologies for
 3057 success, proposed success criteria, location of photo-monitoring stations, vegetation
 3058 sampling points, survey points, bank pins, scour chains, and reference streams; an
 3059 abatement and control plan for undesirable plant species; an erosion and
 3060 sedimentation control plan, if appropriate; a construction schedule; a plan-view
 3061 drawing depicting the pattern and all compensation measures being employed; a
 3062 profile drawing; cross-sectional drawing or drawings of the proposed compensation
 3063 stream; and the final protective mechanism for the protection of the compensation site
 3064 or sites, including all surface waters and buffer areas within its boundaries.

3065 (3) The approved protective mechanism. The protective mechanism shall be recorded
 3066 in the chain of title to the property, or an equivalent instrument for government-owned
 3067 lands, and proof of recordation shall be submitted to the Department of Environmental
 3068 Quality prior to commencing impacts in surface waters.

3069 6. The following criteria shall apply to permittee-responsible wetland or stream
 3070 compensation:

3071 a. The vegetation used shall be native species common to the area, shall be suitable
 3072 for growth in local wetland or riparian conditions, and shall be from areas within the
 3073 same or adjacent U.S. Department of Agriculture Plant Hardiness Zone or Natural
 3074 Resources Conservation Service Land Resource Region as that of the project site.
 3075 Planting of woody plants shall occur when vegetation is normally dormant, unless
 3076 otherwise approved in the final wetlands or stream compensation plan or plans.

3077 b. All work in permitted impact areas shall cease if compensation site construction has
 3078 not commenced within 180 days of commencement of project construction, unless
 3079 otherwise authorized by the department.

3080 c. The Department of Environmental Quality shall be notified in writing prior to the
 3081 initiation of construction activities at the compensation site.

3082 d. Point sources of stormwater runoff shall be prohibited from entering a wetland
 3083 compensation site prior to treatment by appropriate best management practices.
 3084 Appropriate best management practices may include sediment traps, grassed
 3085 waterways, vegetated filter strips, debris screens, oil and grease separators, or
 3086 forebays.

3087 e. The success of the compensation shall be based on meeting the success criteria
 3088 established in the approved final compensation plan.

3089 f. If the wetland or stream compensation area fails to meet the specified success
 3090 criteria in a particular monitoring year, other than the final monitoring year, the reasons
 3091 for this failure shall be determined and a corrective action plan shall be submitted to
 3092 the Department of Environmental Quality for approval with or before that year's
 3093 monitoring report. The corrective action plan shall contain at minimum the proposed
 3094 actions, a schedule for those actions, and a monitoring plan, and shall be implemented
 3095 by the permittee in accordance with the approved schedule. Should significant
 3096 changes be necessary to ensure success, the required monitoring cycle shall begin
 3097 again, with monitoring year one being the year that the changes are complete as
 3098 confirmed by the Department of Environmental Quality. If the wetland or stream
 3099 compensation area fails to meet the specified success criteria by the final monitoring

3100 year or if the wetland or stream compensation area has not met the stated restoration
 3101 goals, reasons for this failure shall be determined and a corrective action plan,
 3102 including proposed actions, a schedule, and a monitoring plan, shall be submitted with
 3103 the final year monitoring report for the Department of Environmental Quality approval.
 3104 Corrective action shall be implemented by the permittee in accordance with the
 3105 approved schedule. Annual monitoring shall be required to continue until two
 3106 sequential, annual reports indicate that all criteria have been successfully satisfied and
 3107 the site has met the overall restoration goals (e.g., that corrective actions were
 3108 successful).

3109 g. The surveyed wetland boundary for the compensation site shall be based on the
 3110 results of the hydrology, soils, and vegetation monitoring data and shall be shown on
 3111 the site plan. Calculation of total wetland acreage shall be based on that boundary at
 3112 the end of the monitoring cycle. Data shall be submitted by December 31 of the final
 3113 monitoring year.

3114 h. Herbicides or algicides shall not be used in or immediately adjacent to the
 3115 compensation site or sites without prior authorization by the department. All vegetation
 3116 removal shall be done by manual means only, unless authorized by the Department
 3117 of Environmental Quality in advance.

3118 B. Impact site construction monitoring.

3119 1. Construction activities authorized by this permit that are within impact areas shall be
 3120 monitored and documented. The monitoring shall consist of:

3121 a. Preconstruction photographs taken at each impact area prior to initiation of activities
 3122 within impact areas. Photographs shall remain on the project site and depict the impact
 3123 area and the nonimpacted surface waters immediately adjacent to and downgradient
 3124 of each impact area. Each photograph shall be labeled to include the following
 3125 information: permit number, impact area number, date and time of the photograph,
 3126 name of the person taking the photograph, photograph orientation, and photograph
 3127 subject description.

3128 b. Site inspections shall be conducted by the permittee or the permittee's qualified
 3129 designee once every calendar month during activities within impact areas. Monthly
 3130 inspections shall be conducted in the following areas: all authorized permanent and
 3131 temporary impact areas; all avoided surface waters, including wetlands, stream
 3132 channels, and open water; surface water areas within 50 feet of any land disturbing
 3133 activity and within the project or right-of-way limits; and all on-site permanent
 3134 preservation areas required under this permit. Observations shall be recorded on the
 3135 inspection form provided by the Department of Environmental Quality. The form shall
 3136 be completed in its entirety for each monthly inspection and shall be kept on site and
 3137 made available for review by the Department of Environmental Quality staff upon
 3138 request during normal business hours. Inspections are not required during periods of
 3139 no activity within impact areas.

3140 2. Monitoring of water quality parameters shall be conducted during permanent relocation
 3141 of perennial streams through new channels in the manner noted below. The permittee
 3142 shall report violations of water quality standards to the Department of Environmental
 3143 Quality in accordance with the procedures in 9VAC25-680-100 Part II E. Corrective
 3144 measures and additional monitoring may be required if water quality standards are not
 3145 met. Reporting shall not be required if water quality standards are not violated.

3146 a. A sampling station shall be located upstream and immediately downstream of the
 3147 relocated channel.

3148 b. Temperature, pH, and dissolved oxygen (D.O.) measurements shall be taken every
 3149 30 minutes for at least two hours at each station prior to opening the new channels
 3150 and immediately before opening new channels.

3151 c. Temperature, pH, and D.O. readings shall be taken after opening the channels and
 3152 every 30 minutes for at least three hours at each station.

3153 C. Permittee-responsible wetland compensation site monitoring.

3154 1. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial
 3155 surveys, shall be conducted for the entire compensation site or sites, including invert
 3156 elevations for all water elevation control structures and spot elevations throughout the site
 3157 or sites. Aerial surveys shall include the variation from actual ground conditions, such as
 3158 +/- 0.2 feet. Either type of survey shall be certified by a licensed surveyor or by a registered
 3159 professional engineer to conform to the design plans. The survey shall be submitted within
 3160 60 days of completing compensation site construction. Changes or deviations in the as-
 3161 built survey or aerial survey shall be shown on the survey and explained in writing.

3162 2. Photographs shall be taken at the compensation site or sites from the permanent
 3163 markers identified in the final compensation plan, and established to ensure that the same
 3164 locations and view directions at the site or sites are monitored in each monitoring period.
 3165 These photographs shall be taken after the initial planting and at a time specified in the
 3166 final compensation plan during every monitoring year.

3167 3. Compensation site monitoring shall begin on the first day of the first complete growing
 3168 season (monitoring year 1) after wetland compensation site construction activities,
 3169 including planting, have been completed. Monitoring shall be required for monitoring years
 3170 1, 2, 3, and 5, unless otherwise approved by the Department of Environmental Quality. In
 3171 all cases, if all success criteria have not been met in the final monitoring year, then
 3172 monitoring shall be required for each consecutive year until two annual sequential reports
 3173 indicate that all criteria have been successfully satisfied.

3174 4. The establishment of wetland hydrology shall be measured weekly during the growing
 3175 season, with the location and number of monitoring wells, and frequency of monitoring for
 3176 each site, set forth in the final monitoring plan. Hydrology monitoring well data shall be
 3177 accompanied by precipitation data, including rainfall amounts, either from on site or from
 3178 the closest weather station. Once the wetland hydrology success criteria have been
 3179 satisfied for a particular monitoring year, monitoring may be discontinued for the remainder
 3180 of that monitoring year following Department of Environmental Quality approval. After a
 3181 period of three monitoring years, the permittee may request that hydrology monitoring be
 3182 discontinued, providing that adequate hydrology has been established and maintained.
 3183 Hydrology monitoring shall not be discontinued without written approval from the
 3184 Department of Environmental Quality.

3185 5. The presence of hydric soils or soils under hydric conditions shall be evaluated in
 3186 accordance with the final compensation plan.

3187 6. The establishment of wetland vegetation shall be in accordance with the final
 3188 compensation plan. Monitoring shall take place in August, September, or October during
 3189 the growing season of each monitoring year, unless otherwise authorized in the monitoring
 3190 plan.

3191 7. The presence of undesirable plant species shall be documented.

3192 8. All wetland compensation monitoring reports shall be submitted in accordance with
 3193 9VAC25-680-100 Part II E 6.

3194 D. Permittee-responsible stream compensation and monitoring.

- 3195 1. Riparian buffer restoration activities shall be detailed in the final compensation plan and
 3196 shall include, as appropriate, the planting of a variety of native species currently growing
 3197 in the site area, including appropriate seed mixtures and woody species that are bare root,
 3198 balled, or burlapped. A minimum buffer width of 50 feet, measured from the top of the
 3199 stream bank at bankfull elevation landward on both sides of the stream, shall be required
 3200 where practical.
- 3201 2. The installation of root wads, vanes, and other instream structures, shaping of the
 3202 stream banks and channel relocation shall be completed in the dry whenever practicable.
- 3203 3. Livestock access to the stream and designated riparian buffer shall be limited to the
 3204 greatest extent practicable.
- 3205 4. Stream channel restoration activities shall be conducted in the dry or during low flow
 3206 conditions. When site conditions prohibit access from the streambank or upon prior
 3207 authorization from the Department of Environmental Quality, heavy equipment may be
 3208 authorized for use within the stream channel.
- 3209 5. Photographs shall be taken at the compensation site from the vicinity of the permanent
 3210 photo-monitoring stations identified in the final compensation plan. The photograph
 3211 orientation shall remain constant during all monitoring events. At a minimum, photographs
 3212 shall be taken from the center of the stream, facing downstream, with a sufficient number
 3213 of photographs to view the entire length of the restoration site. Photographs shall
 3214 document the completed restoration conditions. Photographs shall be taken prior to site
 3215 activities, during instream and riparian compensation construction activities, within one
 3216 week of completion of activities, and during at least one day of each monitoring year to
 3217 depict restored conditions.
- 3218 6. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial
 3219 surveys, shall be conducted for the entire compensation site or sites. Aerial surveys shall
 3220 include the variation from actual ground conditions, such as +/- 0.2 feet. The survey shall
 3221 be certified by the licensed surveyor or by a registered, professional engineer to conform
 3222 to the design plans. The survey shall be submitted within 60 days of completing
 3223 compensation site construction. Changes or deviations from the final compensation plans
 3224 in the as-built survey or aerial survey shall be shown on the survey and explained in
 3225 writing.
- 3226 7. Compensation site monitoring shall begin on day one of the first complete growing
 3227 season (monitoring year 1) after stream compensation site constructions activities,
 3228 including planting, have been completed. Monitoring shall be required for monitoring years
 3229 1 and 2, unless otherwise approved by the Department of Environmental Quality. In all
 3230 cases, if all success criteria have not been met in the final monitoring year, then monitoring
 3231 shall be required for each consecutive year until two annual sequential reports indicate
 3232 that all criteria have been successfully satisfied.
- 3233 8. All stream compensation site monitoring reports shall be submitted in accordance with
 3234 9VAC25-680-100 Part II E 6.

3235 E. Reporting.

- 3236 1. Written communications required by this VWP general permit shall be submitted to the
 3237 appropriate Department of Environmental Quality office. The VWP general permit tracking
 3238 number shall be included on all correspondence.
- 3239 2. The Department of Environmental Quality shall be notified in writing prior to the start of
 3240 construction activities at the first permitted impact area.
- 3241 3. A construction status update form provided by the Department of Environmental Quality
 3242 shall be completed and submitted to the Department of Environmental Quality twice per

- 3243 year for the duration of coverage under a VWP general permit. Forms completed in June
 3244 shall be submitted by or on July 10, and forms completed in December shall be submitted
 3245 by or on January 10. The form shall include reference to the VWP permit tracking number
 3246 and one of the following statements for each authorized surface water impact location:
- 3247 a. Construction activities have not yet started;
 - 3248 b. Construction activities have started;
 - 3249 c. Construction activities have started but are currently inactive; or
 - 3250 d. Construction activities are complete.
- 3251 4. The Department of Environmental Quality shall be notified in writing within 30 days
 3252 following the completion of all activities in all authorized impact areas.
- 3253 5. The Department of Environmental Quality shall be notified in writing prior to the initiation
 3254 of activities at the permittee-responsible compensation site. The notification shall include
 3255 a projected schedule of activities and construction completion.
- 3256 6. All permittee-responsible compensation site monitoring reports shall be submitted
 3257 annually by December 31, with the exception of the last year, in which case the report
 3258 shall be submitted at least 60 days prior to the expiration of the general permit, unless
 3259 otherwise approved by the Department of Environmental Quality.
- 3260 a. All wetland compensation site monitoring reports shall include, as applicable, the
 3261 following:
 - 3262 (1) General description of the site including a site location map identifying photo-
 3263 monitoring stations, vegetative and soil monitoring stations, monitoring wells, and
 3264 wetland zones.
 - 3265 (2) Summary of activities completed during the monitoring year, including alterations
 3266 or maintenance conducted at the site.
 - 3267 (3) Description of monitoring methods.
 - 3268 (4) Analysis of all hydrology information, including monitoring well data, precipitation
 3269 data, and gauging data from streams or other open water areas, as set forth in the
 3270 final compensation plan.
 - 3271 (5) Evaluation of hydric soils or soils under hydric conditions, as appropriate.
 - 3272 (6) Analysis of all vegetative community information, including woody and herbaceous
 3273 species, both planted and volunteers, as set forth in the final compensation plan.
 - 3274 (7) Photographs labeled with the permit number, the name of the compensation site,
 3275 the photo-monitoring station number, the photograph orientation, the date and time of
 3276 the photograph, the name of the person taking the photograph, and a brief description
 3277 of the photograph subject. This information shall be provided as a separate attachment
 3278 to each photograph, if necessary. Photographs taken after the initial planting shall be
 3279 included in the first monitoring report after planting is complete.
 - 3280 (8) Discussion of wildlife or signs of wildlife observed at the compensation site.
 - 3281 (9) Comparison of site conditions from the previous monitoring year and reference site.
 - 3282 (10) Discussion of corrective measures or maintenance activities to control
 3283 undesirable species, to repair damaged water control devices, or to replace damaged
 3284 planted vegetation.
 - 3285 (11) Corrective action plan that includes proposed actions, a schedule, and monitoring
 3286 plan.
 - 3287 b. All stream compensation site monitoring reports shall include, as applicable, the
 3288 following:

- 3289 (1) General description of the site including a site location map identifying photo-
3290 monitoring stations and monitoring stations.
- 3291 (2) Summary of activities completed during the monitoring year, including alterations
3292 or maintenance conducted at the site.
- 3293 (3) Description of monitoring methods.
- 3294 (4) Evaluation and discussion of the monitoring results in relation to the success
3295 criteria and overall goals of compensation.
- 3296 (5) Photographs shall be labeled with the permit number, the name of the
3297 compensation site, the photo-monitoring station number, the photograph orientation,
3298 the date and time of the photograph, the name of the person taking the photograph,
3299 and a brief description of the photograph subject. Photographs taken prior to
3300 compensation site construction activities, during instream and riparian restoration
3301 activities, and within one week of completion of activities shall be included in the first
3302 monitoring report.
- 3303 (6) Discussion of alterations, maintenance, or major storm events resulting in
3304 significant change in stream profile or cross section, and corrective actions conducted
3305 at the stream compensation site.
- 3306 (7) Documentation of undesirable plant species and summary of abatement and
3307 control measures.
- 3308 (8) Summary of wildlife or signs of wildlife observed at the compensation site.
- 3309 (9) Comparison of site conditions from the previous monitoring year and reference site,
3310 and as-built survey, if applicable.
- 3311 (10) Corrective action plan that includes proposed actions, a schedule and monitoring
3312 plan.
- 3313 (11) Additional submittals that were approved by the Department of Environmental
3314 Quality in the final compensation plan.
- 3315 7. The permittee shall notify the Department of Environmental Quality in writing when
3316 unusual or potentially complex conditions are encountered which require debris removal
3317 or involve potentially toxic substance. Measures to remove the obstruction, material, or
3318 toxic substance or to change the location of a structure are prohibited until approved by
3319 the Department of Environmental Quality.
- 3320 8. The permittee shall report fish kills or spills of oil or fuel immediately upon discovery. If
3321 spills or fish kills occur between the hours of 8:15 a.m. to 5 p.m., Monday through Friday,
3322 the appropriate Department of Environmental Quality regional office shall be notified;
3323 otherwise, the Department of Emergency Management shall be notified at 1-800-468-
3324 8892.
- 3325 9. Violations of state water quality standards shall be reported to the appropriate
3326 Department of Environmental Quality office no later than the end of the business day
3327 following discovery.
- 3328 10. The permittee shall notify the Department of Environmental Quality no later than the
3329 end of the third business day following the discovery of additional impacts to surface
3330 waters including wetlands, stream channels, and open water that are not authorized by
3331 the Department of Environmental Quality or to any required preservation areas. The
3332 notification shall include photographs, estimated acreage or linear footage of impacts, and
3333 a description of the impacts.
- 3334 11. Submittals required by this VWP general permit shall contain the following signed
3335 certification statement:

3336 "I certify under penalty of law that this document and all attachments were prepared under
 3337 my direction or supervision in accordance with a system designed to assure that qualified
 3338 personnel properly gather and evaluate the information submitted. Based on my inquiry of
 3339 the person or persons who manage the system, or those persons directly responsible for
 3340 gathering the information, the information submitted is, to the best of my knowledge and
 3341 belief, true, accurate, and complete. I am aware that there are significant penalties for
 3342 submitting false information, including the possibility of fine and imprisonment for knowing
 3343 violation."

3344 Part III. Conditions Applicable to All VWP General Permits.

3345 A. Duty to comply. The permittee shall comply with all conditions, limitations, and other
 3346 requirements of the VWP general permit; any requirements in coverage granted under this VWP
 3347 general permit; the Clean Water Act, as amended; and the State Water Control Law and
 3348 regulations adopted pursuant to it. Any VWP general permit violation or noncompliance is a
 3349 violation of the Clean Water Act and State Water Control Law and is grounds for (i) enforcement
 3350 action, (ii) VWP general permit coverage termination for cause, (iii) VWP general permit coverage
 3351 revocation, (iv) denial of application for coverage, or (v) denial of an application for a modification
 3352 to VWP general permit coverage. Nothing in this VWP general permit shall be construed to relieve
 3353 the permittee of the duty to comply with all applicable federal and state statutes, regulations, and
 3354 toxic standards and prohibitions.

3355 B. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent
 3356 impacts in violation of the VWP general permit that may have a reasonable likelihood of adversely
 3357 affecting human health or the environment.

3358 C. Reopener. This VWP general permit may be reopened to modify its conditions when the
 3359 circumstances on which the previous VWP general permit was based have materially and
 3360 substantially changed, or special studies conducted by the department or the permittee show
 3361 material and substantial change since the time the VWP general permit was issued and thereby
 3362 constitute cause for revoking and reissuing the VWP general permit.

3363 D. Compliance with state and federal law. Compliance with this VWP general permit
 3364 constitutes compliance with the VWP permit requirements of the State Water Control Law.
 3365 Nothing in this VWP general permit shall be construed to preclude the institution of any legal
 3366 action under or relieve the permittee from any responsibilities, liabilities, or other penalties
 3367 established pursuant to any other state law or regulation or under the authority preserved by §
 3368 510 of the Clean Water Act.

3369 E. Property rights. The issuance of this VWP general permit does not convey property rights
 3370 in either real or personal property or any exclusive privileges, nor does it authorize injury to private
 3371 property, any invasion of personal property rights, or any infringement of federal, state, or local
 3372 laws or regulations.

3373 F. Severability. The provisions of this VWP general permit are severable.

3374 G. Inspection and entry. Upon presentation of credentials, the permittee shall allow the
 3375 department or any duly authorized agent of the department, at reasonable times and under
 3376 reasonable circumstances, to enter upon the permittee's property, public or private, and have
 3377 access to inspect and copy any records that must be kept as part of the VWP general permit
 3378 conditions; to inspect any facilities, operations, or practices (including monitoring and control
 3379 equipment) regulated or required under the VWP general permit; and to sample or monitor any
 3380 substance, parameter, or activity for the purpose of assuring compliance with the conditions of
 3381 the VWP general permit or as otherwise authorized by law. For the purpose of this section, the

3382 time for inspection shall be deemed reasonable during regular business hours. Nothing contained
 3383 herein shall make an inspection time unreasonable during an emergency.

3384 H. Transferability of VWP general permit coverage. VWP general permit coverage may be
 3385 transferred to another permittee when all of the criteria listed in this subsection are met. On the
 3386 date of the VWP general permit coverage transfer, the transferred VWP general permit coverage
 3387 shall be as fully effective as if it had been granted directly to the new permittee.

3388 1. The current permittee notifies the department of the proposed transfer of the general
 3389 permit coverage and provides a written agreement between the current and new
 3390 permittees containing a specific date of transfer of VWP general permit responsibility,
 3391 coverage, and liability to the new permittee, or that the current permittee will retain such
 3392 responsibility, coverage, or liability, including liability for compliance with the requirements
 3393 of enforcement activities related to the authorized activity.

3394 2. The department does not within 15 days notify the current and new permittees of the
 3395 board's intent to modify or revoke and reissue the VWP general permit.

3396 I. Notice of planned change. VWP general permit coverage may be modified subsequent to
 3397 issuance in accordance with 9VAC25-680-80.

3398 J. VWP general permit coverage termination for cause. VWP general permit coverage is
 3399 subject to termination for cause by the department after public notice and opportunity for a hearing
 3400 in accordance with 9VAC25-210-180. Reasons for termination for cause are as follows:

3401 1. Noncompliance by the permittee with any provision of this chapter, any condition of the
 3402 VWP general permit, or any requirement in general permit coverage;

3403 2. The permittee's failure in the application or during the process of granting VWP general
 3404 permit coverage to disclose fully all relevant facts or the permittee's misrepresentation of
 3405 any relevant facts at any time;

3406 3. The permittee's violation of a special or judicial order;

3407 4. A determination by the department that the authorized activity endangers human health
 3408 or the environment and can be regulated to acceptable levels by a modification to VWP
 3409 general permit coverage or a termination;

3410 5. A change in any condition that requires either a temporary or permanent reduction or
 3411 elimination of any activity controlled by the VWP general permit; or

3412 6. A determination that the authorized activity has ceased and that the compensation for
 3413 unavoidable adverse impacts has been successfully completed.

3414 K. The department may terminate VWP general permit coverage without cause when the
 3415 permittee is no longer a legal entity due to death or dissolution or when a company is no longer
 3416 authorized to conduct business in the Commonwealth. The termination shall be effective 30 days
 3417 after notice of the proposed termination is sent to the last known address of the permittee or
 3418 registered agent, unless the permittee objects within that time. If the permittee does object during
 3419 that period, the department shall follow the applicable procedures for termination under 9VAC25-
 3420 210-180 and § 62.1-44.15:25 of the Code of Virginia.

3421 L. VWP general permit coverage termination by consent. The permittee shall submit a request
 3422 for termination by consent within 30 days of completing or canceling all authorized activities
 3423 requiring notification under 9VAC25-680-50 A and all compensatory mitigation requirements.
 3424 When submitted for project completion, the request for termination by consent shall constitute a
 3425 notice of project completion in accordance with 9VAC25-210-130 F. The director may accept this
 3426 termination of coverage on behalf of the department. The permittee shall submit the following
 3427 information:

3428 1. Name, mailing address, and telephone number;

- 3429 2. Name and location of the activity;
- 3430 3. The VWP general permit tracking number; and
- 3431 4. One of the following certifications:
- 3432 a. For project completion:
- 3433 "I certify under penalty of law that all activities and any required compensatory
- 3434 mitigation authorized by the VWP general permit and general permit coverage have
- 3435 been completed. I understand that by submitting this notice of termination I am no
- 3436 longer authorized to perform activities in surface waters in accordance with the VWP
- 3437 general permit and general permit coverage, and that performing activities in surface
- 3438 waters is unlawful where the activity is not authorized by the VWP permit or coverage,
- 3439 unless otherwise excluded from obtaining coverage. I also understand that the
- 3440 submittal of this notice does not release me from liability for any violations of the VWP
- 3441 general permit coverage."
- 3442 b. For project cancellation:
- 3443 "I certify under penalty of law that the activities and any required compensatory
- 3444 mitigation authorized by the VWP general permit and general permit coverage will not
- 3445 occur. I understand that by submitting this notice of termination I am no longer
- 3446 authorized to perform activities in surface waters in accordance with the VWP general
- 3447 permit and general permit coverage, and that performing activities in surface waters is
- 3448 unlawful where the activity is not authorized by the VWP permit or coverage, unless
- 3449 otherwise excluded from obtaining coverage. I also understand that the submittal of
- 3450 this notice does not release me from liability for any violations of the VWP general
- 3451 permit or coverage, nor does it allow me to resume the authorized activities without
- 3452 reapplication and coverage."
- 3453 c. For events beyond permittee control, the permittee shall provide a detailed
- 3454 explanation of the events, to be approved by the Department of Environmental Quality,
- 3455 and the following certification statement:
- 3456 "I certify under penalty of law that the activities or the required compensatory mitigation
- 3457 authorized by the VWP general permit and general permit coverage have changed as
- 3458 the result of events beyond my control (see attached). I understand that by submitting
- 3459 this notice of termination I am no longer authorized to perform activities in surface
- 3460 waters in accordance with the VWP general permit and general permit coverage, and
- 3461 that performing activities in surface waters is unlawful where the activity is not
- 3462 authorized by the VWP permit or coverage, unless otherwise excluded from obtaining
- 3463 coverage. I also understand that the submittal of this notice does not release me from
- 3464 liability for any violations of the VWP general permit authorization or coverage, nor
- 3465 does it allow me to resume the authorized activities without reapplication and
- 3466 coverage."
- 3467 M. Civil and criminal liability. Nothing in this VWP general permit shall be construed to relieve
- 3468 the permittee from civil and criminal penalties for noncompliance.
- 3469 N. Oil and hazardous substance liability. Nothing in this VWP general permit shall be
- 3470 construed to preclude the institution of legal action or relieve the permittee from any
- 3471 responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of
- 3472 the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.
- 3473 O. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement
- 3474 action that it would have been necessary to halt or reduce the activity for which VWP general
- 3475 permit coverage has been granted in order to maintain compliance with the conditions of the VWP
- 3476 general permit or coverage.

- 3477 P. Duty to provide information.
- 3478 1. The permittee shall furnish to the department any information that the department may
- 3479 request to determine whether cause exists for modifying, revoking, or terminating VWP
- 3480 permit coverage or to determine compliance with the VWP general permit or general
- 3481 permit coverage. The permittee shall also furnish to the department, upon request, copies
- 3482 of records required to be kept by the permittee.
- 3483 2. Plans, maps, conceptual reports, and other relevant information shall be submitted as
- 3484 required by the department prior to commencing construction.
- 3485 Q. Monitoring and records requirements.
- 3486 1. Monitoring of parameters, other than pollutants, shall be conducted according to
- 3487 approved analytical methods as specified in the VWP general permit. Analysis of
- 3488 pollutants will be conducted according to 40 CFR Part 136 ~~(2000)~~ as published in the July
- 3489 1, 2023 update, Guidelines Establishing Test Procedures for the Analysis of Pollutants.
- 3490 2. Samples and measurements taken for the purpose of monitoring shall be representative
- 3491 of the monitored activity.
- 3492 3. The permittee shall retain records of all monitoring information, including all calibration
- 3493 and maintenance records and all original strip chart or electronic recordings for continuous
- 3494 monitoring instrumentation, copies of all reports required by the VWP general permit, and
- 3495 records of all data used to complete the application for coverage under the VWP general
- 3496 permit, for a period of at least three years from the date of general permit expiration. This
- 3497 period may be extended by request of the department at any time.
- 3498 4. Records of monitoring information shall include, as appropriate:
- 3499 a. The date, exact place, and time of sampling or measurements;
- 3500 b. The name of the individuals who performed the sampling or measurements;
- 3501 c. The date and time the analyses were performed;
- 3502 d. The name of the individuals who performed the analyses;
- 3503 e. The analytical techniques or methods supporting the information such as
- 3504 observations, readings, calculations, and bench data used;
- 3505 f. The results of such analyses; and
- 3506 g. Chain of custody documentation.
- 3507 R. Unauthorized discharge of pollutants. Except in compliance with this VWP general permit,
- 3508 it shall be unlawful for the permittee to:
- 3509 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or
- 3510 deleterious substances;
- 3511 2. Excavate in a wetland;
- 3512 3. Otherwise alter the physical, chemical, or biological properties of state waters and make
- 3513 them detrimental to the public health, to animal or aquatic life, or to the uses of such waters
- 3514 for domestic or industrial consumption, for recreation, or for other uses; or
- 3515 4. On and after August 1, 2001, for linear transportation projects of the Virginia Department
- 3516 of Transportation, or on and after October 1, 2001, for all other projects, conduct the
- 3517 following activities in a wetland:
- 3518 a. New activities to cause draining that significantly alters or degrades existing wetland
- 3519 acreage or functions;
- 3520 b. Filling or dumping;
- 3521 c. Permanent flooding or impounding; or

3522 d. New activities that cause significant alteration or degradation of existing wetland
3523 acreage or functions.

3524 S. Duty to reapply. Any permittee desiring to continue a previously authorized activity after the
3525 expiration date of the VWP general permit shall comply with the provisions in 9VAC25-680-27.

3526 **9VAC25-690-100. VWP general permit.**

3527 VWP GENERAL PERMIT NO. WP4 FOR IMPACTS FROM DEVELOPMENT AND
3528 CERTAIN MINING ACTIVITIES UNDER THE VIRGINIA WATER PROTECTION PERMIT
3529 AND THE VIRGINIA STATE WATER CONTROL LAW

3530 Effective date: August 2, 2016

3531 Expiration date: August 1, 2026

3532 In compliance with § 401 of the Clean Water Act, as amended (33 USC § 1341) and the State
3533 Water Control Law and regulations adopted pursuant thereto, the board has determined that there
3534 is a reasonable assurance that this VWP general permit, if complied with, will protect instream
3535 beneficial uses, will not violate applicable water quality standards, and will not cause or contribute
3536 to a significant impairment of state waters or fish and wildlife resources. In issuing this VWP
3537 general permit, the board has not taken into consideration the structural stability of any proposed
3538 activities.

3539 The permanent or temporary impact of up to two acres of nontidal wetlands or open water and
3540 up to 1,500 linear feet of nontidal stream bed shall be subject to the provisions of the VWP general
3541 permit set forth herein; any requirements in coverage granted under this general permit; the Clean
3542 Water Act, as amended; and the State Water Control Law and regulations adopted pursuant to it.

3543 Part I. Special Conditions.

3544 A. Authorized activities.

3545 1. The activities authorized by this chapter shall not cause more than the permanent or
3546 temporary impacts of up to two acres of nontidal wetlands or open water and up to 1,500
3547 linear feet of nontidal stream bed. Additional permit requirements as stipulated by the
3548 department in the coverage letter, if any, shall be enforceable conditions of this permit.

3549 2. Any changes to the authorized permanent impacts to surface waters shall require a
3550 notice of planned change in accordance with 9VAC25-690-80. An application or request
3551 for modification to coverage or another VWP permit application may be required.

3552 3. Any changes to the authorized temporary impacts to surface waters shall require written
3553 notification to and approval from the Department of Environmental Quality in accordance
3554 with 9VAC25-690-80 prior to initiating the impacts and restoration to preexisting conditions
3555 in accordance with the conditions of this permit.

3556 4. Modification to compensation requirements may be approved at the request of the
3557 permittee when a decrease in the amount of authorized surface waters impacts occurs,
3558 provided that the adjusted compensation meets the initial compensation goals.

3559 B. Overall conditions.

3560 1. The activities authorized by this VWP general permit shall be executed in a manner so
3561 as to minimize adverse impacts on instream beneficial uses as defined in § 62.1-10 (b) of
3562 the Code of Virginia.

- 3563 2. No activity may substantially disrupt the movement of aquatic life indigenous to the
3564 water body, including those species which normally migrate through the area, unless the
3565 primary purpose of the activity is to impound water. Pipes and culverts placed in streams
3566 must be installed to maintain low flow conditions and shall be countersunk at both inlet
3567 and outlet ends of the pipe or culvert, unless otherwise specifically approved by the
3568 Department of Environmental Quality on a case-by-case basis, and as follows: The
3569 requirement to countersink does not apply to extensions or maintenance of existing pipes
3570 and culverts that are not countersunk, floodplain pipes and culverts being placed above
3571 ordinary high water, pipes and culverts being placed on bedrock, or pipes and culverts
3572 required to be placed on slopes 5.0% or greater. Bedrock encountered during construction
3573 must be identified and approved in advance of a design change where the countersunk
3574 condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be
3575 countersunk three inches below the natural stream bed elevations, and pipes and culverts
3576 greater than 24 inches shall be countersunk at least six inches below the natural stream
3577 bed elevations. Hydraulic capacity shall be determined based on the reduced capacity
3578 due to the countersunk position. In all stream crossings appropriate measures shall be
3579 implemented to minimize any disruption of aquatic life movement.
- 3580 3. Wet or uncured concrete shall be prohibited from entry into flowing surface waters,
3581 unless the area is contained within a cofferdam and the work is performed in the dry, or
3582 unless otherwise approved by the Department of Environmental Quality. Excess or waste
3583 concrete shall not be disposed of in flowing surface waters or washed into flowing surface
3584 waters.
- 3585 4. All fill material shall be clean and free of contaminants in toxic concentrations or
3586 amounts in accordance with all applicable laws and regulations.
- 3587 5. Erosion and sedimentation controls shall be designed in accordance with the Virginia
3588 Erosion and Sediment Control Handbook, Third Edition, 1992, or for mining activities
3589 covered by this general permit, the standards issued by the Virginia Department of Energy
3590 that are effective as those in the Virginia Erosion and Sediment Control Handbook, Third
3591 Edition, 1992. These controls shall be placed prior to clearing and grading and maintained
3592 in good working order to minimize impacts to state waters. These controls shall remain in
3593 place until the area is stabilized and shall then be removed.
- 3594 6. Exposed slopes and streambanks shall be stabilized immediately upon completion of
3595 work in each permitted impact area. All denuded areas shall be properly stabilized in
3596 accordance with the Virginia Erosion and Sediment Control Handbook, Third Edition,
3597 1992.
- 3598 7. All construction, construction access (e.g., cofferdams, sheetpiling, and causeways)
3599 and demolition activities associated with the project shall be accomplished in a manner
3600 that minimizes construction or waste materials from entering surface waters to the
3601 maximum extent practicable, unless authorized by this VWP general permit.
- 3602 8. No machinery may enter flowing waters, unless authorized by this VWP general permit
3603 or approved prior to entry by the Department of Environmental Quality.
- 3604 9. Heavy equipment in temporarily-impacted wetland areas shall be placed on mats,
3605 geotextile fabric, or other suitable material to minimize soil disturbance to the maximum
3606 extent practicable. Equipment and materials shall be removed immediately upon
3607 completion of work.
- 3608 10. All nonimpacted surface waters and compensatory mitigation areas within 50 feet of
3609 authorized activities and within the project or right-of-way limits shall be clearly flagged or
3610 marked for the life of the construction activity at that location to preclude unauthorized
3611 disturbances to these surface waters and compensatory mitigation areas during

3612 construction. The permittee shall notify contractors that no activities are to occur in these
3613 marked surface waters.

3614 11. Temporary disturbances to surface waters during construction shall be avoided and
3615 minimized to the maximum extent practicable. All temporarily disturbed wetland areas
3616 shall be restored to preexisting conditions within 30 days of completing work at each
3617 respective temporary impact area, which shall include reestablishing preconstruction
3618 elevations and contours with topsoil from the impact area where practicable and planting
3619 or seeding with appropriate wetland vegetation according to cover type (i.e., emergent,
3620 scrub-shrub, or forested). The permittee shall take all appropriate measures to promote
3621 and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation
3622 through the second year post-disturbance. All temporarily impacted streams and
3623 streambanks shall be restored to their preconstruction elevations and contours with topsoil
3624 from the impact area where practicable within 30 days following the construction at that
3625 stream segment. Streambanks shall be seeded or planted with the same vegetation cover
3626 type originally present, including any necessary supplemental erosion control grasses.
3627 Invasive species identified on the Department of Conservation and Recreation's Virginia
3628 Invasive Plant Species List shall not be used to the maximum extent practicable or without
3629 prior approval from the Department of Environmental Quality.

3630 12. Materials (including fill, construction debris, and excavated and woody materials)
3631 temporarily stockpiled in wetlands shall be placed on mats or geotextile fabric, immediately
3632 stabilized to prevent entry into state waters, managed such that leachate does not enter
3633 state waters, and completely removed within 30 days following completion of that
3634 construction activity. Disturbed areas shall be returned to preconstruction elevations and
3635 contours with topsoil from the impact area where practicable; restored within 30 days
3636 following removal of the stockpile; and restored with the same vegetation cover type
3637 originally present, including any necessary supplemental erosion control grasses. Invasive
3638 species identified on the Department of Conservation and Recreation's Virginia Invasive
3639 Plant Species List shall not be used to the maximum extent practicable or without prior
3640 approval from the Department of Environmental Quality.

3641 13. Continuous flow of perennial springs shall be maintained by the installation of spring
3642 boxes, french drains, or other similar structures.

3643 14. The permittee shall employ measures to prevent spills of fuels or lubricants into state
3644 waters.

3645 15. The permittee shall conduct activities in accordance with the time-of-year restrictions
3646 recommended by the Virginia Department of Wildlife Resources, the Virginia Marine
3647 Resources Commission, or other interested and affected agencies, as contained, when
3648 applicable, in Department of Environmental Quality VWP general permit coverage, and
3649 shall ensure that all contractors are aware of the time-of-year restrictions imposed.

3650 16. Water quality standards shall not be violated as a result of the construction activities.

3651 17. If stream channelization or relocation is required, all work in surface waters shall be
3652 done in the dry, unless otherwise authorized by the Department of Environmental Quality,
3653 and all flows shall be diverted around the channelization or relocation area until the new
3654 channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and
3655 outlet ends of the new channel during excavation. Once the new channel has been
3656 stabilized, flow shall be routed into the new channel by first removing the downstream plug
3657 and then the upstream plug. The rerouted stream flow must be fully established before
3658 construction activities in the old stream channel can begin.

3659 C. Road crossings.

3660 1. Access roads and associated bridges, pipes, and culverts shall be constructed to
 3661 minimize the adverse effects on surface waters to the maximum extent practicable.
 3662 Access roads constructed above preconstruction elevations and contours in surface
 3663 waters must be bridged, piped, or culverted to maintain surface flows.

3664 2. Installation of road crossings shall occur in the dry via the implementation of cofferdams,
 3665 sheetpiling, stream diversions, or similar structures.

3666 D. Utility lines.

3667 1. All utility line work in surface waters shall be performed in a manner that minimizes
 3668 disturbance, and the area must be returned to its preconstruction elevations and contours
 3669 with topsoil from the impact area where practicable and restored within 30 days of
 3670 completing work in the area, unless otherwise authorized the Department of
 3671 Environmental Quality. Restoration shall be the seeding or planting of the same vegetation
 3672 cover type originally present, including any necessary supplemental erosion control
 3673 grasses. Invasive species identified on the Department of Conservation and Recreation's
 3674 Virginia Invasive Plant Species List shall not be used to the maximum extent practicable
 3675 or without prior approval from the Department of Environmental Quality.

3676 2. Material resulting from trench excavation may be temporarily sidecast into wetlands not
 3677 to exceed a total of 90 days, provided the material is not placed in a manner such that it
 3678 is dispersed by currents or other forces.

3679 3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g.,
 3680 backfilling with extensive gravel layers creating a french drain effect.). For example, utility
 3681 lines may be backfilled with clay blocks to ensure that the trench does not drain surface
 3682 waters through which the utility line is installed.

3683 E. Stream modification and stream bank protection.

3684 1. Riprap bank stabilization shall be of an appropriate size and design in accordance with
 3685 the Virginia Erosion and Sediment Control Handbook, Third Edition, 1992.

3686 2. Riprap apron for all outfalls shall be designed in accordance with the Virginia Erosion
 3687 and Sediment Control Handbook, Third Edition, 1992.

3688 3. For stream bank protection activities, the structure and backfill shall be placed as close
 3689 to the stream bank as practicable. No material shall be placed in excess of the minimum
 3690 necessary for erosion protection.

3691 4. All stream bank protection structures shall be located to eliminate or minimize impacts
 3692 to vegetated wetlands to the maximum extent practicable.

3693 5. Asphalt and materials containing asphalt or other toxic substances shall not be used in
 3694 the construction of submerged sills or breakwaters.

3695 6. Redistribution of existing stream substrate for the purpose of erosion control is
 3696 prohibited.

3697 7. No material removed from the stream bottom shall be disposed of in surface waters,
 3698 unless otherwise authorized by this VWP general permit.

3699 F. Dredging.

3700 1. Dredging depths shall be determined and authorized according to the proposed use
 3701 and controlling depths outside the area to be dredged.

3702 2. Dredging shall be accomplished in a manner that minimizes disturbance of the bottom
 3703 and minimizes turbidity levels in the water column.

3704 3. If evidence of impaired water quality, such as a fish kill, is observed during the dredging,
 3705 dredging operations shall cease, and the Department of Environmental Quality shall be
 3706 notified immediately.

- 3707 4. Barges used for the transportation of dredge material shall be filled in such a manner
3708 to prevent the overflow of dredged materials.
- 3709 5. Double handling of dredged material in state waters shall not be permitted.
- 3710 6. For navigation channels the following shall apply:
- 3711 a. A buffer of four times the depth of the dredge cut shall be maintained between the
3712 bottom edge of the design channel and the channelward limit of wetlands, or a buffer
3713 of 15 feet shall be maintained from the dredged cut and the channelward edge of
3714 wetlands, whichever is greater. This landward limit of buffer shall be flagged and
3715 inspected prior to construction.
- 3716 b. Side slope cuts of the dredging area shall not exceed a two-horizontal-to-one-
3717 vertical slope to prevent slumping of material into the dredged area.
- 3718 7. A dredged material management plan for the designated upland disposal site shall be
3719 submitted and approved 30 days prior to initial dredging activity.
- 3720 8. Pipeline outfalls and spillways shall be located at opposite ends of the dewatering area
3721 to allow for maximum retention and settling time. Filter fabric shall be used to line the
3722 dewatering area and to cover the outfall pipe to further reduce sedimentation to state
3723 waters.
- 3724 9. The dredge material dewatering area shall be of adequate size to contain the dredge
3725 material and to allow for adequate dewatering and settling out of sediment prior to
3726 discharge back into state waters.
- 3727 10. The dredge material dewatering area shall utilize an earthen berm or straw bales
3728 covered with filter fabric along the edge of the area to contain the dredged material, filter
3729 bags, or other similar filtering practices, any of which shall be properly stabilized prior to
3730 placing the dredged material within the containment area.
- 3731 11. Overtopping of the dredge material containment berms with dredge materials shall be
3732 strictly prohibited.
- 3733 G. Stormwater management facilities.
- 3734 1. Stormwater management facilities shall be installed in accordance with best
3735 management practices and watershed protection techniques (e.g., vegetated buffers,
3736 siting considerations to minimize adverse effects to aquatic resources, bioengineering
3737 methods incorporated into the facility design to benefit water quality and minimize adverse
3738 effects to aquatic resources) that provide for long-term aquatic resources protection and
3739 enhancement, to the maximum extent practicable.
- 3740 2. Compensation for unavoidable impacts shall not be allowed within maintenance areas
3741 of stormwater management facilities.
- 3742 3. Maintenance activities within stormwater management facilities shall not require
3743 additional permit coverage or compensation provided that the maintenance activities do
3744 not exceed the original contours of the facility, as approved and constructed, and is
3745 accomplished in designated maintenance areas as indicated in the facility maintenance
3746 or design plan or when unavailable, an alternative plan approved by the Department of
3747 Environmental Quality.
- 3748 Part II. Construction and Compensation Requirements, Monitoring, and Reporting.
- 3749 A. Minimum compensation requirements.
- 3750 1. The permittee shall provide any required compensation for impacts in accordance with
3751 the conditions in this VWP general permit, the coverage letter, and the chapter

- 3752 promulgating the general permit. For all compensation that requires a protective
3753 mechanism, including preservation of surface waters or buffers, the permittee shall record
3754 the approved protective mechanism in the chain of title to the property, or an equivalent
3755 instrument for government-owned lands, and proof of recordation shall be submitted to
3756 the Department of Environmental Quality prior to commencing impacts in surface waters.
- 3757 2. Compensation options that may be considered under this VWP general permit shall
3758 meet the criteria in § 62.1-44.15:23 of the Code of Virginia, 9VAC25-210-116, and
3759 9VAC25-690-70.
- 3760 3. The permittee-responsible compensation site or sites depicted in the conceptual
3761 compensation plan submitted with the application shall constitute the compensation site.
3762 A site change may require a modification to coverage.
- 3763 4. For compensation involving the purchase of mitigation bank credits or the purchase of
3764 in-lieu fee program credits, the permittee shall not initiate work in permitted impact areas
3765 until documentation of the mitigation bank credit purchase or of the in-lieu fee program
3766 credit purchase has been submitted to and received by the Department of Environmental
3767 Quality.
- 3768 5. The final compensation plan shall be submitted to and approved by the department
3769 prior to a construction activity in permitted impact areas. The department shall review and
3770 provide written comments on the final plan within 30 days of receipt or it shall be deemed
3771 approved. The final plan as approved by the department shall be an enforceable
3772 requirement of any coverage under this VWP general permit. Deviations from the
3773 approved final plan shall be submitted and approved in advance by the department.
- 3774 a. The final permittee-responsible wetlands compensation plan shall include:
- 3775 (1) The complete information on all components of the conceptual compensation plan.
- 3776 (2) A summary of the type and acreage of existing wetland impacts anticipated during
3777 the construction of the compensation site and the proposed compensation for these
3778 impacts; a site access plan; a monitoring plan, including proposed success criteria,
3779 monitoring goals, and the location of photo-monitoring stations, monitoring wells,
3780 vegetation sampling points, and reference wetlands or streams, if available; an
3781 abatement and control plan for undesirable plant species; an erosion and
3782 sedimentation control plan; a construction schedule; and the final protective
3783 mechanism for the compensation site or sites, including all surface waters and buffer
3784 areas within its boundaries.
- 3785 (3) The approved protective mechanism. The protective mechanism shall be recorded
3786 in the chain of title to the property, or an equivalent instrument for government-owned
3787 lands, and proof of recordation shall be submitted to the Department of Environmental
3788 Quality prior to commencing impacts in surface waters.
- 3789 b. The final permittee-responsible stream compensation plan shall include:
- 3790 (1) The complete information on all components of the conceptual compensation plan.
- 3791 (2) An evaluation, discussion, and plan drawing or drawings of existing conditions on
3792 the proposed compensation stream, including the identification of functional and
3793 physical deficiencies for which the measures are proposed, and summary of
3794 geomorphologic measurements (e.g., stream width, entrenchment ratio, width-depth
3795 ratio, sinuosity, slope, substrate, etc.); a site access plan; a monitoring plan, including
3796 a monitoring and reporting schedule, monitoring design and methodologies for
3797 success, proposed success criteria, location of photo-monitoring stations, vegetation
3798 sampling points, survey points, bank pins, scour chains, and reference streams; an
3799 abatement and control plan for undesirable plant species; an erosion and

3800 sedimentation control plan, if appropriate; a construction schedule; a plan-view
3801 drawing depicting the pattern and all compensation measures being employed; a
3802 profile drawing; cross-sectional drawing or drawings of the proposed compensation
3803 stream; and the final protective mechanism for the protection of the compensation site
3804 or sites, including all surface waters and buffer areas within its boundaries.

3805 (3) The approved protective mechanism. The protective mechanism shall be recorded
3806 in the chain of title to the property, or an equivalent instrument for government-owned
3807 lands, and proof of recordation shall be submitted to the Department of Environmental
3808 Quality prior to commencing impacts in surface waters.

3809 6. The following criteria shall apply to permittee-responsible wetland or stream
3810 compensation:

3811 a. The vegetation used shall be native species common to the area, shall be suitable
3812 for growth in local wetland or riparian conditions, and shall be from areas within the
3813 same or adjacent U.S. Department of Agriculture Plant Hardiness Zone or Natural
3814 Resources Conservation Service Land Resource Region as that of the project site.
3815 Planting of woody plants shall occur when vegetation is normally dormant, unless
3816 otherwise approved in the final wetlands or stream compensation plan or plans.

3817 b. All work in permitted impact areas shall cease if compensation site construction has
3818 not commenced within 180 days of commencement of project construction, unless
3819 otherwise authorized by the department.

3820 c. The Department of Environmental Quality shall be notified in writing prior to the
3821 initiation of construction activities at the compensation site.

3822 d. Point sources of stormwater runoff shall be prohibited from entering a wetland
3823 compensation site prior to treatment by appropriate best management practices.
3824 Appropriate best management practices may include sediment traps, grassed
3825 waterways, vegetated filter strips, debris screens, oil and grease separators, or
3826 forebays.

3827 e. The success of the compensation shall be based on meeting the success criteria
3828 established in the approved final compensation plan.

3829 f. If the wetland or stream compensation area fails to meet the specified success
3830 criteria in a particular monitoring year, other than the final monitoring year, the reasons
3831 for this failure shall be determined, and a corrective action plan shall be submitted to
3832 the Department of Environmental Quality for approval with or before that year's
3833 monitoring report. The corrective action plan shall contain at minimum the proposed
3834 actions, a schedule for those actions, and a monitoring plan, and shall be implemented
3835 by the permittee in accordance with the approved schedule. Should significant
3836 changes be necessary to ensure success, the required monitoring cycle shall begin
3837 again, with monitoring year one being the year that the changes are complete, as
3838 confirmed by the Department of Environmental Quality. If the wetland or stream
3839 compensation area fails to meet the specified success criteria by the final monitoring
3840 year or if the wetland or stream compensation area has not met the stated restoration
3841 goals, reasons for this failure shall be determined and a corrective action plan,
3842 including proposed actions, a schedule, and a monitoring plan, shall be submitted with
3843 the final year monitoring report for Department of Environmental Quality approval.
3844 Corrective action shall be implemented by the permittee in accordance with the
3845 approved schedule. Annual monitoring shall be required to continue until two
3846 sequential, annual reports indicate that all criteria have been successfully satisfied and
3847 the site has met the overall restoration goals (e.g., that corrective actions were
3848 successful).

3849 g. The surveyed wetland boundary for the wetlands compensation site shall be based
 3850 on the results of the hydrology, soils, and vegetation monitoring data and shall be
 3851 shown on the site plan. Calculation of total wetland acreage shall be based on that
 3852 boundary at the end of the monitoring cycle. Data shall be submitted by December 31
 3853 of the final monitoring year.

3854 h. Herbicides or algicides shall not be used in or immediately adjacent to the wetlands
 3855 or stream compensation site or sites without prior authorization by the department. All
 3856 vegetation removal shall be done by manual means, unless authorized by the
 3857 Department of Environmental Quality in advance.

3858 B. Impact site construction monitoring.

3859 1. Construction activities authorized by this permit that are within impact areas shall be
 3860 monitored and documented. The monitoring shall consist of:

3861 a. Preconstruction photographs taken at each impact area prior to initiation of activities
 3862 within impact areas. Photographs shall remain on the project site and depict the impact
 3863 area and the nonimpacted surface waters immediately adjacent to and downgradient
 3864 of each impact area. Each photograph shall be labeled to include the following
 3865 information: permit number, impact area number, date and time of the photograph,
 3866 name of the person taking the photograph, photograph orientation, and photograph
 3867 subject description.

3868 b. Site inspections shall be conducted by the permittee or the permittee's qualified
 3869 designee once every calendar month during activities within impact areas. Monthly
 3870 inspections shall be conducted in the following areas: all authorized permanent and
 3871 temporary impact areas; all avoided surface waters, including wetlands, stream
 3872 channels, and open water; surface water areas within 50 feet of any land disturbing
 3873 activity and within the project or right-of-way limits; and all on-site permanent
 3874 preservation areas required under this permit. Observations shall be recorded on the
 3875 inspection form provided by the Department of Environmental Quality. The form shall
 3876 be completed in its entirety for each monthly inspection and shall be kept on site and
 3877 made available for review by the Department of Environmental Quality staff upon
 3878 request during normal business hours. Inspections are not required during periods of
 3879 no activity within impact areas.

3880 2. Monitoring of water quality parameters shall be conducted during permanent relocation
 3881 of perennial streams through new channels in the manner noted below. The permittee
 3882 shall report violations of water quality standards to the Department of Environmental
 3883 Quality in accordance with the procedures in 9VAC25-690-100 Part II E. Corrective
 3884 measures and additional monitoring may be required if water quality standards are not
 3885 met. Reporting shall not be required if water quality standards are not violated.

3886 a. A sampling station shall be located upstream and immediately downstream of the
 3887 relocated channel.

3888 b. Temperature, pH, and dissolved oxygen (D.O.) measurements shall be taken every
 3889 30 minutes for at least two hours at each station prior to opening the new channels
 3890 and immediately before opening new channels.

3891 c. Temperature, pH, and D.O. readings shall be taken after opening the channels and
 3892 every 30 minutes for at least three hours at each station.

3893 C. Permittee-responsible wetland compensation site monitoring.

3894 1. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial
 3895 surveys, shall be conducted for the entire compensation site or sites including invert
 3896 elevations for all water elevation control structures and spot elevations throughout the site

- 3897 or sites. Aerial surveys shall include the variation from actual ground conditions, such as
 3898 +/- 0.2 feet. Either type of survey shall be certified by a licensed surveyor or by a registered
 3899 professional engineer to conform to the design plans. The survey shall be submitted within
 3900 60 days of completing compensation site construction. Changes or deviations in the as-
 3901 built survey or aerial survey shall be shown on the survey and explained in writing.
- 3902 2. Photographs shall be taken at the compensation site or sites from the permanent
 3903 markers identified in the final compensation plan, and established to ensure that the same
 3904 locations and view directions at the site or sites are monitored in each monitoring period.
 3905 These photographs shall be taken after the initial planting and at a time specified in the
 3906 final compensation plan during every monitoring year.
- 3907 3. Compensation site monitoring shall begin on day one of the first complete growing
 3908 season (monitoring year 1) after wetland compensation site construction activities,
 3909 including planting, have been completed. Monitoring shall be required for monitoring years
 3910 1, 2, 3, and 5, unless otherwise approved by the Department of Environmental Quality. In
 3911 all cases, if all success criteria have not been met in the final monitoring year, then
 3912 monitoring shall be required for each consecutive year until two annual sequential reports
 3913 indicate that all criteria have been successfully satisfied.
- 3914 4. The establishment of wetland hydrology shall be measured during the growing season,
 3915 with the location and number of monitoring wells, and frequency of monitoring for each
 3916 site, set forth in the final monitoring plan. Hydrology monitoring well data shall be
 3917 accompanied by precipitation data, including rainfall amounts either from on site or from
 3918 the closest weather station. Once the wetland hydrology success criteria have been
 3919 satisfied for a particular monitoring year, monitoring may be discontinued for the remainder
 3920 of that monitoring year following Department of Environmental Quality approval. After a
 3921 period of three monitoring years, the permittee may request that hydrology monitoring be
 3922 discontinued, providing that adequate hydrology has been established and maintained.
 3923 Hydrology monitoring shall not be discontinued without written approval from the
 3924 Department of Environmental Quality.
- 3925 5. The presence of hydric soils or soils under hydric conditions shall be evaluated in
 3926 accordance with the final compensation plan.
- 3927 6. The establishment of wetland vegetation shall be in accordance with the final
 3928 compensation plan. Monitoring shall take place in August, September, or October during
 3929 the growing season of each monitoring year, unless otherwise authorized in the monitoring
 3930 plan.
- 3931 7. The presence of undesirable plant species shall be documented.
- 3932 8. All wetland compensation monitoring reports shall be submitted in accordance with
 3933 9VAC25-690-100 Part II E 6.
- 3934 D. Permittee-responsible stream compensation and monitoring.
- 3935 1. Riparian buffer restoration activities shall be detailed in the final compensation plan and
 3936 shall include, as appropriate, the planting of a variety of native species currently growing
 3937 in the site area, including appropriate seed mixtures and woody species that are bare root,
 3938 balled, or burlapped. A minimum buffer width of 50 feet, measured from the top of the
 3939 stream bank at bankfull elevation landward on both sides of the stream, shall be required
 3940 where practical.
- 3941 2. The installation of root wads, vanes, and other instream structures, shaping of the
 3942 stream banks, and channel relocation shall be completed in the dry whenever practicable.
- 3943 3. Livestock access to the stream and designated riparian buffer shall be limited to the
 3944 greatest extent practicable.

3945 4. Stream channel restoration activities shall be conducted in the dry or during low flow
 3946 conditions. When site conditions prohibit access from the streambank or upon prior
 3947 authorization from the Department of Environmental Quality, heavy equipment may be
 3948 authorized for use within the stream channel.

3949 5. Photographs shall be taken at the compensation site from the vicinity of the permanent
 3950 photo-monitoring stations identified in the final compensation plan. The photograph
 3951 orientation shall remain constant during all monitoring events. At a minimum, photographs
 3952 shall be taken from the center of the stream, facing downstream, with a sufficient number
 3953 of photographs to view the entire length of the restoration site. Photographs shall
 3954 document the completed restoration conditions. Photographs shall be taken prior to site
 3955 activities, during instream and riparian compensation construction activities, within one
 3956 week of completion of activities, and during at least one day of each monitoring year to
 3957 depict restored conditions.

3958 6. An as-built ground survey, or an aerial survey provided by a firm specializing in aerial
 3959 surveys, shall be conducted for the entire compensation site or sites. Aerial surveys shall
 3960 include the variation from actual ground conditions, such as +/- 0.2 feet. The survey shall
 3961 be certified by the licensed surveyor or by a registered, professional engineer to conform
 3962 to the design plans. The survey shall be submitted within 60 days of completing
 3963 compensation site construction. Changes or deviations from the final compensation plans
 3964 in the as-built survey or aerial survey shall be shown on the survey and explained in
 3965 writing.

3966 7. Compensation site monitoring shall begin on day one of the first complete growing
 3967 season (monitoring year 1) after stream compensation site construction activities,
 3968 including planting, have been completed. Monitoring shall be required for monitoring years
 3969 1 and 2, unless otherwise approved by the Department of Environmental Quality. In all
 3970 cases, if all success criteria have not been met in the final monitoring year, then monitoring
 3971 shall be required for each consecutive year until two annual sequential reports indicate
 3972 that all criteria have been successfully satisfied.

3973 8. All stream compensation site monitoring reports shall be submitted by in accordance
 3974 with 9VAC25-690-100 Part II E 6.

3975 E. Reporting.

3976 1. Written communications required by this VWP general permit shall be submitted to the
 3977 appropriate Department of Environmental Quality office. The VWP general permit tracking
 3978 number shall be included on all correspondence.

3979 2. The Department of Environmental Quality shall be notified in writing prior to the start of
 3980 construction activities at the first permitted impact area.

3981 3. A construction status update form provided by the Department of Environmental Quality
 3982 shall be completed and submitted to the Department of Environmental Quality twice per
 3983 year for the duration of coverage under a VWP general permit. Forms completed in June
 3984 shall be submitted by or on July 10, and forms completed in December shall be submitted
 3985 by or on January 10. The form shall include reference to the VWP permit tracking number
 3986 and one of the following statements for each authorized surface water impact location:

3987 a. Construction activities have not yet started;

3988 b. Construction activities have started;

3989 c. Construction activities have started but are currently inactive; or

3990 d. Construction activities are complete.

3991 4. The Department of Environmental Quality shall be notified in writing within 30 days
 3992 following the completion of all activities in all authorized impact areas.

- 3993 5. The Department of Environmental Quality shall be notified in writing prior to the initiation
 3994 of activities at the permittee-responsible compensation site. The notification shall include
 3995 a projected schedule of activities and construction completion.
- 3996 6. All permittee-responsible compensation site monitoring reports shall be submitted
 3997 annually by December 31, with the exception of the last year, in which case the report
 3998 shall be submitted at least 60 days prior to the expiration of the general permit, unless
 3999 otherwise approved by the Department of Environmental Quality.
- 4000 a. All wetland compensation site monitoring reports shall include, as applicable, the
 4001 following:
- 4002 (1) General description of the site including a site location map identifying photo-
 4003 monitoring stations, vegetative and soil monitoring stations, monitoring wells, and
 4004 wetland zones.
- 4005 (2) Summary of activities completed during the monitoring year, including alterations
 4006 or maintenance conducted at the site.
- 4007 (3) Description of monitoring methods.
- 4008 (4) Analysis of all hydrology information, including monitoring well data, precipitation
 4009 data, and gauging data from streams or other open water areas, as set forth in the
 4010 final compensation plan.
- 4011 (5) Evaluation of hydric soils or soils under hydric conditions, as appropriate.
- 4012 (6) Analysis of all vegetative community information, including woody and herbaceous
 4013 species, both planted and volunteers, as set forth in the final compensation plan.
- 4014 (7) Photographs labeled with the permit number, the name of the compensation site,
 4015 the photo-monitoring station number, the photograph orientation, the date and time of
 4016 the photograph, the name of the person taking the photograph, and a brief description
 4017 of the photograph subject. This information shall be provided as a separate attachment
 4018 to each photograph, if necessary. Photographs taken after the initial planting shall be
 4019 included in the first monitoring report after planting is complete.
- 4020 (8) Discussion of wildlife or signs of wildlife observed at the compensation site.
- 4021 (9) Comparison of site conditions from the previous monitoring year and reference site.
- 4022 (10) Discussion of corrective measures or maintenance activities to control
 4023 undesirable species, to repair damaged water control devices, or to replace damaged
 4024 planted vegetation.
- 4025 (11) Corrective action plan that includes proposed actions, a schedule, and monitoring
 4026 plan.
- 4027 b. All stream compensation site monitoring reports shall include, as applicable, the
 4028 following:
- 4029 (1) General description of the site including a site location map identifying photo-
 4030 monitoring stations and monitoring stations.
- 4031 (2) Summary of activities completed during the monitoring year, including alterations
 4032 or maintenance conducted at the site.
- 4033 (3) Description of monitoring methods.
- 4034 (4) Evaluation and discussion of the monitoring results in relation to the success
 4035 criteria and overall goals of compensation.
- 4036 (5) Photographs shall be labeled with the permit number, the name of the
 4037 compensation site, the photo-monitoring station number, the photograph orientation,
 4038 the date and time of the photograph, the name of the person taking the photograph,

4039 and a brief description of the photograph subject. Photographs taken prior to
 4040 compensation site construction activities, during instream and riparian restoration
 4041 activities, and within one week of completion of activities shall be included in the first
 4042 monitoring report.

4043 (6) Discussion of alterations, maintenance, or major storm events resulting in
 4044 significant change in stream profile or cross section, and corrective actions conducted
 4045 at the stream compensation site.

4046 (7) Documentation of undesirable plant species and summary of abatement and
 4047 control measures.

4048 (8) Summary of wildlife or signs of wildlife observed at the compensation site.

4049 (9) Comparison of site conditions from the previous monitoring year and reference site,
 4050 and as-built survey, if applicable.

4051 (10) Corrective action plan that includes proposed actions, a schedule and monitoring
 4052 plan.

4053 (11) Additional submittals that were approved by the Department of Environmental
 4054 Quality in the final compensation plan.

4055 7. The permittee shall notify the Department of Environmental Quality in writing when
 4056 unusual or potentially complex conditions are encountered which require debris removal
 4057 or involve potentially toxic substance. Measures to remove the obstruction, material, or
 4058 toxic substance or to change the location of a structure are prohibited until approved by
 4059 the Department of Environmental Quality.

4060 8. The permittee shall report fish kills or spills of oil or fuel immediately upon discovery. If
 4061 spills or fish kills occur between the hours of 8:15 a.m. to 5 p.m., Monday through Friday,
 4062 the appropriate Department of Environmental Quality regional office shall be notified;
 4063 otherwise, the Department of Emergency Management shall be notified at 1-800-468-
 4064 8892.

4065 9. Violations of state water quality standards shall be reported to the appropriate
 4066 Department of Environmental Quality office no later than the end of the business day
 4067 following discovery.

4068 10. The permittee shall notify the Department of Environmental Quality no later than the
 4069 end of the third business day following the discovery of additional impacts to surface
 4070 waters including wetlands, stream channels, and open water that are not authorized by
 4071 the Department of Environmental Quality or to any required preservation areas. The
 4072 notification shall include photographs, estimated acreage or linear footage of impacts, and
 4073 a description of the impacts.

4074 11. Submittals required by this VWP general permit shall contain the following signed
 4075 certification statement:

4076 "I certify under penalty of law that this document and all attachments were prepared under
 4077 my direction or supervision in accordance with a system designed to assure that qualified
 4078 personnel properly gather and evaluate the information submitted. Based on my inquiry of
 4079 the person or persons who manage the system, or those persons directly responsible for
 4080 gathering the information, the information submitted is, to the best of my knowledge and
 4081 belief, true, accurate, and complete. I am aware that there are significant penalties for
 4082 submitting false information, including the possibility of fine and imprisonment for knowing
 4083 violation."

4084 Part III. Conditions Applicable to All VWP General Permits.

4085 A. Duty to comply. The permittee shall comply with all conditions, limitations, and other
 4086 requirements of the VWP general permit; any requirements in coverage granted under this VWP
 4087 general permit; the Clean Water Act, as amended; and the State Water Control Law and
 4088 regulations adopted pursuant to it. Any VWP general permit violation or noncompliance is a
 4089 violation of the Clean Water Act and State Water Control Law and is grounds for (i) enforcement
 4090 action, (ii) VWP general permit coverage termination for cause, (iii) VWP general permit coverage
 4091 revocation, (iv) denial of application for coverage, or (v) denial of an application for a modification
 4092 to VWP general permit coverage. Nothing in this VWP general permit shall be construed to relieve
 4093 the permittee of the duty to comply with all applicable federal and state statutes, regulations, and
 4094 toxic standards and prohibitions.

4095 B. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent
 4096 impacts in violation of the VWP general permit which may have a reasonable likelihood of
 4097 adversely affecting human health or the environment.

4098 C. Reopener. This VWP general permit may be reopened to modify its conditions when the
 4099 circumstances on which the previous VWP general permit was based have materially and
 4100 substantially changed, or special studies conducted by the department or the permittee show
 4101 material and substantial change since the time the VWP general permit was issued and thereby
 4102 constitute cause for revoking and reissuing the VWP general permit.

4103 D. Compliance with state and federal law. Compliance with this VWP general permit
 4104 constitutes compliance with the VWP permit requirements of the State Water Control Law.
 4105 Nothing in this VWP general permit shall be construed to preclude the institution of any legal
 4106 action under or relieve the permittee from any responsibilities, liabilities, or other penalties
 4107 established pursuant to any other state law or regulation or under the authority preserved by §
 4108 510 of the Clean Water Act.

4109 E. Property rights. The issuance of this VWP general permit does not convey property rights
 4110 in either real or personal property or any exclusive privileges, nor does it authorize injury to private
 4111 property, any invasion of personal property rights, or any infringement of federal, state, or local
 4112 laws or regulations.

4113 F. Severability. The provisions of this VWP general permit are severable.

4114 G. Inspection and entry. Upon presentation of credential, the permittee shall allow the
 4115 department or any duly authorized agent of the department, at reasonable times and under
 4116 reasonable circumstances, to enter upon the permittee's property, public or private, and have
 4117 access to inspect and copy any records that must be kept as part of the VWP general permit
 4118 conditions; to inspect any facilities, operations, or practices (including monitoring and control
 4119 equipment) regulated or required under the VWP general permit; and to sample or monitor any
 4120 substance, parameter, or activity for the purpose of assuring compliance with the conditions of
 4121 the VWP general permit or as otherwise authorized by law. For the purpose of this section, the
 4122 time for inspection shall be deemed reasonable during regular business hours. Nothing contained
 4123 herein shall make an inspection time unreasonable during an emergency.

4124 H. Transferability of VWP general permit coverage. VWP general permit coverage may be
 4125 transferred to another permittee when all of the criteria listed in this subsection are met. On the
 4126 date of the VWP general permit coverage transfer, the transferred VWP general permit coverage
 4127 shall be as fully effective as if it had been granted directly to the new permittee.

4128 1. The current permittee notifies the department of the proposed transfer of the general
 4129 permit coverage and provides a written agreement between the current and new
 4130 permittees containing a specific date of transfer of VWP general permit responsibility,
 4131 coverage, and liability to the new permittee, or that the current permittee will retain such
 4132 responsibility, coverage, or liability, including liability for compliance with the requirements
 4133 of enforcement activities related to the authorized activity.

4134 2. The department does not within 15 days notify the current and new permittees of the
4135 board's intent to modify or revoke and reissue the VWP general permit.

4136 I. Notice of planned change. VWP general permit coverage may be modified subsequent to
4137 issuance in accordance with 9VAC25-690-80.

4138 J. VWP general permit coverage termination for cause. VWP general permit coverage is
4139 subject to termination for cause by the department after public notice and opportunity for a hearing
4140 in accordance with 9VAC25-210-180. Reasons for termination for cause are as follows:

4141 1. Noncompliance by the permittee with any provision of this chapter, any condition of the
4142 VWP general permit, or any requirement in general permit coverage;

4143 2. The permittee's failure in the application or during the process of granting VWP general
4144 permit coverage to disclose fully all relevant facts or the permittee's misrepresentation of
4145 any relevant facts at any time;

4146 3. The permittee's violation of a special or judicial order;

4147 4. A determination by the department that the authorized activity endangers human health
4148 or the environment and can be regulated to acceptable levels by a modification to VWP
4149 general permit coverage or a termination;

4150 5. A change in any condition that requires either a temporary or permanent reduction or
4151 elimination of any activity controlled by the VWP general permit; or

4152 6. A determination that the authorized activity has ceased and that the compensation for
4153 unavoidable adverse impacts has been successfully completed.

4154 K. The department may terminate VWP general permit coverage without cause when the
4155 permittee is no longer a legal entity due to death or dissolution or when a company is no longer
4156 authorized to conduct business in the Commonwealth. The termination shall be effective 30 days
4157 after notice of the proposed termination is sent to the last known address of the permittee or
4158 registered agent, unless the permittee objects within that time. If the permittee does object during
4159 that period, the department shall follow the applicable procedures for termination under 9VAC25-
4160 210-180 and § 62.1-44.15:25 of the Code of Virginia.

4161 L. VWP general permit coverage termination by consent. The permittee shall submit a request
4162 for termination by consent within 30 days of completing or canceling all authorized activities
4163 requiring notification under 9VAC25-690-50 A and all compensatory mitigation requirements.
4164 When submitted for project completion, the request for termination by consent shall constitute a
4165 notice of project completion in accordance with 9VAC25-210-130 F. The director may accept this
4166 termination of coverage on behalf of the department. The permittee shall submit the following
4167 information:

4168 1. Name, mailing address, and telephone number;

4169 2. Name and location of the activity;

4170 3. The VWP general permit tracking number; and

4171 4. One of the following certifications:

4172 a. For project completion:

4173 "I certify under penalty of law that all activities and any required compensatory
4174 mitigation authorized by the VWP general permit and general permit coverage have
4175 been completed. I understand that by submitting this notice of termination I am no
4176 longer authorized to perform activities in surface waters in accordance with the VWP
4177 general permit and general permit coverage, and that performing activities in surface
4178 waters is unlawful where the activity is not authorized by the VWP permit or coverage,
4179 unless otherwise excluded from obtaining coverage. I also understand that the

4180 submittal of this notice does not release me from liability for any violations of the VWP
4181 general permit or coverage."

4182 b. For project cancellation:

4183 "I certify under penalty of law that the activities and any required compensatory
4184 mitigation authorized by the VWP general permit and general permit coverage will not
4185 occur. I understand that by submitting this notice of termination I am no longer
4186 authorized to perform activities in surface waters in accordance with the VWP general
4187 permit and general permit coverage, and that performing activities in surface waters is
4188 unlawful where the activity is not authorized by the VWP permit or coverage, unless
4189 otherwise excluded from obtaining coverage. I also understand that the submittal of
4190 this notice does not release me from liability for any violations of the VWP general
4191 permit or coverage, nor does it allow me to resume the authorized activities without
4192 reapplication and coverage."

4193 c. For events beyond permittee control, the permittee shall provide a detailed
4194 explanation of the events, to be approved by the Department of Environmental Quality,
4195 and the following certification statement:

4196 "I certify under penalty of law that the activities or the required compensatory mitigation
4197 authorized by the VWP general permit and general permit coverage have changed as
4198 the result of events beyond my control (see attached). I understand that by submitting
4199 this notice of termination I am no longer authorized to perform activities in surface
4200 waters in accordance with the VWP general permit and general permit coverage, and
4201 that performing activities in surface waters is unlawful where the activity is not
4202 authorized by the VWP permit or coverage, unless otherwise excluded from obtaining
4203 coverage. I also understand that the submittal of this notice does not release me from
4204 liability for any violations of the VWP general permit or coverage, nor does it allow me
4205 to resume the authorized activities without reapplication and coverage."

4206 M. Civil and criminal liability. Nothing in this VWP general permit shall be construed to relieve
4207 the permittee from civil and criminal penalties for noncompliance.

4208 N. Oil and hazardous substance liability. Nothing in this VWP general permit shall be
4209 construed to preclude the institution of legal action or relieve the permittee from any
4210 responsibilities, liabilities, or penalties to which the permittee is or may be subject under § 311 of
4211 the Clean Water Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water Control Law.

4212 O. Duty to cease or confine activity. It shall not be a defense for a permittee in an enforcement
4213 action that it would have been necessary to halt or reduce the activity for which VWP general
4214 permit coverage has been granted in order to maintain compliance with the conditions of the VWP
4215 general permit or coverage.

4216 P. Duty to provide information.

4217 1. The permittee shall furnish to the department any information that the department may
4218 request to determine whether cause exists for modifying, revoking, or terminating VWP
4219 permit coverage or to determine compliance with the VWP general permit or general
4220 permit coverage. The permittee shall also furnish to the department, upon request, copies
4221 of records required to be kept by the permittee.

4222 2. Plans, maps, conceptual reports, and other relevant information shall be submitted as
4223 required by the department prior to commencing construction.

4224 Q. Monitoring and records requirements.

4225 1. Monitoring of parameters, other than pollutants, shall be conducted according to
4226 approved analytical methods as specified in the VWP general permit. Analysis of

4227 pollutants will be conducted according to 40 CFR Part 136 ~~(2000)~~ as published in the July
 4228 1, 2023 update, Guidelines Establishing Test Procedures for the Analysis of Pollutants.

4229 2. Samples and measurements taken for the purpose of monitoring shall be representative
 4230 of the monitored activity.

4231 3. The permittee shall retain records of all monitoring information, including all calibration
 4232 and maintenance records and all original strip chart or electronic recordings for continuous
 4233 monitoring instrumentation, copies of all reports required by the VWP general permit, and
 4234 records of all data used to complete the application for coverage under the VWP general
 4235 permit, for a period of at least three years from the date of general permit expiration. This
 4236 period may be extended by request of the department at any time.

4237 4. Records of monitoring information shall include, as appropriate:

4238 a. The date, exact place, and time of sampling or measurements;

4239 b. The name of the individuals who performed the sampling or measurements;

4240 c. The date and time the analyses were performed;

4241 d. The name of the individuals who performed the analyses;

4242 e. The analytical techniques or methods supporting the information such as
 4243 observations, readings, calculations, and bench data used;

4244 f. The results of such analyses; and

4245 g. Chain of custody documentation.

4246 R. Unauthorized discharge of pollutants. Except in compliance with this VWP general permit,
 4247 it shall be unlawful for the permittee to:

4248 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or
 4249 deleterious substances;

4250 2. Excavate in a wetland;

4251 3. Otherwise alter the physical, chemical, or biological properties of state waters and make
 4252 them detrimental to the public health, to animal or aquatic life, or to the uses of such waters
 4253 for domestic or industrial consumption, for recreation, or for other uses; or

4254 4. On and after October 1, 2001, conduct the following activities in a wetland:

4255 a. New activities to cause draining that significantly alters or degrades existing wetland
 4256 acreage or functions;

4257 b. Filling or dumping;

4258 c. Permanent flooding or impounding; or

4259 d. New activities that cause significant alteration or degradation of existing wetland
 4260 acreage or functions.

4261 S. Duty to reapply. Any permittee desiring to continue a previously authorized activity after the
 4262 expiration date of the VWP general permit shall comply with the provisions in 9VAC25-690-27.

4263 **9VAC25-790-210. Nonconventional methods, processes or equipment.**

4264 A. Policy. The policy of the department is to encourage the development of any new or
 4265 nonconventional methods, processes, and equipment that appear to have application for the
 4266 treatment or conveyance of sewage. Sewage treatment methods, processes, and equipment may
 4267 be subject to a special permit application procedure if (i) they are not covered by the Manual of
 4268 Practice (Part III (9VAC25-790-310 et seq.) of this chapter) and (ii) they are in principle, or
 4269 application, deemed to be nonconventional.

4270 B. Provisional CTO. The performance reliability of nonconventional processes and equipment
 4271 shall have been thoroughly demonstrated through an approved testing program for similar

4272 installations (loadings of 75% or more of design level) before they may be considered for
 4273 conventional approval and use. Where the department approves such a testing program, a
 4274 provisional CTO will be issued for treatment works in which new or nonconventional processes
 4275 and equipment are to be evaluated. The provisional CTO will specify conditions related to the
 4276 testing requirements and agreements necessary for issuance of a final CTO. The owner of the
 4277 facility shall submit the required test results to the department according to an approved schedule
 4278 for approval prior to issuance of a final CTO. It is the owner's responsibility to operate in
 4279 compliance with requirements imposed by permits issued for the sewerage system or treatment
 4280 works.

4281 C. Assurance resources. As a prerequisite to the issuance of a provisional CTO, the owner
 4282 must furnish assurance of financial ability or resources available to modify, convert, or replace,
 4283 the new or nonconventional processes or equipment in the event the performance reliability
 4284 cannot be established over the period of time specified by the provisional CTO. These assurances
 4285 may be in the form of funds placed in escrow, letters of credit, performance bonds, etc., which
 4286 would revert to the facility owner if performance reliability cannot be established.

4287 D. Performance reliability testing. All procedures used in testing of the performance reliability
 4288 shall be conducted under the supervision of a licensed professional engineer who shall attest to
 4289 the accuracy of sampling and testing procedures. The required samples shall be tested through
 4290 a qualified laboratory. The testing program shall provide as a minimum the following:

4291 1. Samples shall be collected at designated locations at a stated frequency and analyzed
 4292 in accordance with provisions of the provisional CTO. The minimum testing period shall
 4293 be 12 months under the comparable environmental and operational conditions for which
 4294 the process and equipment will receive conventional approvals for any additional
 4295 installations.

4296 2. All analyses shall be made in accordance with the 19th Edition of Standard Methods for
 4297 the Examination of Water and Wastewater (1995) and 40 CFR Part 136 as published in
 4298 the 40 CFR July 1, 2017 2023, update and ~~82 FR 40836 (August 28, 2017)~~, or other
 4299 approved analytical methods.

4300 E. CTC. After the area engineer evaluates the plans and testing data, the director can issue
 4301 a CTC if the performance data verifies that the method, process, or equipment can perform
 4302 reliably in accordance with the design specifications and the operation standards of Part II, and
 4303 that the method, process, or equipment may be installed as conventional for similar site specific
 4304 operation.

4305 F. Provisional CTO. Upon completion of construction or modification, a provisional CTO for a
 4306 definite period of time will be issued for the operation of the nonconventional methods, processes,
 4307 and equipment. Not more than one provisional CTO will be granted for a similar installation during
 4308 the evaluation period. The provisional CTO shall require that:

4309 1. The evaluation period shall be a minimum of 12 months and no longer than 18 months,

4310 2. The holder of a provisional CTO must submit reports on operation during the evaluation
 4311 period. The reports shall be prepared by either a licensed professional engineer
 4312 experienced in the field of environmental engineering, the owner's operating or
 4313 engineering staff, or a qualified testing firm.

4314 G. Final CTO. The director will issue a final CTO upon lapse of the provisional CTO, if, on the
 4315 basis of testing during that period, the new or nonconventional method, process, or equipment
 4316 demonstrates reliable performance in accordance with permit requirements and the operation
 4317 standards of Part II. If the standards are not met, then the owner shall provide for modification of
 4318 the sewerage systems or treatment works, in a manner that will enable those standards to be met
 4319 in accordance with this chapter.

Office of Regulatory Management

Economic Review Form

Agency name	Department of Environmental Quality
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-31 Secondary Chapters: 9VAC25-32; 9VAC25-210; 9 VAC 25-610; 9VAC25-660; 9VAC25-670; 9VAC25-680; 9VAC25-690, 9VCA25-790
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System Permit (VPDES) Regulation (9VAC25-31); Virginia Pollution Abatement (VPA) Permit Regulation (9VAC25-32); Virginia Water Protection (VWP) Permit Program Regulation (9VAC25-210); Groundwater Withdrawal Regulations (9VAC25-610); Virginia Water Protection (VWP) General Permit for Impacts Less Than One-Half Acre (9VAC25-660); Virginia Water Protection (VWP) General Permit for Facilities and Activities of Utility and Public Service Companies Regulated by the Federal Energy Regulatory Commission or the State Corporation Commission and Other Utility Line Activities (9VAC25-670); Virginia Water Protection General Permit for Linear Transportation Projects (9VAC25-680); Virginia Water Protection General Permit for Impacts from Development and Certain Mining Activities (9VAC25-690) Sewage Collection and Treatment Regulations (9VAC25-790)
Action title	2023 40 CFR Reference Update/Methods Update Rule
Date this document prepared	October 31, 2023
Regulatory Stage (including Issuance of Guidance Documents)	Final Exempt

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

The Regulatory Flexibility Act statement contained in 86 FR 27226 (05/19/2021) states that this action would not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act. This action will not impose any requirements on small entities. This action would approve new and revised versions of Clean Water Act (CWA) testing procedures. Generally, these changes have a positive impact on small entities by increasing method flexibility, thereby allowing entities to reduce costs by choosing more cost-effective methods. In general, EPA expects the final revisions will lead to few, if any, increased costs. Most of the changes clarify or improve the instructions in the method, update the technology used in the method, improve the QC instructions, make editorial corrections, or reflect the most recent approval year of an already approved method. In some cases, they would add alternatives to currently approved methods for a particular analyte (e.g., Method N07–0003 for Nitrate Reductase Nitrate-Nitrogen Analysis). Because these methods would be alternatives rather than requirements, EPA indicated in their analysis there are no direct costs associated with the updated test methods. If a permittee elected to use these methods, they could incur a small cost associated with obtaining these methods from the listed sources.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>Direct Costs: This regulatory action updates testing methods allowed in these regulations to be consistent with those allowed by EPA. The proposed change involves updating the Voluntary Consensus Standards Body (VCSB) methods currently incorporated by reference in 40 CFR part 136, including revisions to the Standard Methods and ASTM International methods. Both organizations also offer memberships or subscriptions that allow unlimited access to their methods. If a permittee or environmental laboratory does not maintain a membership or subscription, then the cost of obtaining these updated methods ranges from \$40 to \$80, which is not a significant financial burden for permittees or environmental laboratories to obtain the updated methods. This is not an additional cost increase or decrease for the actual test. Additionally, the final rule incorporates United States Geological Survey (USGS) methods and vendor Alternative Test Procedures (ATPs), which are available free of charge on their respective websites. Therefore, the direct costs of the proposed change</p>
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would primarily consist of the fees associated with obtaining updated VCSB methods, which are reasonable and minimal.

Indirect Costs:

Indirect costs associated with the proposed change may include costs associated with training personnel on the new test procedures, costs associated with recalibrating equipment to comply with the new procedures, and costs associated with updating standard operating procedures to reflect the changes. While EPA has concluded that the direct costs associated with obtaining the new and revised test procedures would not be a significant financial burden, it is important to note that the permittee or environmental laboratory may still incur some additional costs because of these indirect factors. However, EPA projects that these indirect costs would be minimal, as they are one-time expenses and should not significantly impact the overall cost of compliance.

Direct Benefits:

This update should offer several direct benefits to permittees and environmental laboratories. Firstly, by incorporating the revisions to the VCSB methods and ATPs, the proposed change will provide more options and increased flexibility to permittees in selecting suitable methods for monitoring pollutant levels. This, in turn, will improve compliance and reduce regulatory burden on regulated entities. Secondly, the proposed update will enhance the quality of monitoring data by adopting the latest technological advances in analytical technology. This will enable more accurate and reliable measurement of pollutants, leading to better-informed decisions and more effective management of environmental risks. Overall, the proposed change should offer direct benefits to permittees and environmental laboratories by providing more flexibility and improved data quality, while reducing regulatory burden and enhancing environmental protection. This change may also benefit permittees that operate in multiple states since this regulatory change updates Virginia's test methods to be consistent with the federal regulations. Permittees that have operations in many states may benefit from having consistent test methods available to them in all of the states in which they operate.

Indirect Benefits:

The adoption of methods developed by national voluntary consensus standards can have a ripple effect on the regulated communities beyond just meeting regulatory requirements. It can encourage the use of more standardized and widely accepted

	<p>methods, leading to greater consistency in data collection and analysis. This can improve comparability of data across different facilities and districts, enabling better tracking of trends and identification of potential issues. Additionally, the use of newer, more advanced analytical technologies can lead to more accurate and precise data, which can inform better decision-making by regulators, permittees, and other stakeholders. The adoption of these updated methods can contribute to improved environmental outcomes and protection of public health.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	<p>(a) Both VCSB and ASTM also offer memberships or subscriptions that allow unlimited access to their methods. Without a membership or subscription, the direct cost will be between \$40 - \$80 to obtain the testing updates.</p>	<p>(b) Increased flexibility for permittees will thereby decrease costs overall. Without a membership or subscription, the direct cost will be between \$40 - \$80 to obtain the testing updates.</p>
(3) Net Monetized Benefit	Same as present.	
(4) Other Costs & Benefits (Non-Monetized)	Decreases burden on both permittees and environmental laboratories.	
(5) Information Sources	Federal Register: Clean Water Act: Methods Update Rule for the Analysis of Effluent. 05/19/2021	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Direct Costs: Permittees and environmental laboratories currently must satisfy the older testing standard from 2017.</p> <p>Indirect Costs: Limited flexibility to the regulated community, no improvements in the quality of data collected, and an inability to keep current with technology advances.</p> <p>Direct Benefits: Quality of data collected will remain static and without improvement.</p> <p>Indirect Benefits:</p>
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	Permittees will not have to update or keep current with technology advances.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) \$40 - \$80 per permittee or environmental laboratory to obtain the updated methods if the permittee does not maintain a memberships or subscriptions that allow unlimited access to their methods.	(b) Maintains status quo of the current data quality, limiting the scope of methods that fail to keep current with technology advances, and thus permittees have limited flexibility when testing.
(3) Net Monetized Benefit	Zero net monetized benefit if updates are not made to the regulation.	
(4) Other Costs & Benefits (Non-Monetized)	National Pollutant Discharge Elimination System permits include conditions designed to ensure compliance with the technology-based and water quality-based requirements of the Clean Water Act, including restrictions on the quantity of specific pollutants discharged as well as requirements for pollutant monitoring, measurement, and reporting to DEQ. Permittees are currently limited in deciding which approved test procedure they will use for a specific pollutant because the EPA has subsequently approved the use of more modern and additional methods for testing that are currently not allowed by Virginia’s regulations. This regulatory change updates the Board’s regulations to allow the most recently adopted EPA test methods.	
(5) Information Sources	Federal Register: Clean Water Act – Methods Update Rule for the Analysis of Effluent. 05/19/2021	

Table 1c: Costs and Benefits under Alternative Approach(es)
The agency was unable to identify an alternative approach since this change makes Virginia’s regulations consistent with federal testing methods.

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: NA Indirect Costs: NA Direct Benefits: NA Indirect Benefits: NA	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) Not applicable	(b) Not applicable
(3) Net Monetized Benefit	Not applicable	
(4) Other Costs & Benefits (Non-Monetized)	Not applicable	
(5) Information Sources	Not applicable	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Localities would experience the same costs and benefits described in table 1a. No estimate is available concerning the number of localities benefiting from this regulatory change. Localities that have obtained a VPDES, VPA, Groundwater withdrawal, Virginia Water Protection Permit or are regulated by the Sewage Treatment and Collection regulation are potentially impacted by this amendment.</p> <p>Direct Costs:</p> <p>Indirect Costs:</p> <p>Direct Benefits:</p> <p>Indirect Benefits:</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)		

(4) Assistance	
(5) Information Sources	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: None. Indirect Costs: None. Direct Benefits: None. Indirect Benefits: None.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)		
(4) Information Sources		

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	Small businesses would experience the same costs and benefits described in table 1a. No estimate is available concerning the number of small businesses benefiting from this regulatory change. Small businesses that have obtained a VPDES, VPA, Groundwater withdrawal, Virginia Water Protection Permit or are regulated by the Sewage Treatment and Collection regulation are potentially impacted by this amendment.
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	Direct Costs: None. Indirect Costs: None. Direct Benefits: None. Indirect Benefits: None.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)		
(4) Alternatives		
(5) Information Sources		

Changes to Number of Regulatory Requirements

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved	Authority of Change	Initial Count	Additions	Subtractions	Net Change
9VAC25-31-25	Statutory	0	0	0	0
	Discretionary	0	0	0	0
9VAC25-31-100	Statutory	80	0	0	0
	Discretionary	0	0	0	0
9VAC25-32-25	Statutory	0	0	0	0
	Discretionary	0	0	0	0
9VAC25-210-90	Statutory	12	0	0	0
	Discretionary	0	0	0	0
9VAC25-610-130	Statutory	25	0	0	0
	Discretionary	0	0	0	0
9VAC25-660-100	Statutory	72	0	0	0
	Discretionary	0	0	0	0
9VAC25-670-100	Statutory	90	0	0	0
	Discretionary	0	0	0	0
9VAC25-680-100	Statutory	103	0	0	0
	Discretionary	0	0	0	0
9VAC25-690-100	Statutory	104	0	0	0
	Discretionary	0	0	0	0
9VAC25-790-100	Statutory	31	0	0	0
	Discretionary	0	0	0	0
Total Net Change of Statutory Requirements:					0
Total Net Change of Discretionary Requirements:					0

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-31 9VAC25-32 9VAC25-210 9VAC25-610 9VAC25-660 9VAC25-670 9VAC25-680 9VAC25-790	Update regulation to include additional test methods for use by regulated community.	Membership or subscription with VCSB or ASTM to have unlimited access to their methods, or \$40 - \$80 for nonmember access to testing methods.	Permittees with membership or subscription with VCSB or ASTM will incur no additional cost. Nonmembers will incur a \$40 - \$80 cost to access to testing methods.	Ranges from no increase for Permittees with membership or subscription with VCSB or ASTM to \$40 - \$80 cost to access to for permittees without membership or subscription with VCSB or ASTM

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
9VAC25-31 9VAC25-32 9VAC25-210 9VAC25-610 9VAC25-660 9VAC25-670 9VAC25-680 9VAC25-790	This regulatory amendment will update these references with the 40 CFR Part 136 published in the July 1, 2023, update.	Provides increased flexibility for the permittees in meeting monitoring requirements while improving data quality and complying with the updated methods.

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 136

[EPA-HQ-OW-2018-0826; FRL-10021-59-OW]

RIN 2040-AF84

Clean Water Act Methods Update Rule for the Analysis of Effluent

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: The Environmental Protection Agency (EPA) is finalizing changes to its test procedures required to be used by industries and municipalities when analyzing the chemical, physical, and biological properties of wastewater and other environmental samples for reporting under EPA’s National Pollutant Discharge Elimination System (NPDES) permit program. The Clean Water Act (CWA) requires EPA to

promulgate these test procedures (analytical methods) for analysis of pollutants. EPA anticipates that these changes will provide increased flexibility for the regulated community in meeting monitoring requirements while improving data quality. In addition, this update to the CWA methods is incorporating technological advances in analytical technology.

DATES: This final rule is effective July 19, 2021.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA-HQ-OW-2018-0826. All documents in the docket are listed on the <http://www.regulations.gov> website. Although listed in the index, some information is not publicly available, e.g., confidential business information or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket

materials are available electronically through <http://www.regulations.gov>.

FOR FURTHER INFORMATION CONTACT: Meghan Hessenauer, Engineering and Analysis Division (4303T), Office of Water, Environmental Protection Agency, 1200 Pennsylvania Avenue NW, Washington, DC 20460-0001; telephone: 202-566-1040; email: Hessenauer.Meghan@epa.gov.

SUPPLEMENTARY INFORMATION:

Table of Contents

- I. General Information
- II. Overview
- III. Changes Between the Proposed Rule and the Final Rule
- IV. Statutory Authority
- V. Purpose and Summary of Final Rule
- VI. Statutory and Executive Order Reviews

I. General Information

A. Does this action apply to me?

Entities potentially affected by the requirements of this action include:

Category	Examples of potentially affected entities
State, Territorial, and Indian Tribal Governments.	States, territories, and tribes authorized to administer the National Pollutant Discharge Elimination System (NPDES) permitting program; states, territories, and tribes providing certification under CWA section 401; state, territorial, and tribal-owned facilities that must conduct monitoring to comply with NPDES permits.
Industry	Facilities that must conduct monitoring to comply with NPDES permits.
Municipalities	Publicly Owned Treatment Works (POTWs) or other municipality-owned facilities that must conduct monitoring to comply with NPDES permits.

This table is not exhaustive, but rather provides a guide for readers regarding entities likely to be affected by this action. This table lists types of entities that EPA is now aware of that could potentially be affected by this action. Other types of entities not listed in the table could also be affected. To determine whether your facility is affected by this action, you should carefully examine the applicability language at 40 CFR 122.1 (NPDES purpose and scope), 40 CFR 136.1 (NPDES permits and CWA) and 40 CFR 403.1 (pretreatment standards purpose and applicability). If you have questions regarding the applicability of this action to a particular entity, consult the appropriate person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

II. Overview

This preamble describes the reasons for the final rule; the legal authority for the final rule; a summary of the changes and clarifications; and explanation of the abbreviations and acronyms used in this document.

Abbreviations and Acronyms Used in the Preamble and Rule Text

- 2-CEVE: 2-Chloroethylvinyl ether
- AA: Atomic Absorption
- ADMI: American Dye Manufacturers Institute
- ASTM: ASTM International ¹
- ATP: Alternate Test Procedure
- BHI: Brain heart infusion
- BOD₅: 5-day Biochemical Oxygen Demand
- CAS: Chemical Abstract Services
- CATC: Cyanide Amenable to Chlorination
- CBOD—Carbonaceous Biochemical Oxygen Demand
- CCB: Continuing calibration blank
- CCV: Continuing calibration verification
- CFR: Code of Federal Regulations
- COD: Chemical Oxygen Demand
- CWA: Clean Water Act
- EC-MUG: EC broth with 4-methylumbelliferyl-β-D-glucuronide
- EDTA: Ethylenediaminetetraacetic acid
- ELAB: Environmental Laboratory Advisory Board
- EPA: Environmental Protection Agency
- FLAA: Flame Atomic Absorption Spectroscopy
- GC: Gas Chromatography
- GFAA: Graphite Furnace Atomic Absorption Spectroscopy
- ICP/AES: Inductively Coupled Plasma-Atomic Emission Spectroscopy

¹ Formerly known as the American Society for Testing and Materials (ASTM)

- ICP/MS: Inductively Coupled Plasma-Mass Spectrometry
- ILI: Independent Laboratories Institute
- IPR: Initial Precision and Recovery
- LCS: Laboratory Control Sample
- MDL: Method Detection Limit
- MF: Membrane Filtration
- MgCl₂: Magnesium Chloride
- MPN: Most Probable Number
- MS/MSD: Matrix Spike/Matrix Spike Duplicate
- MS: Mass Spectrometry
- NA-MUG: Nutrient Agar with 4-methylumbelliferyl-β-D-glucuronide
- NECi: A shortened name used by the Nitrate Elimination Company, Inc.
- NPDES: National Pollutant Discharge Elimination System
- NTTAA: National Technology Transfer and Advancement Act
- OPR: Ongoing Precision and Recovery
- QC: Quality Control
- STGFAA: Stabilized Temperature Graphite Furnace Atomic Absorption
- SW: Solid Waste
- TKN: Total Kjeldahl Nitrogen
- TOC: Total Organic Carbon
- USGS: United States Geological Survey
- VCSB: Voluntary Consensus Standards Body

III. Changes Between the Proposed Rule and the Final Rule

EPA received 25 comments on the October 2019 proposed rule from

laboratory associations, commercial labs, state environmental agencies, and various trade associations. None of the comments opposed the promulgation of the proposed methods. Below is a breakout summarizing the comments we received.

- All commenters support finalizing this rule.

- 12 of the comment letters were outside the scope for the proposed rulemaking or requested a method modification with no underlying data to support the requested change.

- Some commenters requested that EPA modify methods developed by external stakeholders (ASTM International, USGS, etc.). However, EPA is only adopting methods as developed by voluntary consensus standard bodies. Comments requesting changes to such methods should be directed to the method developers.

- Some commenters noted typographical errors or minor inconsistencies within 40 CFR part 136 that required minor changes (e.g., the wrong citation date in a footnote, methods listed in the wrong section of the 40 CFR part 136). Except as noted below, the content of the final rule is the same as that of the proposed rule.

A. Changes in Preamble

In the proposed rulemaking, EPA included in Table IA Standard Methods Method 9230D–2013 for the measurement of enterococci but did not include a discussion of this method in the preamble to the proposal. In response to comments, EPA has added a description of the method to Section IV.C of this preamble.

Similarly, while the proposal included in Table IB Standard Methods Method 5210B–2016 for the measurement of carbonaceous biochemical oxygen demand (CBOD₅), EPA did not discuss approving this method in the preamble to the proposal. The preamble did, however, discuss approval of this method for biochemical oxygen demand (BOD₅) and included BOD in Table IB and along with CBOD. In response to comments, EPA has included discussion and the description of the method in Section V.C of this preamble for both BOD and CBOD.

In addition, EPA has corrected a typographical error that appeared in the proposed rulemaking regarding Standard Methods Method 2540E–2015 in Section IV.C of this preamble. The correct method, Standard Methods Method 2540F–2015, is now listed in Section IV.C of this preamble.

The errata sheets for Whole Effluent Toxicity were not referenced in 40 CFR part 136. In the previous 2017 Methods

Update Rule, the errata sheets were approved but not referenced. EPA did not add this to the regulatory test and was a mistake. The errata sheets are now referenced.

B. Changes to Table IB

EPA has corrected two errors in Table IB of the final rule. In the proposal, EPA listed ASTM Method D1179–16(A) in the wrong row in the Table IB entry for Fluoride. The method is a distillation step and was erroneously listed in the row for colorimetric methods. EPA has corrected Table IB in the final rule.

EPA also has corrected the publication date of the Macherey-Nagel Chemical Oxygen Demand method in Footnote 83 to Table IB. In the proposal, the publication date in the footnote was listed as 2008 and has been corrected to 2018.

C. Changes to Table II

EPA is making a number of conforming changes to the final rule in order to correct inadvertent omissions and errors.

In response to a comment that pointed out that EPA did not update Table II to capture the microbiological method changes included in Tables IA and IH, EPA has modified Table II to take account of these changes for the final rule. These changes intended to clarify and correct inadvertent omissions and errors.

A commenter pointed out that EPA did not include organic parameter #73, hexachloroethane in Table II. EPA has corrected this error that dates to the Methods Update Rule proposed in 2004. The parameter #73 has been added to the list of chlorinated hydrocarbons in Table II of the final rule.

Finally, a typographical error in Table II of the proposed rulemaking resulted in the specifications for four matrices listed under the dioxin and furan (CDDs/CDFs) entry to not be indented. This caused some confusion for commenters. EPA has ensured that Table II in the final rule appears as intended.

IV. Statutory Authority

EPA is promulgating this regulation under the authorities of sections 301(a), 304(h), and 501(a) of the CWA; 33 U.S.C. 1311(a), 1314(h), and 1361(a). Section 301(a) of the CWA prohibits the discharge of any pollutant into navigable waters unless the discharge complies with, among other provisions, an NPDES permit issued under section 402 of the CWA. Section 304(h) of the CWA requires the Administrator of EPA to “. . . promulgate guidelines establishing test procedures for the

analysis of pollutants that shall include the factors which must be provided in any certification pursuant to [section 401 of the CWA] or permit application pursuant to [section 402 of the CWA].” Section 501(a) of the CWA authorizes the Administrator to “. . . prescribe such regulations as are necessary to carry out this function under [the CWA].” EPA generally has codified its test procedure regulations (including analysis and sampling requirements) for CWA programs at 40 CFR part 136, though some requirements are codified in other parts (e.g., 40 CFR chapter I, subchapters N and O).

V. Purpose and Summary of Final Rule

NPDES permits must include conditions designed to ensure compliance with the technology-based and water quality-based requirements of the CWA, including in many cases, restrictions on the quantity of specific pollutants that can be discharged as well as requirements for pollutant monitoring, measurement and reporting to NPDES authorities. Often, entities have a choice in deciding which approved test procedure they will use for a specific pollutant because EPA has approved the use of more than one method.²

The procedures for the analysis of pollutants required by CWA section 304(h) are a central element of the NPDES permit program. Examples of where these EPA-approved analytical methods must be used include the following: (1) Applications for NPDES permits, (2) sampling or other reports required under NPDES permits, (3) other requests for quantitative or qualitative effluent data under the NPDES regulations, (4) State CWA 401 certifications and (5) sampling and analysis required under EPA’s General Pretreatment Regulations for Existing and New Sources of Pollution, 40 CFR 136.1 and 40 CFR 403.12(b)(5)(v).

Periodically, EPA updates the approved methods in 40 CFR part 136. In general, the changes in this final action fall into the following categories. The first is new or revised methods published by the VCSBs or the USGS that are similar to methods previously adopted as EPA-approved methods in 40 CFR part 136. The second category is methods EPA has reviewed under the Agency’s national ATP program and preliminarily concluded are appropriate for nationwide use. Lastly, EPA is finalizing certain corrections or amendments to the text and tables of 40

²NPDES permit regulations also specify that the approved method needs to be sufficiently sensitive. See 40 CFR 122.21 (e)(3).

CFR part 136. EPA is adopting these revisions to improve data quality, update methods to keep current with technology advances, and provide the regulated community with greater flexibility. The following paragraphs provide details on the finalized revisions.

A. Changes to 40 CFR 136.3 To Include New Versions of Previously Approved EPA Methods

EPA added the revised version of EPA Method 1623 (labeled 1623.1) to Table IH. Method 1623.1 includes updated acceptance criteria for IPR, OPR, and MS/MSD, and clarifications and revisions based on user questions and feedback about Method 1623 over the past 19 years.

B. Methods Incorporated by Reference

Currently, hundreds of methods and ATPs are incorporated by reference within 40 CFR part 136. In most cases, 40 CFR part 136 contains multiple approved methods for a single pollutant, and regulated entities often have a choice in selecting a method. This final rule contains revisions to VCSB methods that are currently incorporated by reference. Two VCSBs have made such revisions, Standard Methods and ASTM. The finalized VCSB methods are consistent with the requirements of the National Technology Transfer and Advancement Act (NTTAA), under which federal agencies use technical standards developed or adopted by the VCSBs if compliance would not be inconsistent with applicable law or otherwise impracticable (see Section V.I of this preamble). The VCSB methods are available on their respective websites (<https://www.standardmethods.org/> and www.astm.org) to everyone at a cost determined by the VCSB, generally from \$40 to \$80. Both organizations also offer memberships or subscriptions that allow unlimited access to their methods. The cost of obtaining these methods is not a significant financial burden for a discharger or environmental laboratory, making the methods reasonably available. Finally, this final rule also includes USGS methods and vendor ATPs, all of which EPA is incorporating by reference. The ATPs and USGS methods are available free of charge on their respective websites (flowinjection.com, mn-net.com, microbiologylabs.com and USGS.gov), enabling EPA to conclude that the USGS methods and ATPs incorporated by reference are reasonably available.

C. Changes to 40 CFR 136.3 To Include New Versions of Approved Standard Methods Methods

EPA is approving new versions of Standard Methods methods previously included in 40 CFR part 136. The newer versions clarify the existing methods or make editorial corrections. As was the case with the previous methods update rule (82 FR 40836–40941, August 28, 2017), EPA approves and includes in 40 CFR part 136 only the most recent version of a method published by the Standard Methods Committee. EPA is listing only one version of the method with the year of publication designated by the last four digits in the method number (e.g., SM method 3111 B–2011). The date indicates the date of the specific revision to the method. This allows use of a specific method in any edition of the hard copy publication of *Standard Methods for the Examination of Water & Wastewater* that includes a method with the same method number and year of publication.

The finalized revisions to Standard Methods methods previously approved in 40 CFR part 136 will not affect the performance of the method. The following identifies new versions of previously approved Standard Methods methods that EPA included. Each entry contains the Standard Methods number and date, the parameter, and a brief description of the analytical method. The methods listed below are organized according to the table at 40 CFR part 136 in which they appear.

EPA finalized the following changes to Tables IA and IH at 40 CFR part 136:

- Standard Methods Method 9221 (B, E, F)-2014: Method 9221B–2014 Coliform (total); analyzes for total coliforms in non-potable waters using LTB, all presumptive growth LTB tubes are confirmed in BGLB. Method 9221E–2014 Coliform (fecal); analyzes all presumptive growth LTB tubes for fecal coliform using EC broth. Method 9221F–2014 *E. coli*; analyzes all presumptive growth LTB tubes for *E. coli* using EC–MUG. The number of positive tubes (BGLB, EC broth or EC–MUG) is used to determine the MPN. In response to public comment, EPA is clarifying that Method 9221E–2014 is approved for testing sewage sludge. In Table IA.1, EPA changed Footnote 11 from ‘approved’ to ‘recommended’ in the proposed rulemaking because the 2017 Methods Update Rule erroneously changed the footnote from ‘recommended’ to ‘approved.’ EPA is correcting this error and changing the footnote back to “recommended”. EPA has approved all biosolid methods listed in Table 1A.1 for parameter #1,

including those listed in Footnote 11. More method validation data is available for EPA Methods 1680 and 1681 than Standard Method 9221. EPA methods are recommended over 9221 and 9222, although all four methods are approved for biosolids.

- Standard Methods Method 9222 (B, D, I)-2015: Method 9222B–2015 Coliform (total); analyzes for total coliforms in non-potable waters by filtration through a 0.45- μ m membrane filter and plated on mEndo or LES Endo agar. Method 9222D–2015 Coliform (fecal); analyzes for fecal coliforms in non-potable waters by filtration through a 0.45- μ m membrane filter plated on mFC medium. Method 9222 I–2015 *E. coli*; membrane filtration (MF), analyzes presumptive positive filters from Method 9222B and 9222D using nutrient agar plates with MUG (NA–MUG) which are examined under a longwave UV lamp.

- Standard Methods Method 9223B–2016, *E. coli*, multiple tube/multiple well: This method analyzes non-potable waters for *E. coli* using commercially available enzyme substrate media that is mixed with the sample and placed in multiple tubes or multiple well trays, incubated and examined under ambient light for Coliform (total) and under a longwave UV lamp for *E. coli*.

- Standard Methods Method 9230 (B,C)-2013: Method 9230B–2013 (Fecal Streptococci) analyzes non-potable waters for streptococci using azide dextrose broth (ADB) Presumptive positive ADB tubes are confirmed by streaking onto bile esculin azide agar (BEA). Method 9230C–2013 Enterococci; analyzes non-potable waters by filtration through a 0.45- μ m membrane filter and plated on mE agar.

- Standard Methods Method 9230D–2013, Enterococci: This method analyzes non-potable waters using a hydrolyzable substrate (4-methylumbelliferyl- β -D-glucoside) to detect enterococci in a multiple-tube or a multi-well format.

EPA is promulgating the following changes to Table IB at 40 CFR part 136:

- Standard Methods Method 2540 series.

- Method 2540B–2015, total solids. A sample aliquot is evaporated in a pre-weighed evaporating dish at 103–105 °C. Method 2540C–2015 filterable residue (total dissolved solids). The sample aliquot is then filtered through a glass fiber filter, and the filtrate is evaporated on a pre-weighed dish to constant weight at 180 °C.

- Method 2540D–2015 non-filterable residue (total suspended solids). A sample aliquot is filtered through a pre-

weighed glass fiber filter which is then dried to constant weight at 103–105 °C.

c. Method 2540E–2015 volatile residue (fixed and volatile solids). The residue obtained from the determination of total (Method 2540B), filterable (Method 2540C) or non-filterable residue (Method 2540D) is ignited at 550 °C in a muffle furnace.

d. Method 2540F–2015 settleable residue (settleable solids). Settleable matter is measured with an Imhoff cone either volumetrically or gravimetrically.

2. Standard Methods Method 4500–CN⁻ (B–G)–2016, cyanide. Cyanides are measured after preliminary treatment of samples to remove interferences (4500–CN⁻ B). Manual distillation with magnesium chloride (MgCl₂) (4500–CN⁻ C) is followed by: Titration with silver nitrate (4500–CN⁻ D). Spectrophotometric measurement after cyanide in the alkaline distillate is converted to Cyanogen Chloride (4500–CN⁻ E). Potentiometric measurement using an ion selective electrode (4500–CN⁻ F). Cyanide amenable to chlorination (CATC) in which a portion of the sample is chlorinated at high pH and cyanide levels in the chlorinated sample are determined after manual distillation followed by titrimetric or spectrophotometric measurement. Amenable cyanide is calculated by the difference between the results for cyanide in the unchlorinated sample and the results for the chlorinated sample (4500–CN⁻ G).

3. Standard Methods Method 4500–NO₃⁻ D–2016. Nitrate (as nitrogen), measured using an ion-selective electrode that develops a potential across a thin, inert membrane holding in place a water-immiscible liquid ion exchanger.

4. Standard Methods Method 4500–NO₃⁻ (E, F, and H)–2016. Nitrate-nitrite (as nitrogen). Nitrate is reduced to nitrite using a cadmium-copper column, followed by diazotization to form a colored azo dye, which is measured by colorimetry either manually (4500–NO₃⁻ E) or automated (4500–NO₃⁻ F); or by reduction of nitrate to nitrite using hydrazine followed by automated colorimetric measurement of nitrite after diazotization (4500–NO₃⁻ H).

5. Standard Methods Method 4500–NO₃⁻ (E and F)–2016. Nitrite (as nitrogen). Colorimetric: bypasses the cadmium reduction step and measures nitrite after diazotization either by manual or automated colorimetric analysis.

6. Standard Methods Method 4500–O (B–F, and G)–2016. Measurement of oxygen (dissolved), using the Winkler iodometric titration procedure with modifications to eliminate or minimize

certain interferences if necessary, based on sample type (4500–O B through F), or by use of polarographic or galvanic membrane electrodes (4500–O G).

7. Standard Methods Method 5210 B–2016., Biochemical oxygen demand (BOD₅) and carbonaceous biochemical oxygen demand (CBOD₅), dissolved oxygen depletion: The BOD₅ test is an indirect measurement of organic matter. It measures the change in dissolved oxygen (DO) concentration caused by microorganisms as they degrade organic matter in a sample held in a stoppered bottle incubated for 5 days in the dark at 20 °C. Nitrification inhibition is recommended for secondary-effluent samples, samples seeded with secondary effluent, and polluted water because nitrogenous compounds can oxidize in such samples. When a nitrification inhibitor is added as directed in 5210B.5e, results are reported as CBOD₅.

8. Standard Methods Method 5310 (B, C)–2014. Total organic carbon (TOC), combustion, heated persulfate or UV persulfate oxidation. In method 5310 B–2014 Combustion, a sample aliquot is combusted, transported in a carrier gas stream and measured via a nondispersive infrared analyzer, or titrated coulometrically. In method 5310C–2014 Persulfate, UV, or heated-persulfate oxidation method, persulfate oxidizes organic carbon. The produced CO₂ is then purged and measured by either nondispersive infrared (NDIR) analyzer, coulometrically titrated, or separated from the liquid stream by a membrane that specifically allows CO₂ to pass into high-purity water where the change in the high-purity water's conductivity corresponds to the amount of CO₂ passing the membrane.

Lastly, EPA is promulgating one revision to a previously approved Standard Methods method for which the Standard Methods Committee has adopted updates. This modification includes minor changes to method procedures that do not affect the performance of the method. EPA is promulgating the following change to Table IA and Table IH at 40 CFR part 136:

Standard Methods Method 9221F–2014 is an acceptable method for detecting fecal coliforms and *E. coli* simultaneously. This method analyzes Coliform (fecal) and *E. coli* using EC broth with 4-methylumbelliferyl-β-D-glucuronide (EC–MUG) with inverted vials and is an MPN method

D. Changes to 40 CFR 136.3 To Include New Standard Methods Methods Based on Previously Approved Technologies

EPA is promulgating changes based on the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113. This provides that federal agencies and departments must use technical standards developed or adopted by the VCSBs if the use of these standards would not be inconsistent with applicable law or otherwise impracticable. These methods submitted by the Standards Methods Committee are consistent with other methods already approved at 40 CFR part 136.

EPA is adding Standard Methods Method 4500–CN⁻ N–2016 to Table IB for Cyanide, total. Cyanide is measured after preliminary treatment of samples and manual distillation with magnesium chloride (MgCl₂) followed by automated spectrophotometric measurement after conversion to Cyanogen Chloride. This method is similar to the currently approved EPA Method 335.4, USGS Method I–4302–85, and Lachat Method 10–204–00–1–X, and uses semi-automated spectrophotometric measurement of cyanide.

2. EPA is adding Standard Methods Method 4500–NO₃⁻ I–2016 to Table IB for combined nitrate-nitrite, nitrite and nitrate by subtraction. Nitrate is reduced to nitrite using a cadmium-copper column followed by diazotization to form an azo dye which is measured by colorimetry. The cadmium reduction column may be by-passed for measurement of nitrite only. The value obtained for nitrite may be subtracted from the value obtained for combined nitrate-nitrite to calculate the concentration of nitrate. This method is similar to the currently approved EPA Method 353.2, Standard Methods Method 4500–NO₃⁻ F–2011, ASTM Method D3867–04 (A), and USGS Method I–2545–90, and uses automated cadmium reduction and spectrophotometric measurement of nitrite.

3. EPA is adding Standard Methods Method 4500–NO₃⁻ J–2018 to Table IB for measurement of combined nitrate-nitrite, nitrite, and for measurement of nitrate by subtraction. Nitrate is reduced to nitrite by an enzymatic reaction. The nitrite is diazotized to yield an azo dye which is measured colorimetrically. The enzyme reduction step may be by-passed for measurement of nitrite singly. The value obtained for nitrite may be subtracted from the value obtained for combined nitrate-nitrite to calculate the concentration of nitrate.

This method is similar to the currently approved NECi Method N07-0003, USGS Method I-2547-11, and USGS Method I-2548-11.

4. EPA is adding Standard Methods Method 4500-O H-2016 to Table IB for dissolved oxygen. This method uses a luminescent-based sensor for measurement of dissolved oxygen. The method is similar to the currently approved Hach Method 10360, In-Situ Method 1002-8-2009, and ASTM Method D888-09 (C).

E. Changes to 40 CFR 136.3 To Include New Versions of Approved ASTM Methods

EPA is approving new versions of ASTM methods previously approved in 40 CFR part 136 for the reasons outlined in the first paragraph of Section IV.C of this preamble. These changes to currently approved ASTM methods in 40 CFR part 136 include minor clarifications and editorial changes, and in some instances, minor changes to method procedures. None of these changes will affect the performance of the method. The following describes the changes to current ASTM methods that EPA is adding to 40 CFR part 136. Each entry contains (in the following order): The ASTM method number (the last two digits in the method number represent the year ASTM published), the parameter, a brief description of the analytical technique, and a brief description of any procedural changes in this revision from the last approved version of the method. The methods listed below are organized according to the table at 40 CFR part 136 in which they appear.

EPA is promulgating the following changes to Table IB at 40 CFR part 136:

1. ASTM Method D511-14 (A, B), calcium and magnesium, titrimetric, (EDTA), AA direct aspiration. Method D511-14 A, titrimetric. The pH of the sample is adjusted to 10 (for calcium), then to 12-13 (for magnesium) and titrated with ethylenediamine tetraacetic acid (EDTA) to form complexes with calcium and magnesium ions which react with an indicator to form a colored product. The volume of titrant used to affect the color change is proportional to the concentrations of calcium and magnesium in the sample. Method D511-14 B, AA direct aspiration. The sample is acidified and analyzed by atomic absorption. The concentrations of calcium and magnesium in the samples are proportional to the amount of light absorbed during the analysis and are determined in comparison to a standard curve. This version EPA is

adding includes specifications for filter paper.

2. ASTM Method D512-12 chloride ion (A, B), titrimetric (mercuric nitrate), titration (silver nitrate). Method D512-12A, titrimetric mercuric nitrate. The sample is acidified and titrated with mercuric nitrate in the presence of a diphenylcarbazonebromophenol blue indicator. Method D512-12B, titrimetric silver nitrate. Sample pH is adjusted to phenolphthalein endpoint and titrated with silver nitrate in the presence of potassium chromate. The volume of titrant used to affect the color change in either method is proportional to the concentration of chloride in the sample. This version corrects one term in the chloride calculation.

3. ASTM Method D516-16, sulfate ion, turbidimetric. In this method, sulfate ions are converted to barium sulfate to form a suspension. The turbidity of the suspension is measured with a nephelometer, spectrophotometer, or photoelectric colorimeter, and compared to a standard curve to determine the sulfate concentration in the sample. This version adds specifications for filter paper.

4. ASTM Method D858-17 (A-C), manganese, atomic absorption (AA) direct aspiration, AA furnace. The sample is acid digested and analyzed by direct aspiration atomic absorption or graphite furnace atomic absorption. The concentration of manganese in the sample is proportional to the amount of light absorbed and is determined in comparison to a standard curve. There are no procedural changes.

5. ASTM Method D859-16, silica, colorimetric, manual. In this method, soluble silica in the sample is reacted with molybdate then reduced to form a blue complex in solution. The intensity of the blue complex is determined with a spectrophotometer or filter photometer and the concentration of silica is determined by comparison with a standard curve. There are no procedural changes.

6. ASTM Method D888-12 (A-C) dissolved oxygen, Winkler, electrode, luminescent-based sensor. Method D888-12A measures dissolved oxygen using the Winkler iodometric titration procedure. The volume of titrant used is proportional to the concentration of dissolved oxygen in the sample. Method D888-12B measures dissolved oxygen in the sample with an electrochemical probe that produces an electrical potential which is logarithmically proportional to the concentration of dissolved oxygen in the sample. Method D888-12C measures dissolved oxygen with a luminescence-based sensor probe

that employs frequency domain lifetime-based luminescence quenching and signal processing. This version adds information on a two-point calibration and updated performance information from an interlaboratory study to D888-12C.

7. ASTM Method D1067-16, acidity or alkalinity, electrometric endpoint or phenolphthalein endpoint; electrometric or colorimetric titration to pH 4.5, manual. The acidity or alkalinity of the sample is determined by titration to a specific pH endpoint which is determined by colorimetry or with a pH electrode. The acidity or alkalinity is proportional to the volume of titrant required to affect the pH change. There are no procedural changes.

8. ASTM Method D1068-15 (A-C), iron, AA direct aspiration; AA furnace; colorimetric (Phenanthroline): The sample is acid digested and analyzed by either direct aspiration atomic absorption, graphite furnace atomic absorption, or colorimetry. The concentration of iron in the sample is proportional to the amount of light absorbed and is determined in comparison to a standard curve. The version as promulgated includes specifications for filter paper.

9. ASTM Method D1126-17, hardness, titrimetric (EDTA). The pH of the sample is adjusted, and an indicator is added forming a red color. The mixture is titrated until the color changes from red to blue. The volume of titrant used to affect the color change is proportional to the hardness in the sample. There are no procedural changes.

10. ASTM Method D1179-16 (A, B); fluoride ion, manual distillation, electrode, manual. Method D1179A, manual distillation. The sample is distilled as hydrofluorosilic acid and determined by ion-selective electrode. Method D1179B, electrode. The fluoride ion is determined potentiometrically with an ion-selective electrode in conjunction without sample distillation. There are no procedural changes.

11. ASTM Method D1246-16, bromide ion, electrode. The bromide ion in the sample is determined potentiometrically with an ion-selective electrode, either through comparison to a standard curve or through a direct readout on the instrument. There are no changes to method procedures.

12. ASTM Method D1252-06 (A, B) (Reapproved 2012), chemical oxygen demand, titrimetric, spectrophotometric. This is the 2012 reapproval of the 2006 ASTM method. Method D1252-06A, titrimetric measures the loss of the hexavalent

dichromate ion by reflux digestion followed by titration. The chemical oxygen demand in the sample is determined by comparison to a standard curve. Method D1252–06B, spectrophotometric, uses a spectrophotometer to measure the loss of the hexavalent dichromate ion at 420 nm or the increase in the trivalent chromium ion at 600 nm, after closed digestion and determines the chemical oxygen demand by comparison to a standard curve. There are no procedural changes.

13. ASTM Method D1253–14, residual chlorine, amperometric direct. The concentration of chlorine in the sample is determined by titration with phenylarsine oxide, using an amperometric probe that responds to chlorine to determine when the titration is complete. The chlorine concentration in the sample is proportional to the volume of titrant used. There are no procedural changes.

14. ASTM Method D1426–15 (A, B), ammonia nitrogen, Nesslerization, electrode. Method D1426A, Nesslerization. An aliquot is Nesslerized, and the ammonia content determined colorimetrically. Method D1426B, electrode. Ammonia is potentiometrically determined using a gas-permeable ion-selective electrode, either through comparison to a standard curve or through a direct readout on the instrument using. A lengthy section of QC requirements was added to the Nesslerization procedure (D1426A) that parallels the QC discussion that was already in the B procedure. Both procedures added information on use of commercially prepared standards and filter paper.

15. ASTM Method D1687–17 (A–C), chromium (total) and dissolved hexavalent chromium, colorimetric (diphenyl-carbazide); AA direct aspiration; AA furnace. Method D1687–17A, chromium (dissolved) measures dissolved hexavalent chromium by reacting it with diphenyl-carbohydrazide to produce a reddish-purple color that is measured with a spectrophotometer or filter photometer. The concentration in the sample is proportional to the intensity of the color. Method D1687–17B, chromium (total). The sample is acid digested and analyzed by direct aspiration atomic absorption. Method D1687–17C, chromium (total). The sample is acid digested and analyzed by graphite furnace atomic absorption. The concentration of total chromium in the sample is proportional to the amount of light absorbed during the analysis and is determined in comparison to a standard curve. The changes mirror those for the

other metal methods. The QC frequencies for method blank, continuing calibration verification (CCV), continuing calibration blank (CCB), matrix spike, and duplicate analyses are now based on a laboratory-defined batch of up to 20 samples.

16. ASTM Method D1688–17 (A–C), copper, AA direct aspiration, AA furnace. The sample is acid digested and analyzed by direct aspiration atomic absorption (D1688–17A and B) or graphite furnace atomic absorption (D1688–17B). The concentration of copper in the sample is proportional to the amount of light absorbed and is determined in comparison to a standard curve. The changes mirror those for the other metal methods. The changes EPA is promulgating also clarify the requirements for a multi-point calibration by discussing it in the calibration section as well as the QC section of all three procedures. The QC frequencies for method blank, CCV, CCB, matrix spike, and duplicate analyses are now based on a laboratory-defined batch of up to 20 samples.

17. ASTM Method D1691–17 (A, B), zinc, AA direct aspiration. Method D1691–17A. The sample is acid digested and analyzed by direct aspiration atomic absorption. Method D1691–17B. The sample is processed by chelation-extraction and analyzed by atomic absorption. The concentration of zinc in the sample is proportional to the amount of light absorbed and is determined in comparison to a standard curve. The changes mirror those for the other metal methods. The QC frequencies for method blank, CCV, CCB, matrix spike, and duplicate analyses are now based on a laboratory-defined batch of up to 20 samples.

18. ASTM Method D1783–01 (A, B) (Reapproved 2012), phenols, manual distillation followed by manual colorimetric (4AAP). The sample is distilled, the distillate pH is adjusted to 10.0, and reacted with 4-aminoantipyrine to form a colored product. In Method D1783–01A, the colored product is extracted from the sample with chloroform and measured with a photometer at 460 nm. In Method D1783–01B, the colored product is measured without extraction, using a photometer at 510 nm. The concentration of phenolics is determined in comparison to a standard curve. There are no procedural changes.

19. ASTM Method D1886–14 (A–C), nickel AA direct aspiration, chelation extraction AA and AA furnace. Method D1886–14A. The sample is acid digested and analyzed by direct aspiration atomic absorption. Method D1886–14B. The sample is acid digested and the

nickel chelated and extracted. The extract is analyzed by direct aspiration atomic absorption. Method D1886–14C. The sample is acid digested and analyzed by graphite furnace atomic absorption. The concentration of nickel in the sample is proportional to the amount of light absorbed during the analysis and is determined in comparison to a standard curve. The changes mirror those for the other metal methods. The QC frequencies for method blank, CCV, CCB, matrix spike, and duplicate analyses are now based on a laboratory-defined batch of up to 20 samples.

20. ASTM Method D2036–09 (A, B) (Reapproved 2015), D2036–09 A (total cyanide). Manual distillation followed by gas diffusion amperometry, titrimetric, spectrophotometric, ion chromatography, ion selective electrode. D2036–09 B (available (amenable) cyanide) Manual distillation followed by titrimetric or spectrophotometric. The cyanide in the sample is distilled and trapped in a sodium hydroxide solution. Method D2036–09A, the cyanide is treated with strong acid and a catalyst during distillation and measured by titration, gas diffusion amperometry, spectrophotometry, ion-selective electrode, ion chromatography, or flow injection analysis. Method D2036–09B—cyanide amenable to chlorination is determined by comparing the results for one sample aliquot analyzed for total cyanide and a second aliquot that is treated with calcium hypochlorite prior to analysis by Method D2036–09A. There are no procedural changes.

21. ASTM Method D2972–15 (A–C), arsenic, colorimetric, AA gaseous hydride, AA furnace. The sample is digested with nitric and sulfuric acids. Method D2972–15A. Arsenic is trapped in a solution of silver diethyldithiocarbamate in pyridine which produces a red-colored product that is analyzed photometrically by comparison to a standard curve. Method D2972–15B. Arsenic in the digested sample is determined by hydride generation atomic absorption. Method D2972–15C. Arsenic in the digested sample is determined by graphite furnace atomic absorption. The changes mirror those for the other metal methods. The QC frequencies for method blank, CCV, CCB, matrix spike, and duplicate analyses are now based on a laboratory-defined batch of up to 20 samples.

22. ASTM Method D3223–17, total mercury, cold vapor, manual. Mercury in the sample is converted to the mercuric ion, which is reduced to elemental mercury, purged from the

sample, and analyzed by cold vapor atomic absorption. The changes mirror those for the other metals methods, but this version changes the acceptance limit for the CCV from 10% to 15% and adds a requirement for a CCB. Given that the most comparable EPA procedure, Method 245.1, does not include a CCV requirement or an acceptance limit, the change of the acceptance limit from 10% to 15% in the revised ASTM method represents a requirement that is more stringent than that required in EPA's procedure.

23. ASTM Method D3373-17, vanadium, AA furnace. The sample is digested with nitric acid and analyzed by graphite furnace atomic absorption. The concentration of vanadium in the sample is proportional to the amount of light absorbed during the graphite furnace atomic absorption analysis and is determined in comparison to a standard curve. The changes mirror those for the other metals methods. The changes clarify the requirements for a multi-point calibration by discussing it in the calibration section as well as the QC section of all three procedures. The QC frequencies for method blank, CCV, CCB, matrix spike, and duplicate analyses are now based on a laboratory-defined batch of up to 20 samples.

24. ASTM Method D3557-17 (A-D), cadmium, AA direct aspiration, voltammetry, AA furnace. Method D3557-17A—the sample is acid digested and analyzed by direct aspiration atomic absorption. Method D3557-17B the sample is acid digested, the digestate is chelated and extracted. The extract analyzed by direct aspiration atomic absorption. Method D3557-17C—the sample is acid digested and analyzed by differential pulse anodic stripping voltammetry. Method D3557-17D. The sample is digested with nitric acid and analyzed by graphite furnace atomic absorption. The concentration of cadmium in the sample is determined in comparison to a standard curve. The changes mirror those for the other metals methods. The changes also clarify requirements for a multi-point calibration by discussing it in the calibration section as well as the QC section of all three procedures. The QC frequencies for method blank, CCV, CCB, matrix spike, and duplicate analyses are now based on a laboratory-defined batch of up to 20 samples, as opposed to 10 samples previously.

25. ASTM Method D3558-15 (A-C), cobalt, AA direct aspiration, chelation extraction AA, and AA furnace. Method D3558-15A. The sample is acid digested and analyzed by direct aspiration atomic absorption. Method D3558-15B. The sample is acid digested,

chelated and extracted. The extract is analyzed by direct aspiration atomic absorption. Method D3558-15C. The sample is acid digested and analyzed by graphite furnace atomic absorption. The concentration of cobalt in the sample is proportional to the amount of light absorbed during the analysis and is determined in comparison to a standard curve. The changes mirror those for the other metals methods. The changes also clarify the requirements for a multi-point calibration by discussing it in the calibration section as well as the QC section of all three procedures. The QC frequencies for method blank, CCV, CCB, matrix spike, and duplicate analyses are now based on a laboratory-defined batch of up to 20 samples, as opposed to 10 samples previously.

26. ASTM Method D3559-15 (A-D), lead, AA direct aspiration, voltammetry, AA furnace. Method D3559-15A. The sample is acid digested and analyzed by direct aspiration atomic absorption. Method D3559-15B. The sample is acid digested, chelated and extracted. The extract is analyzed by direct aspiration atomic absorption. Method D3559-15C. The sample is acid digested and analyzed by differential pulse anodic stripping voltammetry. Method D3559-15D. The sample is digested with nitric acid and analyzed by graphite furnace atomic absorption. The changes mirror those for the other metals methods. The changes also clarify the requirements for a multi-point calibration by discussing it in the calibration section as well as the QC section of all three procedures. It also adds a new section with the QC requirements to the direct AA procedure that was already present in the AA furnace portion of this procedure (D3559-15 D).

27. ASTM Method D3590-17 (A, B), total Kjeldahl nitrogen, manual digestion and distillation or gas diffusion; semi-automated block digester colorimetric (distillation not required). Method D3590-17A. The sample is chemically processed to covert nitrogenous compounds to ammonia, then distilled or subjected to a gas diffusion system which releases the ammonia for analysis by colorimetry, titrimetry, or potentiometry. Method D3590-17B. The digestion and distillation are accomplished by a semi-automated system and the resulting ammonia is determined by colorimetry of the salicylate/nitroprusside Berthelot reaction product. This version changes the acceptance limit for the CCV from 10% to 15% and adds a requirement for a CCB. Given that neither the approved Standard Methods method for measuring ammonia after the TKN

digestion, nor the comparable EPA Method 350.1, include a CCV requirement or an acceptance limit, the change of the acceptance limit from 10% to 15% in the revised ASTM method represents a requirement that is more stringent than that required in other approved procedures.

28. ASTM Method D3645-15, beryllium (A, B), AA direct aspiration AA furnace. Method D3645-15A. The sample is acid digested and analyzed by direct aspiration atomic absorption. Method D3645-15B. The sample is digested with nitric acid and analyzed by graphite furnace atomic absorption. This version adds specifications for filter paper. The changes also clarify the requirements for a three-point calibration by discussing it in the calibration section as well as the QC section of both procedures. It also adds a new section with the QC requirements to the direct aspiration AA procedure that was already present in the AA furnace portion of this procedure (D3645-15B).

29. ASTM Method D3859-15 (A, B), selenium, AA gaseous hydride, AA furnace. Method D3859-15A. The selenium in the sample is converted to gaseous selenium hydride, which is then analyzed by flame atomic absorption. Method D3859-15B. The selenium in the sample is converted to gaseous selenium hydride and analyzed by graphite furnace atomic absorption. The changes to the gaseous hydride portion of the method clarify the requirement for a 6-point calibration curve by discussing it in the calibration section as well as the QC section. The version adds an updated discussion of block digesters. The QC frequencies for method blank, CCV, CCB, matrix spike, and duplicate analyses are now based on a laboratory-defined batch, as opposed to an otherwise undefined "batch." The GFAA portion contains similar editorial and technical changes. Technical changes also include specifications for filter paper. The calibration requirement for three standards has been clarified by discussing it in the calibration section as well as the QC section.

30. ASTM Method D3867-16 (A, B) nitrate-nitrite, nitrite and nitrate; automated cadmium reduction, manual cadmium reduction, bypass cadmium reduction and subtraction. The combination of nitrate and nitrite in the sample is determined by reducing the nitrate to nitrite using a cadmium-copper column, diazotizing and analyzing in either a manual or automated spectrophotometric system. A second aliquot of the sample can be analyzed without use of the cadmium

reduction column to determine the concentration of nitrate by difference. The changes add more detailed QC requirements, including specifically calling out the laboratory control sample (LCS), method blank, and matrix spike analyses. The 2016 version adds specifications for filter paper. It also changes the LCS frequency from 10% of samples to once per batch (up to 20) and sets the CCB and CCV frequencies at 10%.

31. ASTM Method D4190–15, dissolved elements and total recoverable elements, direct current plasma. The concentrations of various metal elements are determined by acidifying an aliquot of the sample and analyzing it by direct current plasma spectrometry, monitoring a specific wavelength of light for each element. There is one change that adds a requirement to run at least four calibration standards for all metals, as opposed to running four standards for only lithium to demonstrate linearity.

32. ASTM Method D4282–15, free cyanide, manual micro-diffusion and colorimetry. The sample is treated and allows for free cyanide to diffuse into a sodium hydroxide solution. An aliquot of that solution is treated to form a colored product that is measured with a spectrophotometer at 580 nm. There are no procedural changes.

33. ASTM Method D4327–17, inorganic anions (fluoride, bromide, chloride, nitrite, nitrate, orthophosphate, and sulfate), ion chromatography. An aliquot of the sample is injected into an ion chromatograph equipped with an anion exchange column and a conductivity detector. The anions are identified based on their retention times and concentrations are determined by comparison to a standard curve. Changes include updating the equipment and reagent descriptions to reflect more modern instrumentation, such as the use of hydroxide eluents and eluent regeneration systems.

34. ASTM Method D4382–18, barium, AA furnace. The sample is digested with nitric acid and analyzed by graphite furnace atomic absorption. The only procedural change is to the description of the hot block digester equipment. The new version specifies the capability to heat samples between 65 and 95 degrees C, instead of “approximately 95 degrees C.” That change recognizes the operational characteristics of hot block digesters that will experience a temperature drop below 95 degrees when samples are added. EPA has concluded that this should not adversely affect use of this method for barium.

35. ASTM Method D4658–15, sulfide ion, ion selective electrode. The sample is treated with a sulfide antioxidant buffer to create a highly alkaline solution. Sulfide in the sample is measured potentiometrically with an ion-selective electrode. There are no procedural changes.

36. ASTM Method D4839–03 (Reapproved 2017), total organic carbon; heated persulfate or UV persulfate oxidation. The sample is sparged with an inert gas to remove dissolved inorganic carbon and then treated with persulfate and either heat or UV radiation to convert organic carbon to carbon dioxide. The carbon dioxide is measured with an infra-red detector. There are no procedural changes.

37. ASTM Method D5257–17, dissolved hexavalent chromium, ion chromatography. The sample is filtered and buffered, and an aliquot injected into an ion chromatograph that separates hexavalent chromium from other ions. The eluent from the chromatograph is treated with an acidic solution of diphenylcarbohydrazide to form a violet-colored product that is measured with a photometric detector at 530 nm. The changes also include a few additional cautions and recommendations.

38. ASTM Method D5673–16, dissolved elements and total-recoverable elements, ICP/MS. The sample is acid digested and analyzed by inductively coupled plasma/mass spectrometry. Gold was added to the list of target analytes. Some of the changes address the analysis of gold.

39. ASTM Method D6508–15, inorganic anions (fluoride, bromide, chloride, nitrite, nitrate, orthophosphate, and sulfate), capillary ion electrophoresis with indirect UV detection. An aliquot of the sample is injected into a capillary ion electrophoresis instrument where the anions are separated in an applied electric field through a fused silica capillary. The analytes are detected by a UV detector and their concentrations are determined by comparison to a standard curve. There are no procedural changes.

40. ASTM Method D6888–16, available cyanide, flow injection and ligand exchange, followed by gas diffusion amperometry. An aliquot of the sample is introduced into a flow injection analysis instrument, where available cyanide is acidified to form hydrogen cyanide which diffuses through a hydrophobic gas diffusion membrane into an alkaline solution and is detected amperometrically with a silver electrode. This version adds a new mixed ligand exchange reagent, but

also retains the original two ligand reagents that had to be mixed together during the testing.

41. ASTM Method D6919–17, inorganic alkali and alkaline earth cations and ammonium (ammonium, calcium magnesium, potassium and sodium), ion chromatography. An aliquot of the sample is injected into an ion chromatograph equipped with a cation exchange column and a conductivity detector. The cations are identified based on their retention times and concentrations are determined by comparison to a standard curve. There are no procedural changes.

42. ASTM Method D7237–15 A, free cyanide, flow injection, followed by gas diffusion amperometry. An aliquot of the sample is introduced into a flow injection analysis instrument, where it mixes with a phosphate buffer to release hydrogen cyanide which diffuses through a hydrophobic gas diffusion membrane into an alkaline solution and is detected amperometrically with a silver electrode. There are a few additions and changes to the newer version of note. These include changing the applicable range of the method in Section 1.4 at the low end, from 2 to 500 µg/L to 5 to 500 µg/L. New information about interferences from floatation reagents has been added to Section 6.3. New materials in Section 8 discuss alternative reagents or concentrations.

43. ASTM Method D7284–13 (Reapproved 2017), total cyanide, manual distillation with MgCl₂ followed by flow injection, gas diffusion amperometry. The sample is distilled with acid and a magnesium chloride catalyst to release cyanide to a sodium hydroxide solution. An aliquot of the sodium hydroxide solution is introduced into a flow injection analysis instrument, where it is acidified, and the hydrogen cyanide diffuses through a hydrophobic gas diffusion membrane into an alkaline solution and is detected amperometrically with a silver electrode. There are no procedural changes.

44. ASTM Method D7511–12 (Reapproved 2017), total cyanide, segmented flow injection, in-line ultraviolet digestion, followed by gas diffusion amperometry. The sample is introduced into a segmented flow injection analysis instrument, where UV light releases cyanide from cyanide complexes. The sample is then acidified in the instrument and the produced cyanide gas is detected amperometrically with a silver electrode. There are no procedural changes.

45. ASTM Method D7573–09 (Reapproved 2017), total organic carbon,

combustion. The sample is sparged with an inert gas to remove dissolved inorganic carbon, acidified, and then combusted at high temperature convert organic carbon to carbon dioxide. The carbon dioxide is measured with an infra-red detector. There are no procedural changes.

EPA is promulgating the following changes to Table IC at 40 CFR part 136:

1. ASTM Method D7065–17, nonylphenol, bisphenol A, p-tert-octylphenol, nonylphenol monoethoxylate, nonylphenol diethoxylate, gas chromatography/mass spectrometry (GC/MS). The sample is extracted with methylene chloride and the extract is injected into a gas chromatograph-mass spectrometer. The target analytes are identified by retention time and mass spectra and quantified using internal standards and a calibration curve. There are a large number of editorial and structural changes in the document, and a new QC section has been added.

F. Changes to 40 CFR 136.3 To Include a New ASTM Method Based on Previously Approved Technologies

EPA is promulgating these changes in furtherance of the National Technology Transfer and Advancement Act of 1995 (NTTAA), Public Law 104–113, that provides that federal agencies and departments shall use technical standards developed or adopted by the VCSBs if compliance would not be inconsistent with applicable law or otherwise impracticable. This method submitted by ASTM is consistent with other already approved methods.

EPA is adding ASTM Method D7781–14 to Table IB for nitrate-nitrite, nitrite (bypass the enzymatic reduction step) and nitrate by subtraction. Nitrate is reduced to nitrite by an enzymatic reaction. The nitrite is diazotized to yield an azo dye which is measured colorimetrically. The enzyme reduction step may be by-passed for measurement of nitrite singly. The value obtained for nitrite may be subtracted from the value obtained for combined nitrate-nitrite to calculate the concentration of nitrate. This method is similar to the currently approved NECi Method N07–0003, USGS Method I–2547–11, and USGS Method I–2548–11.

G. Changes to 40 CFR 136.3 To Include New United States Geological Survey (USGS) Inorganic Methods Based on Previously Approved Technologies

1. EPA is adding USGS Method I–2057–85 titled “Anions, ion-exchange chromatographic, automated,” to Table IB for bromide. Method I–2057–85 is an ion chromatography method that lists

several target analytes: Bromide, chloride, fluoride, nitrate, nitrite, orthophosphate, and sulfate. These are the same target analytes found in EPA Methods 300.0 (Part A) and 300.1 (Part A). Both EPA methods are approved in 40 CFR part 136 for the target analytes listed in the methods. USGS Method I–2057–85 is similar to EPA Method 300.0, in that it uses ion chromatography with a sodium bicarbonate/sodium carbonate eluent and has the same target analyte list. The two methods specify different columns and eluent concentrations but rely on essentially the same underlying chemistry and determinative technique as other ion chromatography methods approved at 40 CFR part 136 for measurement of bromide. That is, the sample is introduced into an ion chromatograph. The anions of interest are separated and measured, using a system comprised of a guard column, analytical column, suppressor device, and conductivity detector.

2. EPA is adding USGS Method I–2522–90 titled “Nitrogen, ammonia, colorimetry, salicylate-hypochlorite, automated-segmented flow” to Table IB for ammonia. USGS Method I–2522–90 uses the same underlying chemistry and determinative technique as other methods approved at 40 CFR part 136 for measurement of ammonia. The method is similar to other approved methods, such as EPA Method 350.1, Standard Methods Method 4500–NH₃ G, and USGS Method I–4523–85, which rely on the Berthelot reaction. USGS Method I–2522–90 uses a modified version of the Berthelot reaction in which salicylate and hypochlorite react with ammonia in the presence of ferricyanide ions to form the salicylic analog of indophenol blue dye. The resulting color is directly proportional to the concentration of ammonia present and is measured using automated spectrophotometry. This is a well-documented modification to the Berthelot reaction used in EPA Method 351 and is specifically allowed in Table IB.

3. EPA is adding USGS Method I–2540–90 titled “Nitrogen, nitrite, colorimetry, diazotization, automated-segmented flow” to Table IB for nitrite. USGS Method I–2540–90 employs the same underlying chemistry and determinative technique as other methods approved at 40 CFR part 136 for measurement of nitrite. The method is similar to other methods approved at 40 CFR part 136 for measurement of nitrite, including USGS Method I–4540–85, which uses an automated-segmented flow analyzer (Technicon AA II). Method I–2540–90, nitrite reacts with

sulfanilamide under acidic conditions to form a diazo compound which is coupled with N-1-naphthylethylenediamine dihydrochloride to form a red compound, the absorbance of which is measured using an automated-segmented flow, spectrophotometry.

4. EPA is adding USGS Method I–2601–90 titled “Phosphorus, orthophosphate, colorimetry, phosphomolybdate, automated-segmented flow” to Table IB for orthophosphate. USGS Method I–2601–90 employs the same underlying chemistry and determinative technique as other methods approved in 40 CFR part 136 for measurement of orthophosphate. Orthophosphate reacts with ammonium molybdate in acidic solution to form phosphomolybdic acid, which upon reduction with ascorbic acid produces an intensely blue complex the absorbance of which is measured using automated spectrophotometry. Antimony potassium tartrate is added to increase the rate of reduction. The method is similar to other approved methods, such as USGS Method I–4601–85 which uses an automated-segmented flow analyzer (Technicon AA II). The submitted USGS Method I–2601–90 also uses an automated-segmented flow analyzer (Alpkem rapid flow analyzer). It should be noted that the approved USGS Method I–4601–85 has two parameter codes listed:

- a. Phosphorus, orthophosphate, dissolved, I–2601–85 (mg/L as P); and
- b. Phosphorus, orthophosphate, total, I–4601–85 (mg/L as P).

Although USGS Method I–4601–85 is listed in Table IB, samples to be used for measurement of orthophosphate are to be filtered upon collection as provided in Table II. Therefore, the correct parameter code listed for the method should have been I–2601–85. I–2601–90 is just an updated version of that method (parameter code). In Section 3—Interferences, USGS Method I–2601–85 states: “Because as phosphorus is easily adsorbed on sediment, the orthophosphate recovered from the supernatant solution above a water-suspended sediment after some time has elapsed may be less than the orthophosphate that would have been determined in the filtrate from a sample filtered at the time of collection. The amount recovered may also depend on the type of sediment (clay, sand, etc.).”

5. EPA is adding USGS Method I–4472–97 titled “Metals, Acid Digestion, Whole-Water Recoverable, inductively coupled plasma-mass spectrometry” to Table IB for certain

metals by ICP/MS. USGS Method I-4472-97 is an ICP/MS method that was previously listed under the same method number as the USGS ICP/AES Method I-4471-97 and was split out and assigned a unique method number by USGS in 2003. EPA is adding this to Table IB on the line for ICP/MS and replace USGS Method I-4471-97 as an approved method for measurement of the following 16 elements: Aluminum, antimony, barium, beryllium, cadmium, chromium, cobalt, copper, lead, manganese, molybdenum, nickel, selenium, silver, thallium and zinc. USGS Method I-4472-97 relies on the same underlying chemistry and determinative technique as other ICP/MS methods approved at 40 CFR part 136 for measurement of the same 16 elements (e.g., EPA Method 200.8 and Standard Methods Method 3125 B) where analytes in the sample are solubilized by gentle refluxing with acids and then measured using inductively coupled plasma-mass spectrometry.

H. Changes to 40 CFR 136.3 To Include New United States Geological Survey (USGS) Organic Methods Based on Previously Approved Technologies

1. EPA is adding USGS Method O-4127-96 titled "Determination of 86 Volatile Organic Compounds in Water by Gas Chromatography/Mass Spectrometry, Including Detections Less Than Reporting Limits" to Table IC for certain organic compounds. USGS Method O-4127-96 relies on the same underlying chemistry and determinative technique as other methods approved at 40 CFR part 136 for measurement of the analytes. Volatile organic compounds are extracted by purging with helium, collected on a sorbent trap, thermally desorbed, separated by a gas chromatographic capillary column, and finally determined by a quadrupole mass spectrometer operated in full-scan mode. Compound identification is confirmed by the gas chromatographic retention time and by the resultant mass spectrum, typically identified by three unique ions.

2. EPA is adding USGS Method O-4436-16 titled "Determination of Heat Purgeable and Ambient Purgeable Volatile Organic Compounds in Water by Gas Chromatography/Mass Spectrometry" to Table IC for certain organic compounds. USGS Method O-4436-16 relies on the same underlying chemistry and determinative technique as other methods approved at 40 CFR part 136 for measurement of the analytes. Volatile organic compounds are extracted from a water sample and compounds are trapped in a tube

containing suitable sorbent materials and then thermally desorbed into a capillary gas chromatographic column interfaced to a mass spectrometer system. Selected compounds are identified by using strict qualification criteria, which include analyzing standard reference materials and comparing retention times and relative ratios of the mass spectra. Compounds are quantitated using internal standard procedures.

I. Changes to 40 CFR 136.3 To Include Alternate Test Procedures (ATPs)

To promote method innovation, EPA maintains a program that allows method developers to apply for EPA review and potential approval of an alternative method to an existing EPA approved method. This ATP program is described for CWA applications at 40 CFR 136.4 and 136.5. EPA is promulgating three ATPs for nationwide use. Based on EPA's review, the performance of these ATPs is equally effective as other methods already approved for measurement. The ATP applicants supplied EPA with study reports that contain the data from their validation studies that support EPA's conclusion that the ATPs are equally effective to currently approved methods. These study reports and the letters documenting EPA's review are contained as supporting documents within the docket for this final rule. These new methods include: FIALab Method 100, "Determination of Inorganic Ammonia by Continuous Flow Gas Diffusion and Fluorescence Detector Analysis," MACHEREY-NAGEL GmbH and Co. Method 036/038 NANOCOLOR® COD LR/HR, "Spectrophotometric Measurement of Chemical Oxygen Demand in Water and Wastewater," and Micrology Laboratories, LLC. KwikCount™ EC Medium *Escherichia coli* (*E. coli*) enzyme substrate test, "Rapid Detection of *E. coli* in Beach Water by KwikCount™ EC Membrane Filtration." Descriptions of these new methods are as follows:

1. FIALab Instruments, Inc. Method 100, "Determination of Inorganic Ammonia by Continuous Flow Gas Diffusion and Fluorescence Detector Analysis," dated April 4, 2018 (FIALab Instruments, Inc. 2018a). FIALab Method 100 uses automated flow injection analysis with gas diffusion and fluorescence detector analysis to determine concentrations of ammonia in wastewater, ambient water, and Kjeldahl digestates. FIALab Method 100 can be obtained from FIALab Instruments, Inc., 2151 N Northlake

Way, Seattle, WA 98103. Telephone: 425-376-0450.

2. MACHEREY-NAGEL GmbH and Co. Method 036/038 NANOCOLOR® COD LR/HR, "Spectrophotometric Measurement of Chemical Oxygen Demand in Water and Wastewater," Revision 1.5, dated, May 2018 (MACHEREY-NAGEL GmbH and Co. 2018a). MACHEREY-NAGEL Method 036/038 NANOCOLOR® COD LR/HR is a manual method that uses spectrophotometry to measure chemical oxygen demand in wastewater. MACHEREY-NAGEL GmbH and Co. Method 036/038 NANOCOLOR® COD LR/HR, can be obtained from MACHEREY-NAGEL GmbH and Co., 2850 Emrick Blvd., Bethlehem, PA 18020. Telephone: 888-321-6224.

3. Micrology Laboratories LLC. KwikCount™ EC Medium *E. coli* enzyme substrate test, "Rapid Detection of *E. coli* in Beach Water by KwikCount™ EC Membrane Filtration" uses a membrane filtration procedure for rapid detection and enumeration of *E. coli* in ambient water. The KwikCount™ EC Medium *E. coli* enzyme substrate test can be obtained from Micrology Laboratories, LLC, 1303 Eisenhower Drive, Goshen, IN 46526. Telephone: 574-533-3351.

J. Changes to 40 CFR 136.3, Tables IA, IB, and IH

EPA is promulgating the following changes to 40 CFR 136.3, Tables IA and IH:

1. Table IA: Moving Colilert-18 from Parameter #1 Coliform (fecal), number per 100 mL or number per gram dry weight, to Parameter #2 Coliform (fecal), (number per 100 mL), to eliminate confusion as to whether it is approved for sewage sludge in addition to wastewater.

2. Table IA: Adding *E. coli*, number per 100 mL – MF, two-step, Standard Methods Method 9222 B/9222 I, to the table along with footnote 31 "Subject coliform positive samples determined by 9222 B-2015 or other membrane filter procedure to 9222 I-2015 using NA-MUG media." The method was inadvertently omitted from Table IA when Table IA was split into two tables (IA and IH) in an earlier rulemaking; the addition corrects that error.

3. Table IA: Revising Parameter #2 Coliform (fecal), deleting "in presence of chlorine," number per 100 mL. The phrase "in the presence of chlorine" caused confusion because the methods cited were the same for the analyte/matrix combination that did not state "in the presence of chlorine." The approved methods did not change.

4. Table IA: Deleting Parameter #4 Coliform (total) in presence of chlorine, number per 100 mL. Except for “MF with enrichment,” all the methods were duplicative (e.g., Parameters #3 and #4). No approved methods for coliform (total) were removed from Table IA.

5. Table IH: Deleting Parameters #2 Coliform (fecal) in presence of chlorine, number per 100 mL and #4 Coliform (total) in presence of chlorine, number per 100 mL. Except for “MF with enrichment” for coliform (total), all the methods were duplicative (e.g., Parameters #1 and #2). In addition to the methods being duplicative, Table IH is for ambient water which would not be expected to contain chlorine. No approved methods for coliform (fecal) or coliform (total) were removed from Table IH. The remaining parameters are renumbered.

6. Tables IA and IH: Revising footnote 13 to Table IA and footnote 12 to Table IH as follows “These tests are collectively known as defined enzyme substrate tests.” The remaining text, “where, for example, a substrate is used to detect the enzyme β -glucuronidase produced by *E. coli*” has been deleted because the example has caused some confusion to stakeholders.

7. Tables IA and IH: Adding Quanti-Tray®/2000 as an option to footnotes 13 (IH), 15 (IH), 16 (IA) and 18 (IA). The addition of Quanti-Tray®/2000 is to address matrices with high bacterial concentrations and to ensure Tables IA and IH are accurate and consistent.

8. Tables IA and IH: Adding footnote 30 to Table IA and footnote 27 to Table IH to specify a verification procedure. The footnotes contain the following language: “On a monthly basis, at least ten sheen colonies from positive samples must be verified using Lauryl Tryptose Broth and brilliant green lactose bile broth, followed by count adjustment based on these results; and representative non-sheen colonies should be verified using Lauryl Tryptose Broth. Where possible, verifications should be done from randomized sample sources.” Adding the footnotes addresses the change in Standard Methods Method 9222 B–2015 that stated that five typical and five atypical colonies should be verified per membrane, which could be burdensome to laboratories analyzing samples other than drinking water. In most cases, analysis of ambient waters and wastewaters could result in multiple plates per sample with typical and atypical colonies, whereas drinking water analyses would seldom result in any typical or atypical colonies. In addition, the language in footnotes 29 (IA) and 26 (IH), was revised as follows

“the medium” was replaced with “positive samples” for clarity and consistency.

9. Tables IA and IH: Adding footnote 32 to Table IA and footnote 30 to Table IH. The footnotes contain the following language “Verification of colonies by incubation of BHI agar at 10 ± 0.5 °C for 48 ± 3 h is optional.” As per the Errata to the 23rd Edition of Standard Methods for the Examination of Water & Wastewater, “Growth on a BHI agar plate incubated at 10 ± 0.5 °C for 48 ± 3 h is further verification that the colony belongs to the genus *Enterococcus*.”

10. Updating the Aquatic Toxicity Table to include the editorial correction from *pulex* to *pulex* and adding the common names of the genus and species.

11. Table IH: Deleting “or number per gram dry weight” from Parameter #1. Table IH is specifically for ambient waters, which does not require reporting results on a per gram dry weight basis.

12. Table IH: Adding the Alternate Test Procedure KwikCount™ EC for *E. coli*, number per 100 mL under “Other.”

13. Table IH: Adding EPA Method 1623.1 for Parameters 6 and 7. EPA Method 1623.1 includes updated acceptance criteria for IPR, OPR, and MS/MSD, and clarifications and revisions based on the use of EPA Method 1623 and technical support questions over the past 19 years. EPA is approving the use of both methods 1623 and 1623.1 for Parameters 6 and 7.

14. Table IH: Deleting footnote 5, “Because the MF technique usually yields low and variable recovery from chlorinated wastewaters, the Most Probable Number method will be required to resolve any controversies.” Table IH is specifically for ambient waters, so the footnote is not applicable. The remaining footnotes are renumbered accordingly.

15. Table IH: Revising footnote 20, to reference only EPA Method 1604. The literature reference was deleted from the footnote because it resulted in confusion as to whether EPA Method 1604 provided all the necessary information required by stakeholders to conduct analyses of ambient waters under the CWA.

K. Changes to Table II at 40 CFR 136.3(e) to Required Containers, Preservation Techniques, and Holding Times

EPA is updating footnote 6 to the preservation and holding time requirements for cyanide to cite the latest version of ASTM method D7365–09a that was reapproved in 2015. The recommended sampling and preservation procedures in the ASTM

method have not changed since 2009, but the change to footnote 6 will simplify identification of the current method that is available from ASTM International.

EPA is adding a call-out to footnote 9 to the preservation and holding time requirements for the purgeable halocarbons entry. This will allow the flexibility to collect a single sample with no acidification to be used for analysis of both purgeable halocarbons and purgeable aromatic hydrocarbons within seven days of collection, or to collect a single sample with acidification to be used for analysis of both purgeable halocarbons (except 2–CEVE) and purgeable aromatic hydrocarbons within the 14-day maximum holding time specified in Table II for both classes of compounds. The added flexibility is consistent with historical requirements for preservation in 40 CFR part 136 and holding time requirements in other EPA program methods, such as the SW–846 methods in the Office of Land and Emergency Management. This is part of EPA’s ongoing effort to harmonize methods between EPA programs, as requested by the Environmental Laboratory Advisory Board (ELAB).

Footnote 9 to Table II states: “If the sample is not adjusted to pH 2, then the sample must be analyzed within seven days of sampling.”

L. Changes to 40 CFR 136.6 Method Modifications and Analytical Requirements

In response to requests from ELAB and the Independent Laboratories Institute, EPA is adding a new paragraph (b)(4)(xviii) to 40 CFR 136.6 that explicitly allows the use of closed-vessel microwave digestion as a modification to the approved metals digestion procedure that does not require prior approval. Microwave digestion has the same fundamental chemistry as a hot plate digestion, both the microwave and hot plate serve the same function as heat sources.

VI. Statutory and Executive Order Reviews

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This rule is not a significant regulatory action and was therefore not submitted to the Office of Management and Budget (OMB) for interagency review under this E.O.

B. Paperwork Reduction Act

This action does not impose an information collection burden under the

Paperwork Reduction Act. This rule does not impose any information collection, reporting, or recordkeeping requirements. This rule merely adds or revises CWA test procedures.

C. Regulatory Flexibility Act

I certify that this action would not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act. This action will not impose any requirements on small entities. This action would approve new and revised versions of CWA testing procedures. Generally, these changes have a positive impact on small entities by increasing method flexibility, thereby allowing entities to reduce costs by choosing more cost-effective methods. In general, EPA expects the final revisions will lead to few, if any, increased costs. As explained previously, most of the changes clarify or improve the instructions in the method, update the technology used in the method, improve the QC instructions, make editorial corrections, or reflect the most recent approval year of an already approved method. In some cases, they would add alternatives to currently approved methods for a particular analyte (e.g., Method N07-0003 for Nitrate Reductase Nitrate-Nitrogen Analysis). Because these methods would be alternatives rather than requirements, there are no direct costs associated with this proposal. EPA finalized methods that would be incorporated by reference. If a permittee elected to use these methods, they could incur a small cost associated with obtaining these methods from the listed sources. See Section IV.B of this preamble.

D. Unfunded Mandates Reform Act

This action does not contain any unfunded mandate as described in the Unfunded Mandates Reform Act, 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local or tribal governments or the private sector.

E. Executive Order 13132: Federalism

This final rule does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

F. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This final rule does not have tribal implications as specified in Executive Order 13175. This rule merely approves new and revised versions of test procedures. EPA has concluded that the final rule would not lead to any costs to any tribal governments, and in the event there are any, EPA projects they would be minimal. Thus, Executive Order 13175 does not apply to this action.

G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks

EPA interprets Executive Order 13045 as applying only to those regulatory actions that concern environmental health or safety risks that EPA has reason to believe may disproportionately affect children, per the definition of “covered regulatory action” in section 2-202 of the Executive Order. This action is not subject to Executive Order 13045 because it does not concern an environmental health risk or safety risk.

H. Executive Order 13211: Actions That Significantly Affect Energy Supply, Distribution, or Use

This action is not subject to Executive Order 13211 because it is not a significant regulatory action under Executive Order 12866.

I. National Technology Transfer and Advancement Act of 1995

This action involves technical standards. EPA is approving the use of technical standards developed and recommended by the Standard Methods Committee and ASTM International for use in compliance monitoring where EPA determined that those standards meet the needs of CWA programs. As described above, the final rule is consistent with the NTTAA.

J. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

EPA has concluded that this action will not have potential disproportionately high and adverse human health or environmental effects on minority, low-income or indigenous populations.

L. Congressional Review Act

This action is subject to the Congressional Review Act and EPA will submit a rule report to each House of the Congress and to the Comptroller General of the United States. This action

is not a “major rule” as defined by 5 U.S.C. 804(2).

List of Subjects in 40 CFR Part 136

Environmental protection, Incorporation by reference, Reporting and recordkeeping requirements, Test procedures, Water pollution control.

Michael S. Regan,
Administrator.

For the reasons set out in the preamble, the EPA amends 40 CFR part 136 as follows:

PART 136—GUIDELINES ESTABLISHING TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS

■ 1. The authority citation for part 136 continues to read as follows:

Authority: Secs. 301, 304(h), 307 and 501(a), Pub. L. 95-217, 91 Stat. 1566, *et seq.* (33 U.S.C. 1251, *et seq.*) (the Federal Water Pollution Control Act Amendments of 1972 as amended by the Clean Water Act of 1977).

■ 2. Amend § 136.3:

■ a. In paragraph (a):

■ i. In the introductory text, in the seventh sentence, by removing the word “year” and adding in its place the word “date”, and removing from the last sentence the text “(paragraph (c) of this section, in § 136.5(a) through (d) or 40 CFR 401.13)” and adding in its place the text “paragraph (c) of this section, § 136.5(a) through (d) or 40 CFR 401.13,” respectively;

■ ii. By revising tables IA, IB, IC, and IH;

■ b. In paragraph (b) by:

■ i. Revising the introductory text; paragraph (b)(8) introductory text, and paragraphs (b)(8)(ix) through (xv);

■ ii. Adding paragraph (b)(8)(xvi);

■ iii. Revising paragraphs (b)(10)(xiv), (xxxix), (xliv), (xlv), (lii), (liv), and (lxvii) through (lxx), (b)(15)(v), (vi), (viii) through (xiii), (xv) through (xix), (xxi) through (xxvi), (xxxix), (xxxiv), (xxxv), (xxxvii), (xxxix) through (xliii), (xlv) through (l), (lii), (liv), (lv), (lviii), (lxi) through (lxvi), (lxviii), and (lxix);

■ iv. Adding paragraph (b)(15)(lxx);

■ v. Redesignating paragraphs (b)(25) through (36) as paragraphs (b)(28) through (39);

■ vi. Redesignating paragraphs (b)(19) through (24) as paragraphs (b)(20) through (25);

■ vii. Adding new paragraphs (b)(19), (26), and (27);

■ viii. Revising the newly redesignated paragraphs (b)(38)(ii) through (xxi);

■ ix. Adding paragraphs (b)(38)(xxii) and (xxiii); and

■ c. By revising table II in paragraph (e).

The revisions and additions read as follows:

§ 136.3 Identification of test procedures.

* * * * *

TABLE IA—LIST OF APPROVED BIOLOGICAL METHODS FOR WASTEWATER AND SEWAGE SLUDGE

Parameter and units	Method ¹	EPA	Standard methods	AOAC, ASTM, USGS	Other
Bacteria					
1. Coliform (fecal), number per 100 mL or number per gram dry weight.	Most Probable Number (MPN), 5 tube, 3 dilution, or.	p. 132, ³ 1680, ^{11 15} 1681 ^{11 20} .	9221 E–2014.		
2. Coliform (fecal), number per 100 mL	Membrane filter (MF) ²⁵ , single step MPN, 5 tube, 3 dilution, or	p. 124 ³ p. 132 ³	9222 D–2015 ²⁹ 9221 E–2014; 9221 F–2014 ³³ .	B–0050–85 ⁴ .	
	Multiple tube/multiple well, or				Colilert-18 [®] , ^{13 18 28}
3. Coliform (total), number per 100 mL	MF ²⁵ , single step ⁵ MPN, 5 tube, 3 dilution, or	p. 124 ³ p. 114 ³	9222 D–2015 ²⁹ . 9221 B–2014.		
	MF ²⁵ , single step or two step	p. 108 ³	9222 B–2015 ³⁰	B–0025–85 ⁴ .	
	MF ²⁵ , with enrichment	p. 111 ³	9222 B–2015 ³⁰ .		
4. <i>E. coli</i> , number per 100 mL	MPN ^{68 16} multiple tube, or		9221 B2014/9221 F–2014 ^{12 14 33} .		
	multiple tube/multiple well, or		9223 B–2016 ¹³	991.15 ¹⁰	Colilert [®] ^{13 18} Colilert-18 [®] ^{13 17 18}
	MF ^{25 6 7 8} , two step, or		9222 B–2015/9222 I–2015 ³¹ .		
5. Fecal streptococci, number per 100 mL.	Single step	1603 ²¹			m-ColiBlue24 [®] , ¹⁹
	MPN, 5 tube, 3 dilution, or	p. 139 ³	9230 B–2013.		
6. Enterococci, number per 100 mL	MF ² , or	p. 136 ³	9230 C–2013 ³²	B–0055–85 ⁴ .	
	Plate count	p. 143 ³ .			
	MPN ⁶⁸ , multiple tube/multiple well, or	p. 139 ³	9230 B–2013. 9230 D–2013	D6503–99 ⁹	Enterolert [®] , ^{13 23}
	or				
	MF ^{25 6 7 8} single step or	1600 ²⁴	9230 C–2013 ³² .		
7. <i>Salmonella</i> , number per gram dry weight ¹¹ .	Plate count	p. 143 ³ .			
	MPN multiple tube	1682 ²² .			
Aquatic Toxicity					
8. Toxicity, acute, fresh water organisms, LC ₅₀ , percent effluent.	Water flea, Cladoceran, <i>Ceriodaphnia dubia</i> acute.	2002.0 ²⁵ .			
	Water fleas, Cladocerans, <i>Daphnia pulex</i> and <i>Daphnia magna</i> acute.	2021.0 ²⁵ .			
	Fish, Fathead minnow, <i>Pimephales promelas</i> , and Bannerfin shiner, <i>Cyprinella leedsii</i> , acute.	2000.0 ²⁵ .			
	Fish, Rainbow trout, <i>Oncorhynchus mykiss</i> , and brook trout, <i>Salvelinus fontinalis</i> , acute.	2019.0 ²⁵ .			
9. Toxicity, acute, estuarine and marine organisms of the Atlantic Ocean and Gulf of Mexico, LC ₅₀ , percent effluent.	Mysid, <i>Mysidopsis bahia</i> , acute	2007.0 ²⁵ .			
	Fish, Sheepshead minnow, <i>Cyprinodon variegatus</i> , acute.	2004.0 ²⁵ .			
	Fish, Silverside, <i>Menidia beryllina</i> , <i>Menidia menidia</i> , and <i>Menidia peninsulae</i> , acute.	2006.0 ²⁵ .			
10. Toxicity, chronic, fresh water organisms, NOEC or IC ₂₅ , percent effluent.	Fish, Fathead minnow, <i>Pimephales promelas</i> , larval survival and growth.	1000.0 ²⁶ .			
	Fish, Fathead minnow, <i>Pimephales promelas</i> , embryo-larval survival and teratogenicity.	1001.0 ²⁶ .			
	Water flea, Cladoceran, <i>Ceriodaphnia dubia</i> , survival and reproduction.	1002.0 ²⁶ .			
	Green alga, <i>Selenastrum capricornutum</i> , growth.	1003.0 ²⁶ .			
11. Toxicity, chronic, estuarine and marine organisms of the Atlantic Ocean and Gulf of Mexico, NOEC or IC ₂₅ , percent effluent.	Fish, Sheepshead minnow, <i>Cyprinodon variegatus</i> , larval survival and growth.	1004.0 ²⁷ .			
	Fish, Sheepshead minnow, <i>Cyprinodon variegatus</i> , embryo-larval survival and teratogenicity.	1005.0 ²⁷ .			
	Fish, Inland silverside, <i>Menidia beryllina</i> , larval survival and growth.	1006.0 ²⁷ .			
	Mysid, <i>Mysidopsis bahia</i> , survival, growth, and fecundity.	1007.0 ²⁷ .			
	Sea urchin, <i>Arbacia punctulata</i> , fertilization.	1008.0 ²⁷ .			

Table IA notes:

¹ The method must be specified when results are reported.

² A 0.45-µm membrane filter (MF) or other pore size certified by the manufacturer to fully retain organisms to be cultivated and to be free of extractables which could interfere with their growth.

³ Microbiological Methods for Monitoring the Environment, Water and Wastes, EPA/600/8-78/017. 1978. U.S. EPA.

⁴ U.S. Geological Survey Techniques of Water-Resource Investigations, Book 5, Laboratory Analysis, Chapter A4, Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples. 1989. USGS.

⁵ Because the MF technique usually yields low and variable recovery from chlorinated wastewaters, the Most Probable Number method will be required to resolve any controversies.

⁶ Tests must be conducted to provide organism enumeration (density). Select the appropriate configuration of tubes/filtrations and dilutions/volumes to account for the quality, character, consistency, and anticipated organism density of the water sample.

⁷ When the MF method has been used previously to test waters with high turbidity, large numbers of noncoliform bacteria, or samples that may contain organisms stressed by chlorine, a parallel test should be conducted with a multiple-tube technique to demonstrate applicability and comparability of results.

⁸ To assess the comparability of results obtained with individual methods, it is suggested that side-by-side tests be conducted across seasons of the year with the water samples routinely tested in accordance with the most current *Standard Methods for the Examination of Water and Wastewater* or EPA alternate test procedure (ATP) guidelines.

⁹ Annual Book of ASTM Standards-Water and Environmental Technology, Section 11.02. 2000, 1999, 1996. ASTM International.

¹⁰ Official Methods of Analysis of AOAC International. 16th Edition, 4th Revision, 1998. AOAC International.

¹¹ Recommended for enumeration of target organism in sewage sludge.

¹² The multiple-tube fermentation test is used in 9221B.2-2014. Lactose broth may be used in lieu of lauryl tryptose broth (LTB), if at least 25 parallel tests are conducted between this broth and LTB using the water samples normally tested, and this comparison demonstrates that the false-positive rate and false-negative rate for total coliform using lactose broth is less than 10 percent. No requirement exists to run the completed phase on 10 percent of all total coliform-positive tubes on a seasonal basis.

¹³ These tests are collectively known as defined enzyme substrate tests.

¹⁴ After prior enrichment in a presumptive medium for total coliform using 9221B.2-2014, all presumptive tubes or bottles showing any amount of gas, growth or acidity within 48 h ± 3 h of incubation shall be submitted to 9221F-2014. Commercially available EC-MUG media or EC media supplemented in the laboratory with 50 µg/mL of MUG may be used.

¹⁵ Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation Using Lauryl-Tryptose Broth (LTB) and EC Medium, EPA-821-R-14-009. September 2014. U.S. EPA.

¹⁶ Samples shall be enumerated by the multiple-tube or multiple-well procedure. Using multiple-tube procedures, employ an appropriate tube and dilution configuration of the sample as needed and report the Most Probable Number (MPN). Samples tested with Colilert® may be enumerated with the multiple-well procedures, Quanti-Tray® or Quanti-Tray®/2000 and the MPN calculated from the table provided by the manufacturer.

¹⁷ Colilert-18® is an optimized formulation of the Colilert® for the determination of total coliforms and *E. coli* that provides results within 18 h of incubation at 35 °C rather than the 24 h required for the Colilert® test and is recommended for marine water samples.

¹⁸ Descriptions of the Colilert®, Colilert-18®, Quanti-Tray®, and Quanti-Tray®/2000 may be obtained from IDEXX Laboratories, Inc.

¹⁹ A description of the mColiBlue24® test is available from Hach Company.

²⁰ Method 1681: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation Using A-1 Medium, EPA-821-R-06-013. July 2006. U.S. EPA.

²¹ Method 1603: *Escherichia coli* (*E. coli*) in Water by Membrane Filtration Using Modified Membrane-Thermotolerant *Escherichia coli* Agar (modified mTEC), EPA-821-R-14-010. September 2014. U.S. EPA.

²² Method 1682: *Salmonella* in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis (MSRV) Medium, EPA-821-R-14-012. September 2014. U.S. EPA.

²³ A description of the Enterolert® test may be obtained from IDEXX Laboratories Inc.

²⁴ Method 1600: Enterococci in Water by Membrane Filtration Using Membrane-Enterococcus Indoxyl-β-D-Glucoside Agar (mEI), EPA-821-R-14-011. September 2014. U.S. EPA.

²⁵ Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-821-R-02-012. Fifth Edition, October 2002. U.S. EPA; and U.S. EPA Whole Effluent Toxicity Methods Errata Sheet, EPA 821-R-02-012-ES. December 2016.

²⁶ Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms, EPA-821-R-02-013. Fourth Edition, October 2002. U.S. EPA; and U.S. EPA Whole Effluent Toxicity Methods Errata Sheet, EPA 821-R-02-012-ES. December 2016.

²⁷ Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, EPA-821-R-02-014. Third Edition, October 2002. U.S. EPA; and U.S. EPA Whole Effluent Toxicity Methods Errata Sheet, EPA 821-R-02-012-ES. December 2016.

²⁸ To use Colilert-18® to assay for fecal coliforms, the incubation temperature is 44.5 ± 0.2 °C, and a water bath incubator is used.

²⁹ On a monthly basis, at least ten blue colonies from positive samples must be verified using Lauryl Tryptose Broth and EC broth, followed by count adjustment based on these results; and representative non-blue colonies should be verified using Lauryl Tryptose Broth. Where possible, verifications should be done from randomized sample sources.

³⁰ On a monthly basis, at least ten sheen colonies from positive samples must be verified using lauryl tryptose broth and brilliant green lactose bile broth, followed by count adjustment based on these results; and representative non-sheen colonies should be verified using lauryl tryptose broth. Where possible, verifications should be done from randomized sample sources.

³¹ Subject coliform positive samples determined by 9222 B-2015 or other membrane filter procedure to 9222 I-2015 using NA-MUG media.

³² Verification of colonies by incubation of BHI agar at 10 ± 0.5 °C for 48 ± 3 h is optional. As per the Errata to the 23rd Edition of *Standard Methods for the Examination of Water and Wastewater* "Growth on a BHI agar plate incubated at 10 ± 0.5 °C for 48 ± 3 h is further verification that the colony belongs to the genus *Enterococcus*."

³³ 9221 F.2-2014 allows for simultaneous detection of *E. coli* and thermotolerant fecal coliforms by adding inverted vials to EC-MUG; the inverted vials collect gas produced by thermotolerant fecal coliforms.

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES

Parameter	Methodology ⁵⁸	EPA ⁶²	Standard methods ⁶⁴	ASTM	USGS/AOAC/other
1. Acidity, as CaCO ₃ , mg/L.	Electrometric endpoint or phenolphthalein endpoint.	.....	2310 B-2011	D1067-16	I-1020-85. ²
2. Alkalinity, as CaCO ₃ , mg/L.	Electrometric or Colorimetric titration to pH 4.5, Manual.	.....	2320 B-2011	D1067-16	973.43, ³ I-1030-85. ²
3. Aluminum—Total, ⁴ mg/L.	Automatic	310.2 (Rev. 1974) ¹ ..	.....	.....	I-2030-85. ²
	Digestion, ⁴ followed by any of the following:	.....	.....	.....	.....
	AA direct aspiration ³⁶ .....	.....	3111 D-2011 or 3111 E-2011.	.....	I-3051-85. ²
	AA furnace .....	.....	3113 B-2010.	.....	.....
	STGFAA	200.9, Rev. 2.2 (1994)/	.....	.....	.....
4. Ammonia (as N), mg/L.	ICP/AES ³⁶	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B-2011	D1976-12	I-4471-97. ⁵⁰
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B-2011	D5673-16	993.14, ³ I-4472-97. ⁸¹
	Direct Current Plasma (DCP) ³⁶ .....	.....	.....	D4190-15	See footnote. ³⁴
	Colorimetric (Eriochrome cyanine R) .....	.....	3500-Al B-2011.	.....	.....
	Manual distillation ⁶ or gas diffusion (pH > 11), followed by any of the following:	350.1, Rev. 2.0 (1993).	4500-NH ₃ B-2011 ...	.....	973.49. ³
Nesslerization .....	.....	.....	.....	D1426-15 (A)	973.49, ³ I-3520-85. ²
	Titration .....	.....	4500-NH ₃ C-2011.	.....	.....
	Electrode .....	.....	4500-NH ₃ D-2011 or E-2011.	D1426-15 (B).	.....

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁸⁴	ASTM	USGS/AOAC/other					
5. Antimony—Total, ⁴ mg/L.	Manual phenate, salicylate, or other substituted phenols in Berthelot reaction-based methods.	.....	4500-NH ₃ F-2011 ...	.....	See footnote. ⁶⁰			
	Automated phenate, salicylate, or other substituted phenols in Berthelot reaction-based methods.	350.1, ³⁰ Rev. 2.0 (1993).	4500-NH ₃ G-2011 4500-NH ₃ H-2011.	.....	I-4523-85, ² I-2522-90. ⁸⁰				
	Automated electrode	.....	.....	D6919-17.	See footnote. ⁷			
	Ion Chromatography	.....	.....	.....	Timberline Ammonia-001. ⁷⁴		
	Automated gas diffusion, followed by conductivity cell analysis.	.....	.....	.....	FIAlab100. ⁸²		
	Automated gas diffusion followed by fluorescence detector analysis.	.....	.....	.....	.....	
	Digestion, ⁴ followed by any of the following:	.....	.....	.....	.....	
	AA direct aspiration ³⁶	.....	3111 B-2011.	.....	.....			
	AA furnace	.....	3113 B-2010.	.....	.....			
	STGFAA	.....	.....	.....	.....	
6. Arsenic-Total, ⁴ mg/L	ICP/AES ³⁶	200.9, Rev. 2.2 (1994).	3120 B-2011	D1976-12.	.....				
	ICP/MS	200.5, Rev 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3125 B-2011	D5673-16	993.14, ³ I-4472-97. ⁸¹					
	Digestion, ⁴ followed by any of the following:	206.5 (Issued 1978) ¹.	.....	.....	.....		
	AA gaseous hydride	.....	3114 B-2011 or 3114 C-2011.	D2972-15 (B)	I-3062-85. ²				
	AA furnace	.....	3113 B-2010	D2972-15 (C)	I-4063-98. ⁴⁹				
	STGFAA	200.9, Rev. 2.2 (1994).	.....	.....	.....		
	ICP/AES ³⁶	200.5, Rev 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B-2011	D1976-12.	.....				
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B-2011	D5673-16	993.14, ³ I-4020-05. ⁷⁰					
	Colorimetric (SDDC)	.....	3500-As B-2011	D2972-15 (A)	I-3060-85. ²				
	7. Barium-Total, ⁴ mg/L	Digestion, ⁴ followed by any of the following:				
AA direct aspiration ³⁶		.....	3111 D-2011	.....	I-3084-85. ²			
AA furnace		.....	3113 B-2010	D4382-18.	.....				
ICP/AES ³⁶		200.5, Rev 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B-2011	.....	I-4471-97. ⁵⁰				
ICP/MS		200.8, Rev. 5.4 (1994).	3125 B-2011	D5673-16	993.14, ³ I-4472-97. ⁸¹					
DCP ³⁶		.....	.....	.....	See footnote. ³⁴		
Digestion, ⁴ followed by any of the following:		.....	.....	.....	.....	
AA direct aspiration		.....	3111 D-2011 or 3111 E-2011.	D3645-15 (A)	I-3095-85. ²				
AA furnace		.....	3113 B-2010	D3645-15 (B).	.....				
STGFAA		200.9, Rev. 2.2 (1994).	.....	.....	.....		
8. Beryllium—Total, ⁴ mg/L.	ICP/AES	200.5, Rev 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B-2011	D1976-12	I-4471-97. ⁵⁰					
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B-2011	D5673-16	993.14, ³ I-4472-97. ⁸¹					
	DCP	.....	.....	D4190-15	See footnote. ³⁴			
	Colorimetric (aluminon)	.....	See footnote. ⁶¹.	.....	.....			
	Dissolved Oxygen Depletion	.....	5210 B-2016 ⁸⁵	.....	973.44, ³ p. 17, ⁹ I-1578-78, ⁸ See footnote. ^{10, 63}			
	9. Biochemical oxygen demand (BOD ₅), mg/L.	Colorimetric (curcumin)	4500-B B-2011	I-3112-85. ²				
			ICP/AES	200.5, Rev 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B-2011	D1976-12	I-4471-97. ⁵⁰			
			ICP/MS	200.8, Rev. 5.4 (1994).	3125 B-2011	D5673-16	993.14. ³			
			DCP	D4190-15	See footnote. ³⁴			
			Electrode	D1246-16	I-1125-85. ²			
10. Boron—Total, ³⁷ mg/L.			Ion Chromatography	300.0, Rev 2.1 (1993) and 300.1, Rev 1.0 (1997).	4110 B-2011, C-2011, D-2011.	D4327-17	993.30, ³ I-2057-85. ⁷⁹			
				4140 B-2011	D6508-15	D6508, Rev. 2. ⁵⁴			
				11. Bromide, mg/L	CIE/UV	
						Digestion, ⁴ followed by any of the following:
						AA direct aspiration ³⁶	3111 B-2011 or 3111 C-2011.	D3557-17 (A or B)	974.27, ³ p. 37, ⁹ I-3135-85 ² or I-3136-85. ²
	12. Cadmium—Total, ⁴ mg/L.	

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁹⁴	ASTM	USGS/AOAC/other	
13. Calcium—Total, ⁴ mg/L.	AA furnace .....	.....	3113 B–2010	D3557–17 (D)	I–4138–89. ⁵¹
	STGFAA	200.9, Rev. 2.2 (1994).	.....	.....	.....
	ICP/AES ³⁶	200.5, Rev 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–1472–85 ² or I–4471–97. ⁵⁰	
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4472–97. ⁸¹	
	DCP ³⁶ .....	.....	.....	D4190–15	See footnote. ³⁴
	Voltammetry ¹¹ .....	.....	.....	D3557–17 (C).	.....
	Colorimetric (Dithizone) .....	.....	3500–Cd–D–1990.	.....	.....
	Digestion, ⁴ followed by any of the following:	.....	.....	.....	.....
	AA direct aspiration .....	.....	3111 B–2011	D511–14 (B)	I–3152–85. ²
	ICP/AES	200.5, Rev 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011 .....	.....	I–4471–97. ⁵⁰
14. Carbonaceous biochemical oxygen demand (CBOD ₅), mg/L ¹² .	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14. ³	
	DCP .....	.....	.....	.....	See footnote. ³⁴
	Titrimetric (EDTA) .....	.....	3500–Ca B–2011	D511–14 (A).	.....
	Ion Chromatography .....	.....	.....	D6919–17.	.....
15. Chemical oxygen demand (COD), mg/L.	Dissolved Oxygen Depletion with nitrication inhibitor.	.....	5210 B–2016 ⁸⁵ .....	.....	See footnote. ^{35 63}
	Titrimetric	410.3 (Rev. 1978) ¹ ..	5220 B–2011 or C–2011.	D1252–06(12) (A)	973.46, ³ p. 17, ⁹ I–3560–85. ²	
16. Chloride, mg/L	Spectrophotometric, manual or automatic ..	410.4, Rev. 2.0 (1993).	5220 D–2011	D1252–06(12) (B)	See footnotes. ^{13 14 83} , I–3561–85. ²	
	Titrimetric: (silver nitrate) .....	.....	4500–Cl–B–2011	D512–12 (B)	I–1183–85. ²
	(Mercuric nitrate) .....	.....	4500–Cl–C–2011	D512–12 (A)	973.51, ³ I–1184–85. ²
	Colorimetric: manual .....	.....	.....	.....	I–1187–85. ²
	Automated (ferricyanide) .....	.....	4500–Cl–E–2011 .....	.....	I–2187–85. ²
	Potentiometric Titration .....	.....	4500–Cl–D–2011.	.....	.....
	Ion Selective Electrode .....	.....	.....	D512–12 (C).	.....
	Ion Chromatography	300.0, Rev 2.1 (1993) and 300.1, Rev 1.0 (1997).	4110 B–2011 or 4110 C–2011.	D4327–17	993.30, ³ I–2057–90. ⁵¹	
	17. Chlorine—Total residual, mg/L.	CIE/UV	4140 B–2011	D6508–15	D6508, Rev. 2. ⁵⁴
		Amperometric direct	4500–Cl D–2011	D1253–14.
Amperometric direct (low level) .....		.....	4500–Cl E–2011.	.....	.....
Iodometric direct .....		.....	4500–Cl B–2011.	.....	.....
Back titration ether end-point ¹⁵ .....		.....	4500–Cl C–2011.	.....	.....
DPD–FAS .....		.....	4500–Cl F–2011.	.....	.....
Spectrophotometric, DPD .....		.....	4500–Cl G–2011.	.....	.....
Electrode .....		.....	.....	.....	.....
17A. Chlorine-Free Available, mg/L.		Amperometric direct	4500–Cl D–2011	D1253–14.	See footnote. ¹⁶
		Amperometric direct (low level)	4500–Cl E–2011.
18. Chromium VI dissolved, mg/L.	DPD–FAS .....	.....	4500–Cl F–2011.	.....	.....
	Spectrophotometric, DPD .....	.....	4500–Cl G–2011.	.....	.....
	0.45-micron filtration followed by any of the following:	.....	.....	.....	.....
	AA chelation-extraction .....	.....	3111 C–2011 .....	.....	I–1232–85. ²
19. Chromium—Total, ⁴ mg/L.	Ion Chromatography	218.6, Rev. 3.3 (1994).	3500–Cr C–2011	D5257–17	993.23. ³	
	Colorimetric (diphenyl-carbazide) .....	.....	3500–Cr B–2011	D1687–17 (A)	I–1230–85. ²
	Digestion, ⁴ followed by any of the following:	.....	.....	.....	.....
	AA direct aspiration ³⁶ .....	.....	3111 B–2011	D1687–17 (B)	974.27, ³ I–3236–85. ²
	AA chelation-extraction .....	.....	3111 C–2011.	.....	.....
	AA furnace .....	.....	3113 B–2010	D1687–17 (C)	I–3233–93. ⁴⁶
	STGFAA	200.9, Rev. 2.2 (1994).	.....	.....	.....
	ICP/AES ³⁶	200.5, Rev 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12.	.....
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4020–05 ⁷⁰ I–4472–97. ⁸¹	
	20. Cobalt—Total, ⁴ mg/L.	DCP ³⁶	D4190–15	See footnote. ³⁴
Colorimetric (diphenyl-carbazide) .....		.....	3500–Cr B–2011.	.....	.....
Digestion, ⁴ followed by any of the following:		.....	.....	.....	.....
AA direct aspiration .....		.....	3111 B–2011 or 3111 C–2011.	D3558–15 (A or B) ...	p. 37, ⁹ I–3239–85. ²
AA furnace .....		.....	3113 B–2010	D3558–15 (C)	I–4243–89. ⁵¹
STGFAA		200.9, Rev. 2.2 (1994).	.....	.....	.....
ICP/AES		200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰	

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁸⁴	ASTM	USGS/AOAC/other	
21. Color, platinum cobalt units or dominant wavelength, hue, luminance purity	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4020–05, ⁷⁰ I–4472–97. ⁸¹	
	DCP			D4190–15	See footnote. ³⁴	
	Colorimetric (ADMI)		2120 F–2011 ⁷⁸ .			
22. Copper—Total, ⁴ mg/L.	Platinum cobalt visual comparison		2120 B–2011		I–1250–85. ²	
	Spectrophotometric				See footnote ¹⁸	
	Digestion, ⁴ followed by any of the following: AA direct aspiration ³⁶		3111 B–2011 or 3111 C–2011.	D1688–17 (A or B) ...	974.27, ³ p. 37, ⁹ I–3270–85 ² or I–3271–85. ²	
	AA furnace		3113 B–2010	D1688–17 (C)	I–4274–89. ⁵¹	
23. Cyanide—Total, mg/L.	STGFAA	200.9, Rev. 2.2 (1994).				
	ICP/AES ³⁶	200.5, Rev 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰	
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4020–05, ⁷⁰ I–4472–97. ⁸¹	
	DCP ³⁶			D4190–15	See footnote. ³⁴	
	Colorimetric (Neocuproine)		3500-Cu B–2011.			
	Colorimetric (Bathocuproine)		3500-Cu C–2011		See footnote. ¹⁹	
	Automated UV digestion/distillation and Colorimetry.				Kelada-01. ⁵⁵	
	Segmented Flow Injection, In-Line Ultra-violet Digestion, followed by gas diffusion amperometry.			D7511–12(17).		
	Manual distillation with MgCl ₂ , followed by any of the following: Flow Injection, gas diffusion amperometry	335.4, Rev. 1.0 (1993) ⁵⁷ .	4500–CN–B–2016 and C–2016.	D2036–09(15)(A), D7284–13(17).		10–204–00–1–X. ⁵⁶
	Titrimetric		4500–CN–D–2016	D2036–09(15)(A)		p. 22. ⁹
Spectrophotometric, manual		4500–CN–E–2016	D2036–09(15)(A)		I–3300–85. ²	
Semi-Automated ²⁰	335.4, Rev. 1.0 (1993) ⁵⁷ .	4500–CN–N–2016			10–204–00–1–X, ⁵⁶ I–4302–85. ²	
24. Cyanide-Available, mg/L.	Ion Chromatography			D2036–09(15)(A).		
	Ion Selective Electrode		4500–CN–F–2016	D2036–09(15)(A).		
	Cyanide Amenable to Chlorination (CATC); Manual distillation with MgCl ₂ , followed by Titrimetric or Spectrophotometric.		4500–CN–G–2016	D2036–09(15)(B).		
	Flow injection and ligand exchange, followed by gas diffusion amperometry ⁵⁹ .				D6888–16	OIA–1677–09. ⁴⁴
24.A Cyanide-Free, mg/L.	Automated Distillation and Colorimetry (no UV digestion).					
	Flow Injection, followed by gas diffusion amperometry.			D7237–15 (A)	OIA–1677–09. ⁴⁴	
25. Fluoride—Total, mg/L.	Manual micro-diffusion and colorimetry			D4282–15.		
	Manual distillation, ⁶ followed by any of the following: Electrode, manual		4500–F–B–2011	D1179–16 (A).		
	Electrode, automated		4500–F–C–2011	D1179–16 (B).		
	Colorimetric, (SPADNS)		4500–F–D–2011.			
	Automated complexone		4500–F–E–2011.			
	Ion Chromatography	300.0, Rev 2.1 (1993) and 300.1, Rev 1.0 (1997).	4110 B–2011 or C–2011.	D4327–17		993.30. ³
	CIE/UV		4140 B–2011	D6508–15		D6508, Rev. 2. ⁵⁴
26. Gold—Total, ⁴ mg/L	Digestion, ⁴ followed by any of the following: AA direct aspiration		3111 B–2011.			
	AA furnace	231.2 (Issued 1978) ¹	3113 B–2010.			
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16		993.14. ³
	DCP					See footnote. ³⁴
	Automated colorimetric	130.1 (Issued 1971) ¹ .				
27. Hardness—Total, as CaCO ₃ , mg/L.	Titrimetric (EDTA)		2340 C–2011	D1126–17	973.52B ³ , I–1338–85. ²	
	Ca plus Mg as their carbonates, by any approved method for Ca and Mg (See Parameters 13 and 33), provided that the sum of the lowest point of quantitation for Ca and Mg is below the NPDES permit requirement for Hardness.		2340 B–2011.			
	Electrometric measurement		4500–H ⁺ B–2011	D1293–99 (A or B) ...		973.41, ³ I–1586–85. ²
28. Hydrogen ion (pH), pH units.	Automated electrode	150.2 (Dec. 1982) ¹ ..				
					See footnote, ²¹ I–2587–85. ²	

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁸⁴	ASTM	USGS/AOAC/other
29. Iridium—Total, ⁴ mg/L.	Digestion, ⁴ followed by any of the following:				
	AA direct aspiration		3111 B–2011.		
30. Iron—Total, ⁴ mg/L	AA furnace	235.2 (Issued 1978) ¹ .			
	ICP/MS		3125 B–2011.		
	Digestion, ⁴ followed by any of the following:				
	AA direct aspiration ³⁶		3111 B–2011 or 3111 C–2011.	D1068–15 (A)	974.27, ³ I–3381–85. ²
	AA furnace		3113 B–2010	D1068–15 (B).	
	STGFAA	200.9, Rev. 2.2 (1994).			
31. Kjeldahl Nitrogen ⁵ —Total, (as N), mg/L.	ICP/AES ³⁶	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14. ³
	DCP ³⁶			D4190–15	See footnote. ³⁴
	Colorimetric (Phenanthroline)		3500–Fe B–2011	D1068–15 (C)	See footnote. ²²
	Manual digestion ²⁰ and distillation or gas diffusion, followed by any of the following:		4500–N _{org} B–2011 or C–2011 and 4500–NH ₃ B–2011.	D3590–17 (A)	I–4515–91. ⁴⁵
	Titration		4500–NH ₃ C–2011		973.48. ³
	Nesslerization			D1426–15 (A).	
	Electrode		4500–NH ₃ D–2011 or E–2011.	D1426–15 (B).	
	Semi-automated phenate	350.1, Rev. 2.0 (1993).	4500–NH ₃ G–2011 4500–NH ₃ H–2011.		See footnote. ⁶⁰
	Manual phenate, salicylate, or other substituted phenols in Berthelot reaction based methods.		4500–NH ₃ F–2011		
Automated gas diffusion, followed by conductivity cell analysis.				Timberline Ammonia-001, ⁷⁴	
Automated gas diffusion followed by fluorescence detector analysis.				FIALab 100. ⁸²	
Automated Methods for TKN that do not require manual distillation					
32. Lead—Total, ⁴ mg/L	Automated phenate, salicylate, or other substituted phenols in Berthelot reaction based methods colorimetric (auto digestion and distillation).	351.1 (Rev. 1978) ¹ ..			I–4551–78. ⁸
	Semi-automated block digester colorimetric (distillation not required).	351.2, Rev. 2.0 (1993).	4500–N _{org} D–2011 ..	D3590–17 (B)	I–4515–91 ⁴⁵
	Block digester, followed by Auto distillation and Titration.				See footnote. ³⁹
	Block digester, followed by Auto distillation and Nesslerization.				See footnote. ⁴⁰
	Block Digester, followed by Flow injection gas diffusion (distillation not required).				See footnote. ⁴¹
	Digestion with peroxodisulfate, followed by Spectrophotometric (2,6-dimethyl phenol).				Hach 10242. ⁷⁶
	Digestion with persulfate, followed by Colorimetric.				NCASI TNTP W10900. ⁷⁷
	Digestion, ⁴ followed by any of the following:				
	AA direct aspiration ³⁶		3111 B–2011 or 3111 C–2011.	D3559–15 (A or B) ..	974.27, ³ I–3399–85. ²
	AA furnace		3113 B–2010	D3559–15 (D)	I–4403–89. ⁵¹
STGFAA	200.9, Rev. 2.2 (1994).				
ICP/AES ³⁶	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰	
ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4472–97. ⁸¹	
DCP ³⁶			D4190–15	See footnote. ³⁴	
Voltammetry ¹¹			D3559–15 (C).		
Colorimetric (Dithizone)		3500–Pb B–2011.			
33. Magnesium—Total, ⁴ mg/L.	Digestion, ⁴ followed by any of the following:				
	AA direct aspiration		3111 B–2011	D511–14 (B)	974.27, ³ I–3447–85. ²
	ICP/AES	200.5, Rev. 4.2 (2003) ⁶⁸ ; 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14. ³
34. Manganese—Total, ⁴ mg/L.	DCP				See footnote. ³⁴
	Ion Chromatography			D6919–17.	

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁸⁴	ASTM	USGS/AOAC/other	
35. Mercury—Total, mg/L.	AA direct aspiration ³⁶		3111 B–2011	D858–17 (A or B)	974.27, ³ I–3454–85. ²	
	AA furnace		3113 B–2010	D858–17 (C).		
	STGFAA	200.9, Rev. 2.2 (1994).				
	ICP/AES ³⁶	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰	
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4472–97. ⁸¹	
	DCP ³⁶			D4190–15	See footnote. ³⁴	
	Colorimetric (Persulfate)		3500–Mn B–2011		920.203. ³	
	Colorimetric (Periodate)				See footnote. ²³	
	Cold vapor, Manual	245.1, Rev. 3.0 (1994).	3112 B–2011	D3223–17	977.22, ³ I–3462–85. ²	
	Cold vapor, Automated	245.2 (Issued 1974) ¹ .				
36. Molybdenum—Total, ⁴ mg/L.	Cold vapor atomic fluorescence spectrometry (CVAFS).	245.7 Rev. 2.0 (2005) ¹⁷ .			I–4464–01. ⁷¹	
	Purge and Trap CVAFS	1631E ⁴³ .				
	Digestion, ⁴ followed by any of the following:					
	AA direct aspiration		3111 D–2011		I–3490–85. ²	
	AA furnace		3113 B–2010		I–3492–96. ⁴⁷	
	ICP/AES	200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰	
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4472–97. ⁸¹	
	DCP				See footnote. ³⁴	
	Digestion, ⁴ followed by any of the following:					
	AA direct aspiration ³⁶		3111 B–2011 or 3111 C–2011.	D1886–14 (A or B)	I–3499–85. ²	
37. Nickel—Total, ⁴ mg/L	AA furnace		3113 B–2010	D1886–14 (C)	I–4503–89. ⁵¹	
	STGFAA	200.9, Rev. 2.2 (1994).				
	ICP/AES ³⁶	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰	
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4020–05 ⁷⁰ I–4472–97. ⁸¹	
	DCP ³⁶			D4190–15	See footnote. ³⁴	
	Ion Chromatography	300.0, Rev. 2.1 (1993) and 300.1, Rev. 1.0 (1997).	4110 B–2011 or C–2011.	D4327–17	993.30. ³	
	CIE/UV		4140 B–2011	D6508–15	D6508, Rev. 2. ⁵⁴	
	Ion Selective Electrode		4500–NO ₃ D–2016.		973.50, ³	
	Colorimetric (Brucine sulfate)	352.1 (Issued 1971) ¹			419D ¹ thnsp; ⁷ , p. 28. ⁹	
	Spectrophotometric (2,6-dimethylphenol) Nitrate-nitrite N minus Nitrite N (See parameters 39 and 40).				Hach 10206 ⁷⁵	
38. Nitrate (as N), mg/L	Cadmium reduction, Manual		4500–NO ₃ –E–2016	D3867–16 (B).		
	Cadmium reduction, Automated	353.2, Rev. 2.0 (1993).	4500–NO ₃ –F–2016 4500–NO ₃ –I–2016. 4500–NO ₃ –H–2016.	D3867–16 (A)	I–2545–90. ⁵¹	
	Automated hydrazine Reduction/Colorimetric				See footnote. ⁶²	
	Ion Chromatography	300.0, Rev. 2.1 (1993) and 300.1, Rev. 1.0 (1997).	4110 B–2011 or C–2011.	D4327–17	993.30. ³	
	CIE/UV		4140 B–2011	D6508–15	D6508, Rev. 2. ⁵⁴	
	Enzymatic reduction, followed by automated colorimetric determination.			D7781–14	I–2547–11. ⁷² I–2548–11. ⁷² N07–0003. ⁷³	
	Enzymatic reduction, followed by manual colorimetric determination.		4500–NO ₃ –J–2018.			
	Spectrophotometric (2,6-dimethylphenol)				Hach 10206. ⁷⁵	
	Spectrophotometric: Manual		4500–NO ₂ –B–2011		See footnote. ²⁵	
	Automated (Diazotization)				I–4540–85, ² See footnote. ⁶² I–2540–90. ⁸⁰	
39. Nitrate-nitrite (as N), mg/L.	Automated (*bypass cadmium reduction)	353.2, Rev. 2.0 (1993).	4500–NO ₃ –F–2016 4500–NO ₃ –I–2016.	D3867–16 (A)	I–4545–85. ²	
	Manual (*bypass cadmium or enzymatic reduction).		4500–NO ₃ –E–2016, 4500–NO ₃ –J–2018.	D3867–16 (B).		
	Ion Chromatography	300.0, Rev. 2.1 (1993) and 300.1, Rev. 1.0 (1997).	4110 B–2011 or C–2011.	D4327–17	993.30. ³	
	CIE/UV		4140 B–2011	D6508–15	D6508, Rev. 2. ⁵⁴	
	Automated (*bypass Enzymatic reduction)			D7781–14	I–2547–11 ⁷² I–2548–11 ⁷² N07–0003. ⁷³	
	40. Nitrite (as N), mg/L	Automated (*bypass cadmium reduction)	353.2, Rev. 2.0 (1993).	4500–NO ₃ –F–2016 4500–NO ₃ –I–2016.	D3867–16 (A)	I–4545–85. ²
		Manual (*bypass cadmium or enzymatic reduction).		4500–NO ₃ –E–2016, 4500–NO ₃ –J–2018.	D3867–16 (B).	
		Ion Chromatography	300.0, Rev. 2.1 (1993) and 300.1, Rev. 1.0 (1997).	4110 B–2011 or C–2011.	D4327–17	993.30. ³
		CIE/UV		4140 B–2011	D6508–15	D6508, Rev. 2. ⁵⁴
		Automated (*bypass Enzymatic reduction)			D7781–14	I–2547–11 ⁷² I–2548–11 ⁷² N07–0003. ⁷³

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁵⁴	ASTM	USGS/AOAC/other
41. Oil and grease— Total recoverable, mg/L.	Hexane extractable material (HEM): <i>n</i> - Hexane extraction and gravimetry.	1664 Rev. A; 1664 Rev. B ⁴² .	5520 B–2011 ³⁸ .		
	Silica gel treated HEM (SGT–HEM): Silica gel treatment and gravimetry.	1664 Rev. A; 1664 Rev. B ⁴² .	5520 B–2011 ³⁸ and 5520 F–2011 ³⁸ .		
42. Organic carbon— Total (TOC), mg/L.	Combustion		5310 B–2014	D7573–09(17)	973.47, ³ p. 14. ²⁴
	Heated persulfate or UV persulfate oxida- tion.		5310 C–2014 5310 D–2011.	D4839–03(17)	973.47, ³ p. 14. ²⁴
43. Organic nitrogen (as N), mg/L.	Total Kjeldahl N (Parameter 31) minus am- monia N (Parameter 4).				
44. Ortho-phosphate (as P), mg/L.	Ascorbic acid method:				
	Automated	365.1, Rev. 2.0 (1993).	4500–P F–2011 or G–2011.		973.56, ³ I–4601–85, ² I–2601–90. ⁸⁰
	Manual, single-reagent		4500–P E–2011	D515–88 (A)	973.55. ³
	Manual, two-reagent	365.3 (Issued 1978) ¹ .			
45. Osmium—Total, ⁴ mg/L.	Ion Chromatography	300.0, Rev. 2.1 (1993) and 300.1, Rev. 1.0 (1997).	4110 B–2011 or C– 2011.	D4327–17	993.30. ³
	CIE/UV		4140 B–2011	D6508–15	D6508, Rev. 2. ⁵⁴
	Digestion, ⁴ followed by any of the fol- lowing:				
	AA direct aspiration		3111 D–2011.		
46. Oxygen, dissolved, mg/L.	AA furnace	252.2 (Issued 1978) ¹ .			
	Winkler (Azide modification)		4500–O (B–F)–2016	D888–12 (A)	973.45B, ³ I–1575– 78. ⁸
	Electrode		4500–O G–2016	D888–12 (B)	I–1576–78. ⁸
47. Palladium—Total, ⁴ mg/L.	Luminescence-Based Sensor		4500–O H–2016	D888–12 (C)	See footnote. ⁶³ See footnote. ⁶⁴
	Digestion, ⁴ followed by any of the fol- lowing:				
	AA direct aspiration		3111 B–2011.		
	AA furnace	253.2 (Issued 1978) ¹ .			
48. Phenols, mg/L	ICP/MS		3125 B–2011.		See footnote. ³⁴
	DCP				
	Manual distillation, ²⁶ followed by any of the following:	420.1 (Rev. 1978) ¹ ..	5530 B–2010	D1783–01(12).	
	Colorimetric (4AAP) manual	420.1 (Rev. 1978) ¹ ..	5530 D–2010 ²⁷	D1783–01(12) (A or B).	
49. Phosphorus (ele- mental), mg/L.	Automated colorimetric (4AAP)	420.4 Rev. 1.0 (1993).			See footnote. ²⁸
	Gas-liquid chromatography				
50. Phosphorus—Total, mg/L.	Digestion, ²⁰ followed by any of the fol- lowing:		4500–P B (5)–2011 ..		973.55. ³
	Manual	365.3 (Issued 1978) ¹	4500–P E–2011	D515–88 (A).	
	Automated ascorbic acid reduction	365.1 Rev. 2.0 (1993).	4500–P (F–H)–2011		973.56, ³ I–4600–85. ²
	ICP/AES ^{4 36}	200.7, Rev. 4.4 (1994).	3120 B–2011		I–4471–97. ⁵⁰
	Semi-automated block digester (TKP di- gestion).	365.4 (Issued 1974) ¹		D515–88 (B)	I–4610–91. ⁴⁸
51. Platinum—Total, ⁴ mg/L.	Digestion with persulfate, followed by Col- orimetric.				NCASI TNTP W10900. ⁷⁷
	Digestion, ⁴ followed by any of the fol- lowing:				
	AA direct aspiration		3111 B–2011.		
	AA furnace	255.2 (Issued 1978) ¹ .			
52. Potassium—Total, ⁴ mg/L.	ICP/MS		3125 B–2011.		See footnote. ³⁴
	DCP				
	Digestion, ⁴ followed by any of the fol- lowing:				
	AA direct aspiration		3111 B–2011		973.53, ³ I–3630–85. ²
53. Residue—Total, mg/L.	ICP/AES	200.7, Rev. 4.4 (1994).	3120 B–2011.		
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14. ³
	Flame photometric		3500–K B–2011.		
	Electrode		3500–K C–2011.		
54. Residue—filterable, mg/L.	Ion Chromatography			D6919–17.	
	Gravimetric, 103–105°		2540 B–2015		I–3750–85. ²
55. Residue—non-filter- able (TSS), mg/L.	Gravimetric, 180°		2540 C–2015	D5907–13	I–1750–85. ²
	Gravimetric, 103–105° post-washing of re- sidue.		2540 D–2015	D5907–13	I–3765–85. ²

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁸⁴	ASTM	USGS/AOAC/other
56. Residue—settle-able, ml/L.	Volumetric (Imhoff cone), or gravimetric .....	.....	2540 F–2015.		
57. Residue—Volatile, mg/L.	Gravimetric, 550°	160.4 (Issued 1971) ¹	2540 E–2015		I–3753–85. ²
58. Rhodium—Total, ⁴ mg/L.	Digestion, ⁴ followed by any of the following: AA direct aspiration, or .....	.....	3111 B–2011.		
	AA furnace	265.2 (Issued 1978) ¹.	.....	
59. Ruthenium—Total, ⁴ mg/L.	ICP/MS .....	.....	3125 B–2011.		
	Digestion, ⁴ followed by any of the following: AA direct aspiration, or .....	.....	3111 B–2011.		
	AA furnace	267.2 ¹.	.....	
	ICP/MS .....	.....	3125 B–2011.		
60. Selenium—Total, ⁴ mg/L.	Digestion, ⁴ followed by any of the following: AA furnace .....	.....	3113 B–2010	D3859–15 (B)	I–4668–98. ⁴⁹
	STGFAA	200.9, Rev. 2.2 (1994).	.....	
	ICP/AES ³⁶	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12.	
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4020–05 ⁷⁰ I–4472–97. ⁸¹
	AA gaseous hydride .....	.....	3114 B–2011, or 3114 C–2011.	D3859–15 (A)	I–3667–85. ²
61. Silica—Dissolved, ³⁷ mg/L.	0.45-micron filtration followed by any of the following: Colorimetric, Manual .....	.....	4500-SiO ₂ C–2011 ...	D859–16	I–1700–85. ²
	Automated (Molybdosilicate) .....	.....	4500-SiO ₂ E–2011 or F–2011.	.....	I–2700–85. ²
	ICP/AES	200.5, Rev. 4.2 (2003) ⁶⁸ ; 200.7, Rev. 4.4 (1994).	3120 B–2011 .....	.....	I–4471–97. ⁵⁰
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14. ³
62. Silver—Total, ^{4,31} mg/L.	Digestion, ⁴ thnsp; ²⁹ followed by any of the following: AA direct aspiration .....	.....	3111 B–2011 or 3111 C–2011.	.....	974.27, ³ p. 37, ⁹ I–3720–85. ²
	AA furnace .....	.....	3113 B–2010 .....	.....	I–4724–89. ⁵¹
	STGFAA	200.9, Rev. 2.2 (1994).	.....	
	ICP/AES	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4472–97. ⁸¹
	DCP .....	.....	.....	.....	See footnote. ³⁴
63. Sodium—Total, ⁴ mg/L.	Digestion, ⁴ followed by any of the following: AA direct aspiration .....	.....	3111 B–2011 .....	.....	973.54, ³ I–3735–85. ²
	ICP/AES	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011 .....	.....	I–4471–97. ⁵⁰
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14. ³
	DCP .....	.....	.....	.....	See footnote. ³⁴
	Flame photometric .....	.....	3500–Na B–2011.	D6919–17.	
	Ion Chromatography .....	.....	.....	D1125–95(99) (A)	973.40, ³ I–2781–85. ²
64. Specific conductance, micromhos/cm at 25 °C.	Wheatstone bridge	120.1 (Rev. 1982) ¹ ..	2510 B–2011 .....	.....
65. Sulfate (as SO ₄), mg/L.	Automated colorimetric	375.2, Rev. 2.0 (1993).	4500–SO ₄ ²⁻ F–2011 or G–2011.	.....
	Gravimetric .....	.....	4500–SO ₄ ²⁻ C–2011 or D–2011.	.....	925.54. ³
	Turbidimetric .....	.....	4500–SO ₄ ²⁻ E–2011	D516–16.	
	Ion Chromatography	300.0, Rev. 2.1 (1993) and 300.1, Rev. 1.0 (1997).	4110 B–2011 or C–2011.	D4327–17	993, I–4020–05 ⁷⁰ . ³⁰ ₃
	CIE/UV .....	.....	4140 B–2011	D6508–15	D6508, Rev. 2. ⁵⁴
66. Sulfide (as S), mg/L	Sample Pretreatment .....	.....	4500–S ²⁻ B, C–2011.	.....
	Titrimetric (iodine) .....	.....	4500–S–F–2011 .....	.....	I–3840–85. ²
	Colorimetric (methylene blue) .....	.....	4500–S ²⁻ D–2011.	.....
	Ion Selective Electrode .....	.....	4500–S–G–2011	D4658–15.	
67. Sulfite (as SO ₃), mg/L.	Titrimetric (iodine-iodate) .....	.....	4500–SO ₃ ²⁻ B–2011.	.....
68. Surfactants, mg/L ..	Colorimetric (methylene blue) .....	.....	5540 C–2011	D2330–02.	

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES—Continued

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods ⁵⁴	ASTM	USGS/AOAC/other
69. Temperature, °C ...	Thermometric .....	.....	2550 B–2010 .....	.....	See footnote. ³²
70. Thallium-Total, ⁴ mg/L.	Digestion, ⁴ followed by any of the following: AA direct aspiration .....	.....	3111 B–2011. 3113 B–2010.	.....	.....
	AA furnace	279.2 (Issued 1978) ¹	.....	.....	.....
	STGFAA	200.9, Rev. 2.2 (1994).	.....	.....	.....
	ICP/AES	200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12.	.....
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4471– 97 ⁵⁰ I–4472–97. ⁸¹
71. Tin-Total, ⁴ mg/L	Digestion, ⁴ followed by any of the following: AA direct aspiration .....	.....	3111 B–2011 .....	.....	I–3850–78. ⁸
	AA furnace .....	.....	3113 B–2010.	.....	.....
	STGFAA	200.9, Rev. 2.2 (1994).	.....	.....	.....
	ICP/AES	200.5, Rev. 4.2 (2003) ⁶⁸ ; 200.7, Rev. 4.4 (1994).	.....	.....	.....
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14. ³
72. Titanium-Total, ⁴ mg/L.	Digestion, ⁴ followed by any of the following: AA direct aspiration .....	.....	3111 D–2011.	.....	.....
	AA furnace	283.2 (Issued 1978) ¹.	.....	.....	.....
	ICP/AES	200.7, Rev. 4.4 (1994).	.....	.....	.....
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14. ³
73. Turbidity, NTU ⁵³ ...	DCP .....	.....	.....	.....	See footnote. ³⁴
	Nephelometric	180.1, Rev. 2.0 (1993).	2130 B–2011	D1889–00	I–3860–85 ² See footnote. ⁶⁵ See footnote. ⁶⁶ See footnote. ⁶⁷
74. Vanadium-Total, ⁴ mg/L.	Digestion, ⁴ followed by any of the following: AA direct aspiration .....	.....	3111 D–2011. 3113 B–2010	D3373–17.	.....
	AA furnace .....	.....	3120 B–2011	D1976–12	I–4471–97 ⁵⁰
	ICP/AES	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	.....	.....	.....
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4020– 05. ⁷⁰
	DCP .....	.....	.....	D4190–15	See footnote. ³⁴
	Colorimetric (Gallic Acid) .....	.....	3500–V B–2011.	.....	.....
75. Zinc-Total, ⁴ mg/L ...	Digestion, ⁴ followed by any of the following: AA direct aspiration ³⁶ .....	.....	3111 B–2011 or 3111 C–2011.	D1691–17 (A or B) ...	974.27, ³ p. 37, ⁹ I– 3900–85. ²
	AA furnace	289.2 (Issued 1978) ¹.	.....	.....	.....
	ICP/AES ³⁶	200.5, Rev. 4.2 (2003); ⁶⁸ 200.7, Rev. 4.4 (1994).	3120 B–2011	D1976–12	I–4471–97. ⁵⁰
	ICP/MS	200.8, Rev. 5.4 (1994).	3125 B–2011	D5673–16	993.14, ³ I–4020– 05 ⁷⁰ I–4472–97. ⁸¹
	DCP ³⁶ .....	.....	.....	D4190–15	See footnote. ³⁴
	Colorimetric (Zincon) .....	.....	3500 Zn B–2011 .....	.....	See footnote. ³³
76. Acid Mine Drainage	.....	1627 ⁶⁹.	.....	.....	.....

Table IB Notes:

¹ Methods for Chemical Analysis of Water and Wastes, EPA–600/4–79–020. Revised March 1983 and 1979, where applicable. U.S. EPA.

² Methods for Analysis of Inorganic Substances in Water and Fluvial Sediments, Techniques of Water-Resource Investigations of the U.S. Geological Survey, Book 5, Chapter A1., unless otherwise stated. 1989. USGS.

³ Official Methods of Analysis of the Association of Official Analytical Chemists, Methods Manual, Sixteenth Edition, 4th Revision, 1998. AOAC International.

⁴ For the determination of total metals (which are equivalent to total recoverable metals) the sample is not filtered before processing. A digestion procedure is required to solubilize analytes in suspended material and to break down organic-metal complexes (to convert the analyte to a detectable form for colorimetric analysis). For non-platform graphite furnace atomic absorption determinations, a digestion using nitric acid (as specified in Section 4.1.3 of Methods for Chemical Analysis of Water and Wastes) is required prior to analysis. The procedure used should subject the sample to gentle acid refluxing, and at no time should the sample be taken to dryness. For direct aspiration flame atomic absorption (FLAA) determinations, a combination acid (nitric and hydrochloric acids) digestion is preferred, prior to analysis. The approved total recoverable digestion is described as Method 200.2 in Supplement I of "Methods for the Determination of Metals in Environmental Samples" EPA/600R–94/111, May, 1994, and is reproduced in EPA Methods 200.7, 200.8, and 200.9 from the same Supplement. However, when using the gaseous hydride technique or for the determination of certain elements such as antimony, arsenic, selenium, silver, and tin by non-EPA graphite furnace atomic absorption methods, mercury by cold vapor atomic absorption, the noble metals and titanium by FLAA, a specific or modified sample digestion procedure may be required, and, in all cases the referenced method write-up should be consulted for specific instruction and/or cautions. For analyses using inductively coupled plasma-atomic emission spectrometry (ICP–AES), the direct current plasma (DCP) technique or EPA spectrochemical techniques (platform furnace AA, ICP–AES, and ICP–MS), use EPA Method 200.2 or an approved alternate procedure (e.g., CEM microwave digestion, which may be used with certain analytes as indicated in Table IB); the total recoverable digestion procedures in EPA Methods 200.7, 200.8, and 200.9 may be used for those respective methods. Regardless of the digestion procedure, the results of the analysis after digestion procedure are reported as "total" metals.

⁵ Copper sulfate or other catalysts that have been found suitable may be used in place of mercuric sulfate.

⁶ Manual distillation is not required if comparability data on representative effluent samples are on file to show that this preliminary distillation step is not necessary; however, manual distillation will be required to resolve any controversies. In general, the analytical method should be consulted regarding the need for distillation. If the method is not clear, the laboratory may compare a minimum of 9 different sample matrices to evaluate the need for distillation. For each matrix, a matrix spike and matrix spike duplicate are analyzed both with and without the distillation step (for a total of 36 samples, assuming 9 matrices). If results are comparable, the laboratory may dispense with the distillation step for future analysis. Comparable is defined as < 20% RPD for all tested matrices). Alternatively, the two populations of spike recovery percentages may be compared using a recognized statistical test.

⁷ Industrial Method Number 379-75 WE Ammonia, Automated Electrode Method, Technicon Auto Analyzer II. February 19, 1976. Bran & Luebbe Analyzing Technologies Inc.

⁸ The approved method is that cited in Methods for Determination of Inorganic Substances in Water and Fluvial Sediments, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A1. 1979. USGS.

⁹ American National Standard on Photographic Processing Effluents. April 2, 1975. American National Standards Institute.

¹⁰ In-Situ Method 1003-8-2009, Biochemical Oxygen Demand (BOD) Measurement by Optical Probe. 2009. In-Situ Incorporated.

¹¹ The use of normal and differential pulse voltage ramps to increase sensitivity and resolution is acceptable.

¹² Carbonaceous biochemical oxygen demand (CBOD₅) must not be confused with the traditional BOD₅ test method which measures "total 5-day BOD." The addition of the nitrification inhibitor is not a procedural option but must be included to report the CBOD₅ parameter. A discharger whose permit requires reporting the traditional BOD₅ may not use a nitrification inhibitor in the procedure for reporting the results. Only when a discharger's permit specifically states CBOD₅ is required can the permittee report data using a nitrification inhibitor.

¹³ OIC Chemical Oxygen Demand Method. 1978. Oceanography International Corporation.

¹⁴ Method 8000, Chemical Oxygen Demand, Hach Handbook of Water Analysis, 1979. Hach Company.

¹⁵ The back-titration method will be used to resolve controversy.

¹⁶ Orion Research Instruction Manual, Residual Chlorine Electrode Model 97-70. 1977. Orion Research Incorporated. The calibration graph for the Orion residual chlorine method must be derived using a reagent blank and three standard solutions, containing 0.2, 1.0, and 5.0 mL 0.00281 N potassium iodate/100 mL solution, respectively.

¹⁷ Method 245.7, Mercury in Water by Cold Vapor Atomic Fluorescence Spectrometry, EPA-821-R-05-001. Revision 2.0, February 2005. US EPA.

¹⁸ National Council of the Paper Industry for Air and Stream Improvement (NCASI) Technical Bulletin 253 (1971) and Technical Bulletin 803, May 2000.

¹⁹ Method 8506, Bicinchoninate Method for Copper, Hach Handbook of Water Analysis. 1979. Hach Company.

²⁰ When using a method with block digestion, this treatment is not required.

²¹ Industrial Method Number 378-75WA, Hydrogen ion (pH) Automated Electrode Method, Bran & Luebbe (Technicon) Autoanalyzer II. October 1976. Bran & Luebbe Analyzing Technologies.

²² Method 8008, 1,10-Phenanthroline Method using FerroVer Iron Reagent for Water. 1980. Hach Company.

²³ Method 8034, Periodate Oxidation Method for Manganese, Hach Handbook of Wastewater Analysis. 1979. Hach Company.

²⁴ Methods for Analysis of Organic Substances in Water and Fluvial Sediments, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A3, (1972 Revised 1987). 1987. USGS.

²⁵ Method 8507, Nitrogen, Nitrite-Low Range, Diazotization Method for Water and Wastewater. 1979. Hach Company.

²⁶ Just prior to distillation, adjust the sulfuric-acid-preserved sample to pH 4 with 1 + 9 NaOH.

²⁷ The colorimetric reaction must be conducted at a pH of 10.0 ± 0.2.

²⁸ Addison, R.F., and R.G. Ackman. 1970. Direct Determination of Elemental Phosphorus by Gas-Liquid Chromatography, *Journal of Chromatography*, 47(3):421-426.

²⁹ Approved methods for the analysis of silver in industrial wastewaters at concentrations of 1 mg/L and above are inadequate where silver exists as an inorganic halide. Silver halides such as the bromide and chloride are relatively insoluble in reagents such as nitric acid but are readily soluble in an aqueous buffer of sodium thiosulfate and sodium hydroxide to pH of 12. Therefore, for levels of silver above 1 mg/L, 20 mL of sample should be diluted to 100 mL by adding 40 mL each of 2 M Na₂S₂O₃ and NaOH. Standards should be prepared in the same manner. For levels of silver below 1 mg/L the approved method is satisfactory.

³⁰ The use of EDTA decreases method sensitivity. Analysts may omit EDTA or replace with another suitable complexing reagent provided that all method-specified quality control acceptance criteria are met.

³¹ For samples known or suspected to contain high levels of silver (e.g., in excess of 4 mg/L), cyanogen iodide should be used to keep the silver in solution for analysis. Prepare a cyanogen iodide solution by adding 4.0 mL of concentrated NH₄OH, 6.5 g of KCN, and 5.0 mL of a 1.0 N solution of I₂ to 50 mL of reagent water in a volumetric flask and dilute to 100.0 mL. After digestion of the sample, adjust the pH of the digestate to >7 to prevent the formation of HCN under acidic conditions. Add 1 mL of the cyanogen iodide solution to the sample digestate and adjust the volume to 100 mL with reagent water (NOT acid). If cyanogen iodide is added to sample digestates, then silver standards must be prepared that contain cyanogen iodide as well. Prepare working standards by diluting a small volume of a silver stock solution with water and adjusting the pH>7 with NH₄OH. Add 1 mL of the cyanogen iodide solution and let stand 1 hour. Transfer to a 100-mL volumetric flask and dilute to volume with water.

³² "Water Temperature-Influential Factors, Field Measurement and Data Presentation," Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 1, Chapter D1. 1975. USGS.

³³ Method 8009, Zincon Method for Zinc, Hach Handbook of Water Analysis, 1979. Hach Company.

³⁴ Method AES0029, Direct Current Plasma (DCP) Optical Emission Spectrometric Method for Trace Elemental Analysis of Water and Wastes. 1986-Revised 1991. Thermo Jarrell Ash Corporation.

³⁵ In-Situ Method 1004-8-2009, Carbonaceous Biochemical Oxygen Demand (CBOD) Measurement by Optical Probe. 2009. In-Situ Incorporated.

³⁶ Microwave-assisted digestion may be employed for this metal, when analyzed by this methodology. Closed Vessel Microwave Digestion of Wastewater Samples for Determination of Metals. April 16, 1992. CEM Corporation

³⁷ When determining boron and silica, only plastic, PTFE, or quartz laboratory ware may be used from start until completion of analysis.

³⁸ Only use *n*-hexane (*n*-Hexane—85% minimum purity, 99.0% min. saturated C6 isomers, residue less than 1 mg/L) extraction solvent when determining Oil and Grease parameters—Hexane Extractable Material (HEM), or Silica Gel Treated HEM (analogous to EPA Methods 1664 Rev. A and 1664 Rev. B). Use of other extraction solvents is prohibited.

³⁹ Method PAI-DK01, Nitrogen, Total Kjeldahl, Block Digestion, Steam Distillation, Titrimetric Detection. Revised December 22, 1994. OI Analytical.

⁴⁰ Method PAI-DK02, Nitrogen, Total Kjeldahl, Block Digestion, Steam Distillation, Colorimetric Detection. Revised December 22, 1994. OI Analytical.

⁴¹ Method PAI-DK03, Nitrogen, Total Kjeldahl, Block Digestion, Automated FIA Gas Diffusion. Revised December 22, 1994. OI Analytical.

⁴² Method 1664 Rev. B is the revised version of EPA Method 1664 Rev. A. U.S. EPA. February 1999, Revision A. Method 1664, *n*-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated *n*-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry. EPA-821-R-98-002. U.S. EPA. February 2010, Revision B. Method 1664, *n*-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated *n*-Hexane Extractable Material (SGT-HEM; Non-polar Material) by Extraction and Gravimetry. EPA-821-R-10-001.

⁴³ Method 1631, Revision E, Mercury in Water by Oxidation, Purge and Trap, and Cold Vapor Atomic Fluorescence Spectrometry, EPA-821-R-02-019. Revision E. August 2002. U.S. EPA. The application of clean techniques described in EPA's Method 1669: *Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels*. EPA-821-R-96-011, are recommended to preclude contamination at low-level, trace metal determinations.

⁴⁴ Method OIA-1677-09, Available Cyanide by Ligand Exchange and Flow Injection Analysis (FIA). 2010. OI Analytical.

⁴⁵ Open File Report 00-170, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Ammonium Plus Organic Nitrogen by a Kjeldahl Digestion Method and an Automated Photometric Finish that Includes Digest Cleanup by Gas Diffusion. 2000. USGS.

⁴⁶ Open File Report 93-449, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Chromium in Water by Graphite Furnace Atomic Absorption Spectrophotometry. 1993. USGS.

⁴⁷ Open File Report 97-198, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Molybdenum by Graphite Furnace Atomic Absorption Spectrophotometry. 1997. USGS.

⁴⁸ Open File Report 92-146, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Total Phosphorus by Kjeldahl Digestion Method and an Automated Colorimetric Finish That Includes Dialysis. 1992. USGS.

⁴⁹ Open File Report 98-639, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Arsenic and Selenium in Water and Sediment by Graphite Furnace-Atomic Absorption Spectrometry. 1999. USGS.

⁵⁰ Open File Report 98-165, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Elements in Whole-water Digests Using Inductively Coupled Plasma-Optical Emission Spectrometry and Inductively Coupled Plasma-Mass Spectrometry. 1998. USGS.

⁵¹ Open File Report 93-125, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments. 1993. USGS.

⁵² Unless otherwise indicated, all EPA methods, excluding EPA Method 300.1, are published in U.S. EPA. May 1994. Methods for the Determination of Metals in Environmental Samples, Supplement I, EPA/600/R-94/111; or U.S. EPA. August 1993. Methods for the Determination of Inorganic Substances in Environmental Samples, EPA/600/R-93/100. EPA Method 300.1 is U.S. EPA. Revision 1.0, 1997, including errata cover sheet April 27, 1999. Determination of Inorganic Ions in Drinking Water by Ion Chromatography.

⁵³ Styrene divinyl benzene beads (e.g., AMCO-AEPA-1 or equivalent) and stabilized formazin (e.g., Hach StablCal™ or equivalent) are acceptable substitutes for formazin.

⁵⁴ Method D6508-15, Test Method for Determination of Dissolved Inorganic Anions in Aqueous Matrices Using Capillary Ion Electrophoresis and Chromate Electrolyte. 2015. ASTM

⁵⁵ Kelada-01, Kelada Automated Test Methods for Total Cyanide, Acid Dissociable Cyanide, and Thiocyanate, EPA 821-B-01-009, Revision 1.2, August 2001. U.S. EPA. Note: A 450-W UV lamp may be used in this method instead of the 550-W lamp specified if it provides performance within the quality control (QC) acceptance criteria of the method in a given instrument. Similarly, modified flow cell configurations and flow conditions may be used in the method, provided that the QC acceptance criteria are met.

⁵⁶ QuikChem Method 10-204-00-1-X, Digestion and Distillation of Total Cyanide in Drinking and Wastewaters using MICRO DIST and Determination of Cyanide by Flow Injection Analysis. Revision 2.2, March 2005. Lachat Instruments.

⁵⁷ When using sulfide removal test procedures described in EPA Method 335.4-1, reconstitute particulate that is filtered with the sample prior to distillation.

⁵⁸ Unless otherwise stated, if the language of this table specifies a sample digestion and/or distillation "followed by" analysis with a method, approved digestion and/or distillation are required prior to analysis.

⁵⁹ Samples analyzed for available cyanide using OI Analytical method OIA-1677-09 or ASTM method D6888-16 that contain particulate matter may be filtered only after the ligand exchange reagents have been added to the samples, because the ligand exchange process converts complexes containing available cyanide to free cyanide, which is not removed by filtration. Analysts are further cautioned to limit the time between the addition of the ligand exchange reagents and sample filtration to no more than 30 minutes to preclude settling of materials in samples.

⁶⁰ Analysts should be aware that pH optima and chromophore absorption maxima might differ when phenol is replaced by a substituted phenol as the color reagent in Berthelot Reaction ("phenol-hypochlorite reaction") colorimetric ammonium determination methods. For example, when phenol is used as the color reagent, pH optimum and wavelength of maximum absorbance are about 11.5 and 635 nm, respectively—see, Patton, C.J. and S.R. Crouch. March 1977. *Anal. Chem.* 49:464-469. These reaction parameters increase to pH > 12.6 and 665 nm when salicylate is used as the color reagent—see, Krom, M.D. April 1980. *The Analyst* 105:305-316.

⁶¹ If atomic absorption or ICP instrumentation is not available, the aluminum colorimetric method detailed in the 19th Edition of *Standard Methods for the Examination of Water and Wastewater* may be used. This method has poorer precision and bias than the methods of choice.

⁶² Easy (1-Reagent) Nitrate Method, Revision November 12, 2011. Craig Chinchilla.

⁶³ Hach Method 10360, Luminescence Measurement of Dissolved Oxygen in Water and Wastewater and for Use in the Determination of BOD₅ and CBOD₅. Revision 1.2, October 2011. Hach Company. This method may be used to measure dissolved oxygen when performing the methods approved in Table IB for measurement of biochemical oxygen demand (BOD) and carbonaceous biochemical oxygen demand (CBOD).

⁶⁴ In-Situ Method 1002-8-2009, Dissolved Oxygen (DO) Measurement by Optical Probe. 2009. In-Situ Incorporated.

⁶⁵ Mitchell Method M5331, Determination of Turbidity by Nephelometry. Revision 1.0, July 31, 2008. Leck Mitchell.

⁶⁶ Mitchell Method M5271, Determination of Turbidity by Nephelometry. Revision 1.0, July 31, 2008. Leck Mitchell.

⁶⁷ Orion Method AQ4500, Determination of Turbidity by Nephelometry. Revision 5, March 12, 2009. Thermo Scientific.

⁶⁸ EPA Method 200.5, Determination of Trace Elements in Drinking Water by Axially Viewed Inductively Coupled Plasma-Atomic Emission Spectrometry, EPA/600/R-06/115. Revision 4.2, October 2003. U.S. EPA.

⁶⁹ Method 1627, Kinetic Test Method for the Prediction of Mine Drainage Quality, EPA-821-R-09-002. December 2011. U.S. EPA.

⁷⁰ Techniques and Methods Book 5-B1, Determination of Elements in Natural-Water, Biota, Sediment and Soil Samples Using Collision/Reaction Cell Inductively Coupled Plasma-Mass Spectrometry, Chapter 1, Section B, Methods of the National Water Quality Laboratory, Book 5, Laboratory Analysis, 2006. USGS.

⁷¹ Water-Resources Investigations Report 01-4132, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Organic Plus Inorganic Mercury in Filtered and Unfiltered Natural Water with Cold Vapor-Atomic Fluorescence Spectrometry, 2001. USGS.

⁷² USGS Techniques and Methods 5-B8, Chapter 8, Section B, Methods of the National Water Quality Laboratory Book 5, Laboratory Analysis, 2011 USGS.

⁷³ NECi Method N07-0003, "Nitrate Reductase Nitrate-Nitrogen Analysis," Revision 9.0, March 2014, The Nitrate Elimination Co., Inc.

⁷⁴ Timberline Instruments, LLC Method Ammonia-001, "Determination of Inorganic Ammonia by Continuous Flow Gas Diffusion and Conductivity Cell Analysis," June 2011, Timberline Instruments, LLC.

⁷⁵ Hach Company Method 10206, "Spectrophotometric Measurement of Nitrate in Water and Wastewater," Revision 2.1, January 2013, Hach Company.

⁷⁶ Hach Company Method 10242, "Simplified Spectrophotometric Measurement of Total Kjeldahl Nitrogen in Water and Wastewater," Revision 1.1, January 2013, Hach Company.

⁷⁷ National Council for Air and Stream Improvement (NCASI) Method TNTP-W10900, "Total (Kjeldahl) Nitrogen and Total Phosphorus in Pulp and Paper Biologically Treated Effluent by Alkaline Persulfate Digestion," June 2011, National Council for Air and Stream Improvement, Inc.

⁷⁸ The pH adjusted sample is to be adjusted to 7.6 for NPDES reporting purposes.

⁷⁹ I-2057-85 U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Chap. A11989, Methods for Determination of Inorganic Substances in Water and Fluvial Sediments, 1989.

⁸⁰ Methods I-2522-90, I-2540-90, and I-2601-90 U.S. Geological Survey Open-File Report 93-125, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments, 1993.

⁸¹ Method I-1472-97, U.S. Geological Survey Open-File Report 98-165, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments, 1998.

⁸² FIALab Instruments, Inc. Method FIALab 100, "Determination of Inorganic Ammonia by Continuous Flow Gas Diffusion and Fluorescence Detector Analysis", April 4, 2018, FIALab Instruments, Inc.

⁸³ MACHEREY-NAGEL GmbH and Co. Method 036/038 NANOCOLOR® COD LR/HR, "Spectrophotometric Measurement of Chemical Oxygen Demand in Water and Wastewater", Revision 1.5, May 2018, MACHEREY-NAGEL GmbH and Co. KG.

⁸⁴ Please refer to the following applicable Quality Control Sections: Part 2000 Methods, Physical and Aggregate Properties 2020 (2017); Part 3000 Methods, Metals, 3020 (2017); Part 4000 Methods, Inorganic Nonmetallic Constituents, 4020 (2014); Part 5000 Methods, and Aggregate Organic Constituents, 5020 (2017). These Quality Control Standards are available for download at www.standardmethods.org at no charge.

⁸⁵ Each laboratory may establish its own control limits by performing at least 25 glucose-glutamic acid (GGA) checks over several weeks or months and calculating the mean and standard deviation. The laboratory may then use the mean ± 3 standard deviations as the control limit for future GGA checks. However, GGA acceptance criteria can be no wider than 198 ± 30.5 mg/L for BOD₅. GGA acceptance criteria for CBOD must be either 198 ± 30.5 mg/L, or the lab may develop control charts under the following conditions:

- Dissolved oxygen uptake from the seed contribution is between 0.6–1.0 mg/L.
- Control charts are performed on at least 25 GGA checks with three standard deviations from the derived mean.
- The RSD must not exceed 7.5%.
- Any single GGA value cannot be less than 150 mg/L or higher than 250 mg/L.

TABLE IC—LIST OF APPROVED TEST PROCEDURES FOR NON-PESTICIDE ORGANIC COMPOUNDS

Parameter ¹	Method	EPA ^{2,7}	Standard methods	ASTM	Other
1. Acenaphthene	GC	610.			
	GC/MS	625.1, 1625B	6410 B-2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B-2005	D4657-92 (98).	
2. Acenaphthylene	GC	610.			
	GC/MS	625.1, 1625B	6410 B-2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B-2005	D4657-92 (98).	
3. Acrolein	GC	603.			
	GC/MS	624.1, ⁴ 1624B.			O-4127-96. ¹³
4. Acrylonitrile	GC	603.			
	GC/MS	624.1, ⁴ 1624B			
5. Anthracene	GC	610.			
	GC/MS	625.1, 1625B	6410 B-2000		See footnote ⁹ , p. 27.
6. Benzene	HPLC	610	6440 B-2005	D4657-92 (98).	
	GC	602	6200 C-2011.		
	GC/MS	624.1, 1624B	6200 B-2011		O-4127-96 ¹³ , O-4436-16. ¹⁴
7. Benzidine	Spectrophotometric				See footnote ³ , p.1.
	GC/MS	625.1, ⁵ 1625B	6410 B-2000.		
8. Benzo(a)anthracene	HPLC	605.			
	GC	610.			
	GC/MS	625.1, 1625B	6410 B-2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B-2005	D4657-92 (98).	

TABLE IC—LIST OF APPROVED TEST PROCEDURES FOR NON-PESTICIDE ORGANIC COMPOUNDS—Continued

Parameter ¹	Method	EPA ^{2,7}	Standard methods	ASTM	Other
9. Benzo(a)pyrene	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98).	
10. Benzo(b)fluoranthene	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98).	
11. Benzo(g,h,i)perylene	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98).	
12. Benzo(k)fluoranthene	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98).	
13. Benzyl chloride	GC				See footnote ³ , p. 130.
	GC/MS				See footnote ⁶ , p. S102.
14. Butyl benzyl phthalate	GC	606.			
15. bis(2-Chloroethoxy) methane	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	GC	611.			
16. bis(2-Chloroethyl) ether	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	GC	611.			
17. bis(2-Ethylhexyl) phthalate	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	GC	606.			
18. Bromodichloromethane	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
19. Bromoform	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
20. Bromomethane	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
21. 4-Bromophenyl phenyl ether	GC	611.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
22. Carbon tetrachloride	GC	601	6200 C–2011		See footnote ³ , p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
23. 4-Chloro-3-methyl phenol	GC	604	6420 B–2000.		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
24. Chlorobenzene	GC	601, 602	6200 C–2011		See footnote ³ , p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
25. Chloroethane	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96. ¹³
26. 2-Chloroethylvinyl ether	GC	601.			
	GC/MS	624.1, 1624B.			
27. Chloroform	GC	601	6200 C–2011		See footnote ³ , p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
28. Chloromethane	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
29. 2-Chloronaphthalene	GC	612.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
30. 2-Chlorophenol	GC	604	6420 B–2000.		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
31. 4-Chlorophenyl phenyl ether	GC	611.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
32. Chrysene	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
33. Dibenzo(a,h)anthracene	HPLC	610	6440 B–2005	D4657–92 (98).	
	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
34. Dibromochloromethane	HPLC	610	6440 B–2005	D4657–92 (98).	
	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
35. 1,2-Dichlorobenzene	GC	601, 602	6200 C–2011.		See footnote ⁹ , p. 27; O–4127–96, ¹³ O–4436–16. ¹⁴
	GC/MS	624.1, 1625B	6200 B–2011		
36. 1,3-Dichlorobenzene	GC	601, 602	6200 C–2011.		
	GC/MS	624.1, 1625B	6200 B–2011		See footnote ⁹ , p. 27; O–4127–96. ¹³
37. 1,4-Dichlorobenzene	GC	601, 602	6200 C–2011.		
	GC/MS	624.1, 1625B	6200 B–2011		See footnote ⁹ , p. 27; O–4127–96, ¹³ O–4436–16. ¹⁴
38. 3,3'-Dichlorobenzidine	GC/MS	625.1, 1625B	6410 B–2000.		
	HPLC	605.			
39. Dichlorodifluoromethane	GC	601.			
	GC/MS		6200 C–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
40. 1,1-Dichloroethane	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
41. 1,2-Dichloroethane	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
42. 1,1-Dichloroethene	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
43. <i>trans</i> -1,2-Dichloroethene	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
44. 2,4-Dichlorophenol	GC	604	6420 B–2000.		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.

TABLE IC—LIST OF APPROVED TEST PROCEDURES FOR NON-PESTICIDE ORGANIC COMPOUNDS—Continued

Parameter ¹	Method	EPA ^{2,7}	Standard methods	ASTM	Other
45. 1,2-Dichloropropane	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
46. <i>cis</i> -1,3-Dichloropropene	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
47. <i>trans</i> -1,3-Dichloropropene	GC	601	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
48. Diethyl phthalate	GC	606.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
49. 2,4-Dimethylphenol	GC	604	6420 B–2000.		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
50. Dimethyl phthalate	GC	606.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
51. Di- <i>n</i> -butyl phthalate	GC	606.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
52. Di- <i>n</i> -octyl phthalate	GC	606.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
53. 2, 4-Dinitrophenol	GC	604	6420 B–2000		See footnote ⁹ , p. 27.
	GC/MS	625.1, 1625B	6410 B–2000.		
54. 2,4-Dinitrotoluene	GC	609.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
55. 2,6-Dinitrotoluene	GC	609.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
56. Epichlorohydrin	GC				See footnote ³ , p. 130.
	GC/MS				See footnote ⁶ , p. S102.
57. Ethylbenzene	GC	602	6200 C–2011.		
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96, ¹³ O–4436–16. ¹⁴
58. Fluoranthene	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98).	
59. Fluorene	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98).	
60. 1,2,3,4,6,7,8-Heptachloro- dibenzofuran.					
61. 1,2,3,4,7,8,9-Heptachloro- dibenzofuran.	GC/MS	1613B.			
62. 1,2,3,4,6,7,8-Heptachloro-dibenzo- <i>p</i> -dioxin.	GC/MS	1613B.			
63. Hexachlorobenzene	GC	612.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
64. Hexachlorobutadiene	GC	612.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27; O–4127–96. ¹³
65. Hexachlorocyclopentadiene	GC	612.			
	GC/MS	625.1, ⁵ 1625B	6410 B–2000		See footnote ⁹ , p. 27; O–4127–96. ¹³
	GC/MS	1613B.			
66. 1,2,3,4,7,8-Hexachloro- dibenzofuran.					
67. 1,2,3,6,7,8-Hexachloro- dibenzofuran.	GC/MS	1613B.			
68. 1,2,3,7,8,9-Hexachloro- dibenzofuran.	GC/MS	1613B.			
69. 2,3,4,6,7,8-Hexachloro- dibenzofuran.	GC/MS	1613B.			
70. 1,2,3,4,7,8-Hexachloro-dibenzo- <i>p</i> -dioxin.	GC/MS	1613B.			
71. 1,2,3,6,7,8-Hexachloro-dibenzo- <i>p</i> -dioxin.	GC/MS	1613B.			
72. 1,2,3,7,8,9-Hexachloro-dibenzo- <i>p</i> -dioxin.	GC/MS	1613B.			
73. Hexachloroethane	GC	612.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27; O–4127–96. ¹³
74. Indeno(1,2,3- <i>c,d</i>) pyrene	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B–2005	D4657–92 (98).	
75. Isophorone	GC	609.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
76. Methylene chloride	GC	601	6200 C–2011		See footnote ³ , p. 130.
	GC/MS	624.1, 1624B	6200 B–2011		O–4127–96 ¹³ , O–4436–16. ¹⁴
77. 2-Methyl-4,6-dinitrophenol	GC	604	6420 B–2000.		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
78. Naphthalene	GC	610.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	HPLC	610	6440 B–2005.		
79. Nitrobenzene	GC	609.			
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
	HPLC			D4657–92 (98).	
80. 2-Nitrophenol	GC	604	6420 B–2000.		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
81. 4-Nitrophenol	GC	604	6420 B–2000.		
	GC/MS	625.1, 1625B	6410 B–2000		See footnote ⁹ , p. 27.
82. N-Nitrosodimethylamine	GC	607.			

TABLE IC—LIST OF APPROVED TEST PROCEDURES FOR NON-PESTICIDE ORGANIC COMPOUNDS—Continued

Parameter ¹	Method	EPA ^{2,7}	Standard methods	ASTM	Other
83. N-Nitrosodi- <i>n</i> -propylamine	GC/MS GC	625.1, ⁵ 1625B 607.	6410 B-2000 .....	.....	See footnote, ⁹ p. 27.
84. N-Nitrosodiphenylamine	GC/MS GC	625.1, ⁵ 1625B 607.	6410 B-2000 .....	.....	See footnote, ⁹ p. 27.
85. Octachlorodibenzofuran	GC/MS GC/MS	625.1, ⁵ 1625B 1613B. ¹⁰	6410 B-2000 .....	.....	See footnote, ⁹ p. 27.
86. Octachlorodibenzo- <i>p</i> -dioxin	GC/MS	1613B. ¹⁰			
87. 2,2'-oxybis(1-chloropropane) ¹² [also known as bis(2-Chloro-1-methylethyl) ether].	GC	611.			
88. PCB-1016	GC/MS GC	625.1, 1625B 608.3	6410 B-2000 .....	.....	See footnote ⁹ , p. 27. See footnote ³ , p. 43; See footnote. ⁸
89. PCB-1221	GC/MS GC	625.1 608.3	6410 B-2000.	.....	See footnote ³ , p. 43; See footnote. ⁸
90. PCB-1232	GC/MS GC	625.1 608.3	6410 B-2000.	.....	See footnote ³ , p. 43; See footnote. ⁸
91. PCB-1242	GC/MS GC	625.1 608.3	6410 B-2000.	.....	See footnote ³ , p. 43; See footnote. ⁸
92. PCB-1248	GC/MS GC	625.1 608.3	6410 B-2000.	.....	See footnote ³ , p. 43; See footnote. ⁸
93. PCB-1254	GC/MS GC	625.1 608.3	6410 B-2000.	.....	See footnote ³ , p. 43; See footnote. ⁸
94. PCB-1260	GC/MS GC	625.1 608.3	6410 B-2000.	.....	See footnote ³ , p. 43; See footnote. ⁸
95. 1,2,3,7,8-Pentachloro-dibenzofuran.	GC/MS	1613B.			
96. 2,3,4,7,8-Pentachloro-dibenzofuran.	GC/MS	1613B.			
97. 1,2,3,7,8-Pentachloro-dibenzo- <i>p</i> -dioxin.	GC/MS	1613B.			
98. Pentachlorophenol	GC GC/MS	604 625.1, 1625B	6420 B-2000 6410 B-2000 .....	.....	See footnote ³ , p. 140. See footnote ⁹ , p. 27.
99. Phenanthrene	GC GC/MS	610 625.1, 1625B	6410 B-2000 .....	.....	See footnote ⁹ , p. 27.
100. Phenol	HPLC GC GC/MS	610 604 625.1, 1625B	6440 B-2005 6420 B-2000 6410 B-2000	D4657-92 (98).	See footnote ⁹ , p. 27.
101. Pyrene	GC GC/MS	610 625.1, 1625B	6410 B-2000 .....	.....	See footnote ⁹ , p. 27.
102. 2,3,7,8-Tetrachloro-dibenzofuran	HPLC	610	6440 B-2005	D4657-92 (98).	
103. 2,3,7,8-Tetrachloro-dibenzo- <i>p</i> -dioxin.	GC/MS	1613B. ¹⁰			
104. 1,1,2,2-Tetrachloroethane	GC GC/MS	601 624.1, 1624B	6200 C-2011 6200 B-2011 .....	.....	See footnote ³ , p. 130. O-4127-96. ¹³
105. Tetrachloroethene	GC GC/MS	601 624.1, 1624B	6200 C-2011 6200 B-2011 .....	.....	See footnote ³ , p. 130. O-4127-96 ¹³ , O-4436-16. ¹⁴
106. Toluene	GC GC/MS	602 624.1, 1624B	6200 C-2011 6200 B-2011 .....	.....	O-4127-96 ¹³ , O-4436-16. ¹⁴
107. 1,2,4-Trichlorobenzene	GC GC/MS	612 625.1, 1625B	6200 B-2011 6410 B-2000 .....	.....	See footnote ³ , p. 130. See footnote, ⁹ p. 27; O-4127-96, ¹³ O-4436-16. ¹⁴
108. 1,1,1-Trichloroethane	GC GC/MS	601 624.1, 1624B	6200 C-2011 6200 B-2011 .....	.....	O-4127-96 ¹³ , O-4436-16. ¹⁴
109. 1,1,2-Trichloroethane	GC GC/MS	601 624.1, 1624B	6200 C-2011 6200 B-2011 .....	.....	See footnote ³ , p. 130. O-4127-96 ¹³ , O-4436-16. ¹⁴
110. Trichloroethene	GC GC/MS	601 624.1, 1624B	6200 C-2011 6200 B-2011 .....	.....	O-4127-96 ¹³ , O-4436-16. ¹⁴
111. Trichlorofluoromethane	GC GC/MS	601 624.1	6200 C-2011 6200 B-2011 .....	.....	O-4127-96. ¹³
112. 2,4,6-Trichlorophenol	GC GC/MS	604 625.1, 1625B	6420 B-2000 6410 B-2000 .....	.....	See footnote ⁹ , p. 27.
113. Vinyl chloride	GC GC/MS	601 624.1, 1624B	6200 C-2011 6200 B-2011 .....	.....	O-4127-96 ¹³ , O-4436-16. ¹⁴
114. Nonylphenol	GC/MS			D7065-17.	
115. Bisphenol A (BPA)	GC/MS			D7065-17.	
116. <i>p</i> - <i>tert</i> -Octylphenol (OP)	GC/MS			D7065-17.	
117. Nonylphenol Monoethoxylate (NP1EO).	GC/MS			D7065-17.	
118. Nonylphenol Diethoxylate (NP2EO).	GC/MS			D7065-17.	
119. Adsorbable Organic Halides (AOX).	Adsorption and Coulometric Titration.	1650. ¹¹			
120. Chlorinated Phenolics	In Situ Acetylation and GC/MS.	1653. ¹¹			

Table IC notes:

¹ All parameters are expressed in micrograms per liter (µg/L) except for Method 1613B, in which the parameters are expressed in picograms per liter (pg/L).

²The full text of Methods 601–613, 1613B, 1624B, and 1625B are provided at appendix A, Test Procedures for Analysis of Organic Pollutants. The standardized test procedure to be used to determine the method detection limit (MDL) for these test procedures is given at appendix B of this part. Definition and Procedure for the Determination of the Method Detection Limit. These methods are available at: <https://www.epa.gov/cwa-methods> as individual PDF files.

³Methods for Benzidine: Chlorinated Organic Compounds, Pentachlorophenol and Pesticides in Water and Wastewater. September 1978. U.S. EPA.
⁴Method 624.1 may be used for quantitative determination of acrolein and acrylonitrile, provided that the laboratory has documentation to substantiate the ability to detect and quantify these analytes at levels necessary to comply with any associated regulations. In addition, the use of sample introduction techniques other than simple purge-and-trap may be required. QC acceptance criteria from Method 603 should be used when analyzing samples for acrolein and acrylonitrile in the absence of such criteria in Method 624.1.

⁵Method 625.1 may be extended to include benzidine, hexachlorocyclopentadiene, N-nitrosodimethylamine, N-nitrosodi-n-propylamine, and N-nitrosodiphenylamine. However, when they are known to be present, Methods 605, 607, and 612, or Method 1625B, are preferred methods for these compounds.

⁶Method 625.1 screening only.
⁷Selected Analytical Methods Approved and Cited by the United States Environmental Protection Agency, Supplement to the 15th Edition of *Standard Methods for the Examination of Water and Wastewater*. 1981. American Public Health Association (APHA).

⁸Each analyst must make an initial, one-time demonstration of their ability to generate acceptable precision and accuracy with Methods 601–603, 1624B, and 1625B in accordance with procedures in Section 8.2 of each of these methods. Additionally, each laboratory, on an on-going basis must spike and analyze 10% (5% for Methods 624.1 and 625.1 and 100% for methods 1624B and 1625B) of all samples to monitor and evaluate laboratory data quality in accordance with Sections 8.3 and 8.4 of these methods. When the recovery of any parameter falls outside the quality control (QC) acceptance criteria in the pertinent method, analytical results for that parameter in the unspiked sample are suspect. The results should be reported but cannot be used to demonstrate regulatory compliance. If the method does not contain QC acceptance criteria, control limits of ± three standard deviations around the mean of a minimum of five replicate measurements must be used. These quality control requirements also apply to the Standard Methods, ASTM Methods, and other methods cited.

⁹Organochlorine Pesticides and PCBs in Wastewater Using Empore™ Disk. Revised October 28, 1994. 3M Corporation.
¹⁰Method O–3116–87 is in Open File Report 93–125, Methods of Analysis by U.S. Geological Survey National Water Quality Laboratory—Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments. 1993. USGS.

¹¹Analysts may use Fluid Management Systems, Inc. Power-Prep system in place of manual cleanup provided the analyst meets the requirements of Method 1613B (as specified in Section 9 of the method) and permitting authorities. Method 1613, Revision B, Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS. Revision B, 1994. U.S. EPA. The full text of this method is provided in appendix A to this part and at <https://www.epa.gov/cwa-methods/approved-cwa-test-methods-organic-compounds>.

¹²Method 1650, Adsorbable Organic Halides by Adsorption and Coulometric Titration. Revision C, 1997 U.S. EPA. Method 1653, Chlorinated Phenolics in Wastewater by In Situ Acetylation and GCMS. Revision A, 1997 U.S. EPA. The full text for both of these methods is provided at appendix A in part 430 of this chapter, The Pulp, Paper, and Paperboard Point Source Category.

¹³The compound was formerly inaccurately labeled as 2,2'-oxybis(2-chloropropane) and bis(2-chloroisopropyl) ether. Some versions of Methods 611, and 1625 inaccurately list the analyte as "bis(2-chloroisopropyl)ether," but use the correct CAS number of 108–60–1.

¹⁴Method O–4127–96, U.S. Geological Survey Open-File Report 97–829, Methods of analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of 86 volatile organic compounds in water by gas chromatography/mass spectrometry, including detections less than reporting limits, 1998, USGS.

¹⁵Method O–4436–16 U.S. Geological Survey Techniques and Methods, book 5, chap. B12, Determination of heat purgeable and ambient purgeable volatile organic compounds in water by gas chromatography/mass spectrometry, 2016, USGS.

* * * * *

TABLE IH—LIST OF APPROVED MICROBIOLOGICAL METHODS FOR AMBIENT WATER

Parameter and units	Method ¹	EPA	Standard methods	AOAC, ASTM, USGS	Other
Bacteria					
1. Coliform (fecal), number per 100 mL.	Most Probable Number (MPN), 5 tube, 3 dilution, or	p. 132 ³	9221 E–2014, 9221 F–2014 ³²		
	Membrane filter (MF) ² , single step	p. 124 ³	9222 D–2015 ²⁶	B–0050–85 ⁴ , B–0025–85 ⁴	
2. Coliform (total), number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 114 ³	9221 B–2014		
	MF ² , single step or two step	p. 108 ³	9222 B–2015 ²⁷		
3. <i>E. coli</i> , number per 100 mL.	MF ² with enrichment	p. 111 ³	9222 B–2015 ²⁷		
	MPN ^{5,7,13} , multiple tube, or		9221 B.3–2014/9221 F–2014 ^{10,12,32}		
	Multiple tube/multiple well, or		9223 B–2016 ¹¹	991.15 ⁹	Colilert [®] 11 ¹⁵ , Colilert-18 [®] , 11 14 15
	MF ^{2,5,6,7} , two step, or	1103.1 ¹⁸	9222 B–2015/9222 I–2015 ¹⁷ , 9213 D–2007.	D5392–93 ⁸	
	Single step	1603 ¹⁹ , 1604 ²⁰			m-ColiBlue24 [®] 16, KwikCount [™] EC, ^{28,29}
4. Fecal streptococci, number per 100 mL.	MPN, 5 tube, 3 dilution, or	p. 139 ³	9230 B–2013	B–0055–85 ⁴	
	MF ² , or	p. 136 ³	9230 C–2013 ³⁰		
5. Enterococci, number per 100 mL.	Plate count	p. 143 ³			
	MPN ^{5,7} , multiple tube/multiple well, or		9230 D–2013	D6503–99 ⁸	Enterolert [®] , 11 21
	MF ^{2,5,6,7} two step, or	1106.1 ²²	9230 C–2013 ³⁰	D5259–92 ⁸	
	Single step, or	1600 ²³	9230 C–2013 ³⁰		
	Plate count	p. 143 ³			
Protozoa					
6. <i>Cryptosporidium</i>	Filtration/IMS/FA	1622 ²⁴ , 1623 ²⁵ , 1623.1 ^{25,31}			
7. <i>Giardia</i>	Filtration/IMS/FA	1623 ²⁵ , 1623.1 ^{25,31}			

Table 1H notes:
¹The method must be specified when results are reported.
²A 0.45-µm membrane filter (MF) or other pore size certified by the manufacturer to fully retain organisms to be cultivated and to be free of extractables which could interfere with their growth.
³Microbiological Methods for Monitoring the Environment, Water and Wastes. EPA/600/8–78/017. 1978. US EPA.
⁴U.S. Geological Survey Techniques of Water-Resource Investigations, Book 5, Laboratory Analysis, Chapter A4, Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples. 1989. USGS.
⁵Tests must be conducted to provide organism enumeration (density). Select the appropriate configuration of tubes/filtrations and dilutions/volumes to account for the quality, character, consistency, and anticipated organism density of the water sample.
⁶When the MF method has not been used previously to test waters with high turbidity, large numbers of noncoliform bacteria, or samples that may contain organisms stressed by chlorine, a parallel test should be conducted with a multiple-tube technique to demonstrate applicability and comparability of results.
⁷To assess the comparability of results obtained with individual methods, it is suggested that side-by-side tests be conducted across seasons of the year with the water samples routinely tested in accordance with the most current *Standard Methods for the Examination of Water and Wastewater* or EPA alternate test procedure (ATP) guidelines.
⁸Annual Book of ASTM Standards—Water and Environmental Technology. Section 11.02. 2000, 1999, 1996. ASTM International.
⁹Official Methods of Analysis of AOAC International, 16th Edition, Volume I, Chapter 17. 1995. AOAC International.

¹⁰ The multiple-tube fermentation test is used in 9221B.3–2014. Lactose broth may be used in lieu of lauryl tryptose broth (LTB), if at least 25 parallel tests are conducted between this broth and LTB using the water samples normally tested, and this comparison demonstrates that the false-positive rate and false-negative rate for total coliform using lactose broth is less than 10 percent. No requirement exists to run the completed phase on 10 percent of all total coliform-positive tubes on a seasonal basis.

¹¹ These tests are collectively known as defined enzyme substrate tests.

¹² After prior enrichment in a presumptive medium for total coliform using 9221B.3–2014, all presumptive tubes or bottles showing any amount of gas, growth or acidity within 48 h ± 3 h of incubation shall be submitted to 9221F–2014. Commercially available EC–MUG media or EC media supplemented in the laboratory with 50 µg/mL of MUG may be used.

¹³ Samples shall be enumerated by the multiple-tube or multiple-well procedure. Using multiple-tube procedures, employ an appropriate tube and dilution configuration of the sample as needed and report the Most Probable Number (MPN). Samples tested with Colilert® may be enumerated with the multiple-well procedures, Quanti-Tray® or Quanti-Tray®/2000, and the MPN calculated from the table provided by the manufacturer.

¹⁴ Colilert-18® is an optimized formulation of the Colilert® for the determination of total coliforms and *E. coli* that provides results within 18 h of incubation at 35 °C, rather than the 24 h required for the Colilert® test, and is recommended for marine water samples.

¹⁵ Descriptions of the Colilert®, Colilert-18®, Quanti-Tray®, and Quanti-Tray®/2000 may be obtained from IDEXX Laboratories Inc.

¹⁶ A description of the mColiBlue24® test may be obtained from Hach Company.

¹⁷ Subject coliform positive samples determined by 9222B–2015 or other membrane filter procedure to 9222I–2015 using NA–MUG media.

¹⁸ Method 1103.1: *Escherichia coli* (*E. coli*) in Water by Membrane Filtration Using membrane-Thermotolerant *Escherichia coli* Agar (mTEC), EPA–821–R–10–002. March 2010. US EPA.

¹⁹ Method 1603: *Escherichia coli* (*E. coli*) in Water by Membrane Filtration Using Modified membrane-Thermotolerant *Escherichia coli* Agar (Modified mTEC), EPA–821–R–14–010. September 2014. US EPA.

²⁰ Method 1604: Total Coliforms and *Escherichia coli* (*E. coli*) in Water by Membrane Filtration by Using a Simultaneous Detection Technique (MI Medium), EPA 821–R–02–024. September 2002. US EPA.

²¹ A description of the Enterolert® test may be obtained from IDEXX Laboratories Inc.

²² Method 1106.1: Enterococci in Water by Membrane Filtration Using membrane-Enterococcus-Esculin Iron Agar (mE–EIA), EPA–821–R–09–015. December 2009. US EPA.

²³ Method 1600: Enterococci in Water by Membrane Filtration Using membrane-Enterococcus Indoxyl-β-D-Glucoside Agar (mEI), EPA–821–R–14–011. September 2014. US EPA.

²⁴ Method 1622 uses a filtration, concentration, immunomagnetic separation of oocysts from captured material, immunofluorescence assay to determine concentrations, and confirmation through vital dye staining and differential interference contrast microscopy for the detection of *Cryptosporidium*. Method 1622: *Cryptosporidium* in Water by Filtration/IMS/FA, EPA–821–R–05–001. December 2005. US EPA.

²⁵ Methods 1623 and 1623.1 use a filtration, concentration, immunomagnetic separation of oocysts and cysts from captured material, immunofluorescence assay to determine concentrations, and confirmation through vital dye staining and differential interference contrast microscopy for the simultaneous detection of *Cryptosporidium* and *Giardia* oocysts and cysts. Method 1623: *Cryptosporidium* and *Giardia* in Water by Filtration/IMS/FA. EPA–821–R–05–002. December 2005. US EPA. Method 1623.1: *Cryptosporidium* and *Giardia* in Water by Filtration/IMS/FA. EPA 816–R–12–001. January 2012. US EPA.

²⁶ On a monthly basis, at least ten blue colonies from positive samples must be verified using Lauryl Tryptose Broth and EC broth, followed by count adjustment based on these results; and representative non-blue colonies should be verified using Lauryl Tryptose Broth. Where possible, verifications should be done from randomized sample sources.

²⁷ On a monthly basis, at least ten sheen colonies from positive samples must be verified using Lauryl Tryptose Broth and brilliant green lactose bile broth, followed by count adjustment based on these results; and representative non-sheen colonies should be verified using Lauryl Tryptose Broth. Where possible, verifications should be done from randomized sample sources.

²⁸ A description of KwikCount™ EC may be obtained from Micrology Laboratories LLC.

²⁹ Approved for the analyses of *E. coli* in freshwater only.

³⁰ Verification of colonies by incubation of BHI agar at 10 ± 0.5 °C for 48 ± 3 h is optional. As per the Errata to the 23rd Edition of *Standard Methods for the Examination of Water and Wastewater* "Growth on a BHI agar plate incubated at 10 ± 0.5 °C for 48 ± 3 h is further verification that the colony belongs to the genus *Enterococcus*."

³¹ Method 1623.1 includes updated acceptance criteria for IPR, OPR, and MS/MSD and clarifications and revisions based on the use of Method 1623 for years and technical support questions.

³² 9221 F.2–2014 allows for simultaneous detection of *E. coli* and thermotolerant fecal coliforms by adding inverted vials to EC–MUG; the inverted vials collect gas produced by thermotolerant fecal coliforms.

(b) Certain material is incorporated by reference into this section with the approval of the Director of the Federal Register under 5 U.S.C. 552(a) and 1 CFR part 51. All approved material may be inspected at EPA's Water Docket, EPA West, 1301 Constitution Avenue NW, Room 3334, Washington, DC 20004, (Telephone: 202–566–2426). It is also available for inspection at National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202–741–6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

(8) Office of Water, U.S. Environmental Protection Agency, Washington, DC (U.S. EPA). Available at <https://www.epa.gov/cwa-methods>.

(ix) Method 1623.1: *Cryptosporidium* and *Giardia* in Water by Filtration/IMS/FA. EPA 816–R–12–001. January 2012. U.S. EPA, Table IH, Note 25.

(x) Method 1627, Kinetic Test Method for the Prediction of Mine Drainage Quality. December 2011. EPA–821–R–09–002. Table IB, Note 69.

(xi) Method 1664, *n*-Hexane Extractable Material (HEM; Oil and

Grease) and Silica Gel Treated *n*-Hexane Extractable Material (SGT–HEM; Nonpolar Material) by Extraction and Gravimetry. Revision A, February 1999. EPA–821–R–98–002. Table IB, Notes 38 and 42.

(xii) Method 1664, *n*-Hexane Extractable Material (HEM; Oil and Grease) and Silica Gel Treated *n*-Hexane Extractable Material (SGT–HEM; Nonpolar Material) by Extraction and Gravimetry, Revision B, February 2010. EPA–821–R–10–001. Table IB, Notes 38 and 42.

(xiii) Method 1669, Sampling Ambient Water for Trace Metals at EPA Water Quality Criteria Levels. July 1996. Table IB, Note 43.

(xiv) Method 1680: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using Lauryl Tryptose Broth (LTB) and EC Medium. September 2014. EPA–821–R–14–009. Table IA, Note 15.

(xv) Method 1681: Fecal Coliforms in Sewage Sludge (Biosolids) by Multiple-Tube Fermentation using A–1 Medium. July 2006. EPA 821–R–06–013. Table IA, Note 20.

(xvi) Method 1682: *Salmonella* in Sewage Sludge (Biosolids) by Modified Semisolid Rappaport-Vassiliadis

(MSRV) Medium. September 2014. EPA 821–R–14–012. Table IA, Note 23.

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(xiv) 2540, solids. 2015. Table IB.

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(xxxix) 4500–CN–, Cyanide. 2016. Table IB.

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(xliv) 4500–NO₃–, Nitrogen (Nitrate). 2016. Table IB.

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(xlvi) 4500–O, Oxygen (Dissolved). 2016. Table IB.

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(lii) 5210, Biochemical Oxygen Demand (BOD). 2016. Table IB.

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(liv) 5310, Total Organic Carbon (TOC). 2014. Table IB.

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(lxvii) 9221 Multiple-Tube Fermentation Technique for Members of the Coliform Group. 2014. Table IA, Notes 12 and 14; Table IH, Notes 10 and 12.

(lxviii) 9222, Membrane Filter Technique for Members of the Coliform Group. 2015. Table IA; Table IH, Note 17.

(lix) 9223 Enzyme Substrate Coliform Test. 2016. Table IA; Table IH.

(lxx) 9230 Fecal Enterococcus/Streptococcus Groups. 2013. Table IA; Table IH.

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(v) ASTM D511–14, Standard Test Methods for Calcium and Magnesium in Water. November 2014. Table IB.

(vi) ASTM D512–12, Standard Test Methods for Chloride Ion in Water. July 2012. Table IB.

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(viii) ASTM D516–16, Standard Test Method for Sulfate Ion in Water, June 2016. Table IB.

(ix) ASTM D858–17, Standard Test Methods for Manganese in Water. June 2017. Table IB.

(x) ASTM D859–16, Standard Test Method for Silica in Water. June 2016. Table IB.

(xi) ASTM D888–12, Standard Test Methods for Dissolved Oxygen in Water. March 2012. Table IB.

(xii) ASTM D1067–16, Standard Test Methods for Acidity or Alkalinity of Water. June 2016. Table IB.

(xiii) ASTM D1068–15, Standard Test Methods for Iron in Water. October 2015. Table IB.

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(xv) ASTM D1126–17, Standard Test Method for Hardness in Water. December 2017. Table IB.

(xvi) ASTM D1179–16, Standard Test Methods for Fluoride Ion in Water. June 2016. Table IB.

(xvii) ASTM D1246–16, Standard Test Method for Bromide Ion in Water. June 2016. Table IB.

(xviii) ASTM D1252–06 (Reapproved 2012), Standard Test Methods for Chemical Oxygen Demand (Dichromate Oxygen Demand) of Water. June 2012. Table IB.

(xix) ASTM D1253–14, Standard Test Method for Residual Chlorine in Water. February 2014. Table IB.

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(xxi) ASTM D1426–15, Standard Test Methods for Ammonia Nitrogen in Water. April 2015. Table IB.

(xxii) ASTM D1687–17, Standard Test Methods for Chromium in Water. July 2017. Table IB.

(xxiii) ASTM D1688–17, Standard Test Methods for Copper in Water. July 2017. Table IB.

(xxiv) ASTM D1691–17, Standard Test Methods for Zinc in Water. June 2017. Table IB.

(xxv) ASTM D1783–01 (Reapproved 2012), Standard Test Methods for Phenolic Compounds in Water. August 2012. Table IB.

(xxvi) ASTM D1886–14, Standard Test Methods for Nickel in Water. November 2014. Table IB.

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(xxxi) ASTM D2036–09 (Reapproved 2015), Standard Test Methods for Cyanides in Water. July 2015. Table IB.

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(xxxiv) ASTM D2972–15, Standard Tests Method for Arsenic in Water. March 2015. Table IB.

(xxxv) ASTM D3223–17, Standard Test Method for Total Mercury in Water. June 2017. Table IB.

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(xxxvii) ASTM D3373–17, Standard Test Method for Vanadium in Water. June 2017. Table IB.

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(xxxix) ASTM D3557–17, Standard Test Method for Cadmium in Water. June 2017. Table IB.

(xl) ASTM D3558–15, Standard Test Method for Cobalt in Water. March 2015. Table IB.

(xli) ASTM D3559–15, Standard Test Methods for Lead in Water. October 2015. Table IB.

(xlii) ASTM D3590–17, Standard Test Methods for Total Kjeldahl Nitrogen in Water. June 2017. Table IB.

(xliii) ASTM D3645–15, Standard Test Methods for Beryllium in Water. March 2015. Table IB.

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(xlv) ASTM D3859–15, Standard Test Methods for Selenium in Water. April 2015. Table IB.

(xlvi) ASTM D3867–16, Standard Test Method for Nitrite-Nitrate in Water. June 2016. Table IB.

(xlvii) ASTM D4190–15, Standard Test Method for Elements in Water by Direct-Current Plasma Atomic Emission Spectroscopy. March 2015. Table IB.

(xlviii) ASTM D4282–15, Standard Test Method for Determination of Free Cyanide in Water and Wastewater by Microdiffusion. July 2015. Table IB.

(xlix) ASTM D4327–17, Standard Test Method for Anions in Water by Suppressed Ion Chromatography. December 2017. Table IB.

(l) ASTM D4382–18, Standard Test Method for Barium in Water, Atomic Absorption Spectrophotometry, Graphite Furnace. May 2018. Table IB.

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(lii) ASTM D4658–15, Standard Test Method for Sulfide Ion in Water. April 2015. Table IB.

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(liv) ASTM D4839–03 (Reapproved 2017), Standard Test Method for Total Carbon and Organic Carbon in Water by Ultraviolet, or Persulfate Oxidation, or Both, and Infrared Detection. December 2017. Table IB.

(lv) ASTM D5257–17, Standard Test Method for Dissolved Hexavalent Chromium in Water by Ion Chromatography. December 2017. Table IB.

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(lviii) ASTM D5673–16, Standard Test Method for Elements in Water by Inductively Coupled Plasma—Mass Spectrometry. February 2016. Table IB.

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(lxi) ASTM. D6508–15, Standard Test Method for Determination of Dissolved Inorganic Anions in Aqueous Matrices Using Capillary Ion Electrophoresis and Chromate Electrolyte. October 2015. Table IB, Note 54.

(lxii) ASTM. D6888–16, Standard Test Method for Available Cyanide with Ligand Displacement and Flow Injection Analysis (FIA) Utilizing Gas Diffusion Separation and Amperometric Detection. June 2016. Table IB, Note 59.

(lxiii) ASTM. D6919–17, Standard Test Method for Determination of Dissolved Alkali and Alkaline Earth Cations and Ammonium in Water and Wastewater by Ion Chromatography. June 2017. Table IB.

(lxiv) ASTM. D7065–17, Standard Test Method for Determination of Nonylphenol, Bisphenol A, *p*-tert-Octylphenol, Nonylphenol Monoethoxylate and Nonylphenol Diethoxylate in Environmental Waters by Gas Chromatography Mass Spectrometry. January 2018. Table IC.

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(lxviii) ASTM. D7511–12 (Reapproved 2017), Standard Test Method for Total Cyanide by Segmented Flow Injection Analysis, In-Line Ultraviolet Digestion and Amperometric Detection. July 2017. Table IB.

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(lxx) ASTM D7781–14 Standard Test Method for Nitrate-Nitrite in Water by Nitrate Reductase, May 2014. Table IB.

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(19) FIALab Instruments, Inc., 2151 N. Northlake Way, Seattle, WA 98103. Telephone: 425-376-0450.

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(26) MACHEREY-NAGEL GmbH and Co., 2850 Emrick Blvd. Bethlehem, PA 18020. Telephone: 888-321-6224.

(i) Method 036/038 NANOCOLOR® COD LR/HR, Spectrophotometric Measurement of Chemical Oxygen Demand in Water and Wastewater, Revision 1.5, May 2018. Table IB, Note 83.

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(iii) Methods for Determination of Inorganic Substances in Water and Fluvial Sediments, editors, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A1. 1979. Table IB, Note 8.

(iv) Methods for Determination of Inorganic Substances in Water and Fluvial Sediments, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A1. 1989. Table IB, Notes 2 and 79.

(v) Methods for the Determination of Organic Substances in Water and Fluvial Sediments, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 5, Chapter A3. 1987. Table IB, Note 24; Table ID, Note 4.

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With Selected-Ion Monitoring. 1992. Table ID, Note 14.

(viii) OFR 92-146, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Total Phosphorus by a Kjeldahl Digestion Method and an Automated Colorimetric Finish That Includes Dialysis. 1992. Table IB, Note 48.

(ix) OFR 93-125, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments. 1993. Table IB, Note 51 and 80; Table IC, Note 9.

(x) OFR 93-449, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Chromium in Water by Graphite Furnace Atomic Absorption Spectrophotometry. 1993. Table IB, Note 46.

(xi) OFR 94-37, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Triazine and Other Nitrogen-containing Compounds by Gas Chromatography with Nitrogen Phosphorus Detectors. 1994. Table ID, Note 9.

(xii) OFR 95-181, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Pesticides in Water by C-18 Solid-Phase Extraction and Capillary-Column Gas Chromatography/Mass Spectrometry With Selected-Ion Monitoring. 1995. Table ID, Note 11.

(xiii) OFR 97-198, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Molybdenum in Water by Graphite Furnace Atomic Absorption Spectrophotometry. 1997. Table IB, Note 47.

(xiv) OFR 97-829, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of 86 Volatile Organic Compounds in Water by Gas Chromatography/Mass Spectrometry, Including Detections Less Than Reporting Limits. 1999. Table IC, Note 13.

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(xvi) OFR 98-639, Methods of Analysis by the U.S. Geological Survey

National Water Quality Laboratory—Determination of Arsenic and Selenium in Water and Sediment by Graphite Furnace—Atomic Absorption Spectrometry. 1999. Table IB, Note 49.

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(xix) U.S. Geological Survey Techniques of Water-Resources Investigations, Book 5, Laboratory Analysis, Chapter A4, Methods for Collection and Analysis of Aquatic Biological and Microbiological Samples. 1989. Table IA, Note 4; Table IH, Note 4.

(xx) Water-Resources Investigation Report 01-4098, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Moderate-Use Pesticides and Selected Degradates in Water by C-18 Solid-Phase Extraction and Gas Chromatography/Mass Spectrometry. 2001. Table ID, Note 13.

(xxi) Water-Resources Investigations Report 01-4132, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Organic Plus Inorganic Mercury in Filtered and Unfiltered Natural Water With Cold Vapor-Atomic Fluorescence Spectrometry. 2001. Table IB, Note 71.

(xxii) Water-Resources Investigation Report 01-4134, Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory—Determination of Pesticides in Water by Graphitized Carbon-Based Solid-Phase Extraction and High-Performance Liquid Chromatography/Mass Spectrometry. 2001. Table ID, Note 12.

(xxiii) Water Temperature—Influential Factors, Field Measurement and Data Presentation, Techniques of Water-Resources Investigations of the U.S. Geological Survey, Book 1, Chapter D1. 1975. Table IB, Note 32.

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TABLE II—REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES

Parameter number/name	Container ¹	Preservation ^{2,3}	Maximum holding time ⁴
Table IA—Bacterial Tests			
1–4. Coliform, total, fecal, and <i>E. coli</i> .	PA, G	Cool, <10 °C, 0.008% Na ₂ S ₂ O ₃ ⁵	8 hours. ^{22,23}
5. Fecal streptococci	PA, G	Cool, <10 °C, 0.008% Na ₂ S ₂ O ₃ ⁵	8 hours. ²²
6. Enterococci	PA, G	Cool, <10 °C, 0.008% Na ₂ S ₂ O ₃ ⁵	8 hours. ²²
7. <i>Salmonella</i>	PA, G	Cool, <10 °C, 0.008% Na ₂ S ₂ O ₃ ⁵	8 hours. ²²
Table IA—Aquatic Toxicity Tests			
8–11. Toxicity, acute and chronic ..	P, FP, G	Cool, ≤6 °C ¹⁶	36 hours.
Table IB—Inorganic Tests			
1. Acidity	P, FP, G	Cool, ≤6 °C ¹⁸	14 days.
2. Alkalinity	P, FP, G	Cool, ≤6 °C ¹⁸	14 days.
4. Ammonia	P, FP, G	Cool, ≤6 °C ¹⁸ , H ₂ SO ₄ to pH <2	28 days.
9. Biochemical oxygen demand	P, FP, G	Cool, ≤6 °C ¹⁸	48 hours.
10. Boron	P, FP, or Quartz	HNO ₃ to pH <2	6 months.
11. Bromide	P, FP, G	None required	28 days.
14. Biochemical oxygen demand, carbonaceous.	P, FP, G	Cool, ≤6 °C ¹⁸	48 hours.
15. Chemical oxygen demand	P, FP, G	Cool, ≤6 °C ¹⁸ , H ₂ SO ₄ to pH <2	28 days.
16. Chloride	P, FP, G	None required	28 days.
17. Chlorine, total residual	P, G	None required	Analyze within 15 minutes.
21. Color	P, FP, G	Cool, ≤6 °C ¹⁸	48 hours.
23–24. Cyanide, total or available (or CATC) and free.	P, FP, G	Cool, ≤6 °C ¹⁸ , NaOH to pH >10 ^{5,6} , reducing agent if oxidizer present.	14 days.
25. Fluoride	P	None required	28 days.
27. Hardness	P, FP, G	HNO ₃ or H ₂ SO ₄ to pH <2	6 months.
28. Hydrogen ion (pH)	P, FP, G	None required	Analyze within 15 minutes.
31, 43. Kjeldahl and organic N	P, FP, G	Cool, ≤6 °C ¹⁸ , H ₂ SO ₄ to pH <2	28 days.
Table IB—Metals⁷			
18. Chromium VI	P, FP, G	Cool, ≤6 °C ¹⁸ , pH = 9.3–9.7 ²⁰	28 days.
35. Mercury (CVAA)	P, FP, G	HNO ₃ to pH <2	28 days.
35. Mercury (CVAFS)	FP, G; and FP-lined cap ¹⁷	5 mL/L 12N HCl or 5 mL/L BrCl ¹⁷	90 days. ¹⁷
3, 5–8, 12, 13, 19, 20, 22, 26, 29, 30, 32–34, 36, 37, 45, 47, 51, 52, 58–60, 62, 63, 70–72, 74, 75. Metals, except boron, chromium VI, and mercury.	P, FP, G	HNO ₃ to pH <2, or at least 24 hours prior to analysis ¹⁹ .	6 months.
38. Nitrate	P, FP, G	Cool, ≤6 °C ¹⁸	48 hours.
39. Nitrate-nitrite	P, FP, G	Cool, ≤6 °C ¹⁸ , H ₂ SO ₄ to pH <2	28 days.
40. Nitrite	P, FP, G	Cool, ≤6 °C ¹⁸	48 hours.
41. Oil and grease	G	Cool to ≤6 °C ¹⁸ , HCl or H ₂ SO ₄ to pH <2.	28 days.
42. Organic Carbon	P, FP, G	Cool to ≤6 °C ¹⁸ , HCl, H ₂ SO ₄ , or H ₃ PO ₄ to pH <2.	28 days.
44. Orthophosphate	P, FP, G	Cool, to ≤6 °C ^{18,24}	Filter within 15 minutes; Analyze within 48 hours.
46. Oxygen, Dissolved Probe	G, Bottle and top	None required	Analyze within 15 minutes.
47. Winkler	G, Bottle and top	Fix on site and store in dark	8 hours.
48. Phenols	G	Cool, ≤6 °C ¹⁸ , H ₂ SO ₄ to pH <2	28 days.
49. Phosphorus (elemental)	G	Cool, ≤6 °C ¹⁸	48 hours.
50. Phosphorus, total	P, FP, G	Cool, ≤6 °C ¹⁸ , H ₂ SO ₄ to pH <2	28 days.
53. Residue, total	P, FP, G	Cool, ≤6 °C ¹⁸	7 days.
54. Residue, Filterable (TDS)	P, FP, G	Cool, ≤6 °C ¹⁸	7 days.
55. Residue, Nonfilterable (TSS)	P, FP, G	Cool, ≤6 °C ¹⁸	7 days.
56. Residue, Settleable	P, FP, G	Cool, ≤6 °C ¹⁸	48 hours.
57. Residue, Volatile	P, FP, G	Cool, ≤6 °C ¹⁸	7 days.
61. Silica	P or Quartz	Cool, ≤6 °C ¹⁸	28 days.
64. Specific conductance	P, FP, G	Cool, ≤6 °C ¹⁸	28 days.
65. Sulfate	P, FP, G	Cool, ≤6 °C ¹⁸	28 days.
66. Sulfide	P, FP, G	Cool, ≤6 °C ¹⁸ , add zinc acetate plus sodium hydroxide to pH >9.	7 days.
67. Sulfite	P, FP, G	None required	Analyze within 15 minutes.
68. Surfactants	P, FP, G	Cool, ≤6 °C ¹⁸	48 hours.
69. Temperature	P, FP, G	None required	Analyze within 15 minutes.
73. Turbidity	P, FP, G	Cool, ≤6 °C ¹⁸	48 hours.

TABLE II—REQUIRED CONTAINERS, PRESERVATION TECHNIQUES, AND HOLDING TIMES—Continued

Parameter number/name	Container ¹	Preservation ^{2,3}	Maximum holding time ⁴
Table IC—Organic Tests⁸			
13, 18–20, 22, 24, 25, 27, 28, 34–37, 39–43, 45–47, 56, 76, 104, 105, 108–111, 113. Purgeable Halocarbons.	G, FP-lined septum	Cool, ≤6 °C ¹⁸ , 0.008% Na ₂ S ₂ O ₃ ⁵ , HCl to pH 2 ⁹ .	14 days. ⁹
26. 2-Chloroethylvinyl ether	G, FP-lined septum	Cool, ≤6 °C ¹⁸ , 0.008% Na ₂ S ₂ O ₃ ⁵	14 days.
6, 57, 106. Purgeable aromatic hydrocarbons.	G, FP-lined septum	Cool, ≤6 °C ¹⁸ , 0.008% Na ₂ S ₂ O ₃ ⁵ , HCl to pH 2 ⁹ .	14 days. ⁹
3, 4. Acrolein and acrylonitrile	G, FP-lined septum	Cool, ≤6 °C ¹⁸ , 0.008% Na ₂ S ₂ O ₃ , pH to 4–5 ¹⁰ .	14 days. ¹⁰
23, 30, 44, 49, 53, 77, 80, 81, 98, 100, 112. Phenols ¹¹ .	G, FP-lined cap	Cool, ≤6 °C ¹⁸ , 0.008% Na ₂ S ₂ O ₃ ..	7 days until extraction, 40 days after extraction.
7, 38. Benzidines ^{11,12}	G, FP-lined cap	Cool, ≤6 °C ¹⁸ , 0.008% Na ₂ S ₂ O ₃ ⁵	7 days until extraction. ¹³
14, 17, 48, 50–52. Phthalate esters ¹¹ .	G, FP-lined cap	Cool, ≤6 °C ¹⁸	7 days until extraction, 40 days after extraction.
82–84. Nitrosamines ^{11,14}	G, FP-lined cap	Cool, ≤6 °C ¹⁸ , store in dark, 0.008% Na ₂ S ₂ O ₃ ⁵ .	7 days until extraction, 40 days after extraction.
88–94. PCBs ¹¹	G, FP-lined cap	Cool, ≤6 °C ¹⁸	1 year until extraction, 1 year after extraction.
54, 55, 75, 79. Nitroaromatics and isophorone ¹¹ .	G, FP-lined cap	Cool, ≤6 °C ¹⁸ , store in dark, 0.008% Na ₂ S ₂ O ₃ ⁵ .	7 days until extraction, 40 days after extraction.
1, 2, 5, 8–12, 32, 33, 58, 59, 74, 78, 99, 101. Polynuclear aromatic hydrocarbons ¹¹ .	G, FP-lined cap	Cool, ≤6 °C ¹⁸ , store in dark, 0.008% Na ₂ S ₂ O ₃ ⁵ .	7 days until extraction, 40 days after extraction.
15, 16, 21, 31, 87. Haloethers ¹¹ ...	G, FP-lined cap	Cool, ≤6 °C ¹⁸ , 0.008% Na ₂ S ₂ O ₃ ⁵	7 days until extraction, 40 days after extraction.
29, 35–37, 63–65, 73, 107. Chlorinated hydrocarbons ¹¹ .	G, FP-lined cap	Cool, ≤6 °C ¹⁸	7 days until extraction, 40 days after extraction.
60–62, 66–72, 85, 86, 95–97, 102, 103. CDDs/CDFs ¹¹ .	G	See footnote 11	See footnote 11.
Aqueous Samples: Field and Lab Preservation.	G	Cool, ≤6 °C ¹⁸ , 0.008% Na ₂ S ₂ O ₃ ⁵ , pH <9.	1 year.
Solids and Mixed-Phase Samples: Field Preservation.	G	Cool, ≤6 °C ¹⁸	7 days.
Tissue Samples: Field Preservation.	G	Cool, ≤6 °C ¹⁸	24 hours.
Solids, Mixed-Phase, and Tissue Samples: Lab Preservation.	G	Freeze, ≤ –10 °C	1 year.
114–118. Alkylated phenols	G	Cool, <6 °C, H ₂ SO ₄ to pH <2	28 days until extraction, 40 days after extraction.
119. Adsorbable Organic Halides (AOX).	G	Cool, <6 °C, 0.008% Na ₂ S ₂ O ₃ , HNO ₃ to pH <2.	Hold <i>at least</i> 3 days, but not more than 6 months.
120. Chlorinated Phenolics	G, FP-lined cap	Cool, <6 °C, 0.008% Na ₂ S ₂ O ₃ , H ₂ SO ₄ to pH <2.	30 days until acetylation, 30 days after acetylation.
Table ID—Pesticides Tests			
1–70. Pesticides ¹¹	G, FP-lined cap	Cool, ≤6 °C ¹⁸ , pH 5–9 ¹⁵	7 days until extraction, 40 days after extraction.
Table IE—Radiological Tests			
1–5. Alpha, beta, and radium	P, FP, G	HNO ₃ to pH <2	6 months.
Table IH—Bacterial Tests			
1, 2. Coliform, total, fecal	PA, G	Cool, <10 °C, 0.008% Na ₂ S ₂ O ₃ ⁵	8 hours. ²²
3. <i>E. coli</i>	PA, G	Cool, <10 °C, 0.008% Na ₂ S ₂ O ₃ ⁵	8 hours. ²²
4. Fecal streptococci	PA, G	Cool, <10 °C, 0.008% Na ₂ S ₂ O ₃ ⁵	8 hours. ²²
5. Enterococci	PA, G	Cool, <10 °C, 0.008% Na ₂ S ₂ O ₃ ⁵	8 hours. ²²
Table IH—Protozoan Tests			
6. <i>Cryptosporidium</i>	LDPE; field filtration	1–10 °C	96 hours. ²¹
7. <i>Giardia</i>	LDPE; field filtration	1–10 °C	96 hours. ²¹

¹“P” is for polyethylene; “FP” is fluoropolymer (polytetrafluoroethylene [PTFE]; Teflon®), or other fluoropolymer, unless stated otherwise in this Table II; “G” is glass; “PA” is any plastic that is made of a sterilizable material (polypropylene or other autoclavable plastic); “LDPE” is low density polyethylene.

²Except where noted in this Table II and the method for the parameter, preserve each grab sample within 15 minutes of collection. For a composite sample collected with an automated sampler (e.g., using a 24-hour composite sampler; see 40 CFR 122.21(g)(7)(i) or 40 CFR part 403, appendix E), refrigerate the sample at $\leq 6^{\circ}\text{C}$ during collection unless specified otherwise in this Table II or in the method(s). For a composite sample to be split into separate aliquots for preservation and/or analysis, maintain the sample at $\leq 6^{\circ}\text{C}$, unless specified otherwise in this Table II or in the method(s), until collection, splitting, and preservation is completed. Add the preservative to the sample container prior to sample collection when the preservative will not compromise the integrity of a grab sample, a composite sample, or aliquot split from a composite sample within 15 minutes of collection. If a composite measurement is required but a composite sample would compromise sample integrity, individual grab samples must be collected at prescribed time intervals (e.g., 4 samples over the course of a day, at 6-hour intervals). Grab samples must be analyzed separately and the concentrations averaged. Alternatively, grab samples may be collected in the field and composited in the laboratory if the compositing procedure produces results equivalent to results produced by arithmetic averaging of results of analysis of individual grab samples. For examples of laboratory compositing procedures, see EPA Method 1664 Rev. A (oil and grease) and the procedures at 40 CFR 141.24(f)(14)(iv) and (v) (volatile organics).

³When any sample is to be shipped by common carrier or sent via the U.S. Postal Service, it must comply with the Department of Transportation Hazardous Materials Regulations (49 CFR part 172). The person offering such material for transportation is responsible for ensuring such compliance. For the preservation requirement of Table II, the Office of Hazardous Materials, Materials Transportation Bureau, Department of Transportation has determined that the Hazardous Materials Regulations do not apply to the following materials: Hydrochloric acid (HCl) in water solutions at concentrations of 0.04% by weight or less (pH about 1.96 or greater; Nitric acid (HNO_3) in water solutions at concentrations of 0.15% by weight or less (pH about 1.62 or greater); Sulfuric acid (H_2SO_4) in water solutions at concentrations of 0.35% by weight or less (pH about 1.15 or greater); and Sodium hydroxide (NaOH) in water solutions at concentrations of 0.080% by weight or less (pH about 12.30 or less).

⁴Samples should be analyzed as soon as possible after collection. The times listed are the maximum times that samples may be held before the start of analysis and still be considered valid. Samples may be held for longer periods only if the permittee or monitoring laboratory have data on file to show that, for the specific types of samples under study, the analytes are stable for the longer time, and has received a variance from the Regional ATP Coordinator under \S 136.3(e). For a grab sample, the holding time begins at the time of collection. For a composite sample collected with an automated sampler (e.g., using a 24-hour composite sampler; see 40 CFR 122.21(g)(7)(i) or 40 CFR part 403, appendix E), the holding time begins at the time of the end of collection of the composite sample. For a set of grab samples composited in the field or laboratory, the holding time begins at the time of collection of the last grab sample in the set. Some samples may not be stable for the maximum time period given in the table. A permittee or monitoring laboratory is obligated to hold the sample for a shorter time if it knows that a shorter time is necessary to maintain sample stability. See \S 136.3(e) for details. The date and time of collection of an individual grab sample is the date and time at which the sample is collected. For a set of grab samples to be composited, and that are all collected on the same calendar date, the date of collection is the date on which the samples are collected. For a set of grab samples to be composited, and that are collected across two calendar dates, the date of collection is the dates of the two days; e.g., November 14–15. For a composite sample collected automatically on a given date, the date of collection is the date on which the sample is collected. For a composite sample collected automatically, and that is collected across two calendar dates, the date of collection is the dates of the two days; e.g., November 14–15. For static-renewal toxicity tests, each grab or composite sample may also be used to prepare test solutions for renewal at 24 h, 48 h, and/or 72 h after first use, if stored at 0 – 6°C , with minimum head space.

⁵ASTM D7365–09a specifies treatment options for samples containing oxidants (e.g., chlorine) for cyanide analyses. Also, Section 9060A of Standard Methods for the Examination of Water and Wastewater (23rd edition) addresses dechlorination procedures for microbiological analyses.

⁶Sampling, preservation and mitigating interferences in water samples for analysis of cyanide are described in ASTM D7365–09a (15). There may be interferences that are not mitigated by the analytical test methods or D7365–09a (15). Any technique for removal or suppression of interference may be employed, provided the laboratory demonstrates that it more accurately measures cyanide through quality control measures described in the analytical test method. Any removal or suppression technique not described in D7365–09a (15) or the analytical test method must be documented along with supporting data.

⁷For dissolved metals, filter grab samples within 15 minutes of collection and before adding preservatives. For a composite sample collected with an automated sampler (e.g., using a 24-hour composite sampler; see 40 CFR 122.21(g)(7)(i) or 40 CFR part 403, appendix E), filter the sample within 15 minutes after completion of collection and before adding preservatives. If it is known or suspected that dissolved sample integrity will be compromised during collection of a composite sample collected automatically over time (e.g., by interchange of a metal between dissolved and suspended forms), collect and filter grab samples to be composited (footnote 2) in place of a composite sample collected automatically.

⁸Guidance applies to samples to be analyzed by GC, LC, or GC/MS for specific compounds.

⁹If the sample is not adjusted to pH 2, then the sample must be analyzed within seven days of sampling.

¹⁰The pH adjustment is not required if acrolein will not be measured. Samples for acrolein receiving no pH adjustment must be analyzed within 3 days of sampling.

¹¹When the extractable analytes of concern fall within a single chemical category, the specified preservative and maximum holding times should be observed for optimum safeguard of sample integrity (i.e., use all necessary preservatives and hold for the shortest time listed). When the analytes of concern fall within two or more chemical categories, the sample may be preserved by cooling to $\leq 6^{\circ}\text{C}$, reducing residual chlorine with 0.008% sodium thiosulfate, storing in the dark, and adjusting the pH to 6–9; samples preserved in this manner may be held for seven days before extraction and for forty days after extraction. Exceptions to this optional preservation and holding time procedure are noted in footnote 5 (regarding the requirement for thiosulfate reduction), and footnotes 12, 13 (regarding the analysis of benzidine).

¹²If 1,2-diphenylhydrazine is likely to be present, adjust the pH of the sample to 4.0 ± 0.2 to prevent rearrangement to benzidine.

¹³Extracts may be stored up to 30 days at $< 0^{\circ}\text{C}$.

¹⁴For the analysis of diphenylnitrosamine, add 0.008% $\text{Na}_2\text{S}_2\text{O}_3$ and adjust pH to 7–10 with NaOH within 24 hours of sampling.

¹⁵The pH adjustment may be performed upon receipt at the laboratory and may be omitted if the samples are extracted within 72 hours of collection. For the analysis of aldrin, add 0.008% $\text{Na}_2\text{S}_2\text{O}_3$.

¹⁶Place sufficient ice with the samples in the shipping container to ensure that ice is still present when the samples arrive at the laboratory. However, even if ice is present when the samples arrive, immediately measure the temperature of the samples and confirm that the preservation temperature maximum has not been exceeded. In the isolated cases where it can be documented that this holding temperature cannot be met, the permittee can be given the option of on-site testing or can request a variance. The request for a variance should include supportive data which show that the toxicity of the effluent samples is not reduced because of the increased holding temperature. Aqueous samples must not be frozen. Hand-delivered samples used on the day of collection do not need to be cooled to 0 to 6°C prior to test initiation.

¹⁷Samples collected for the determination of trace level mercury (< 100 ng/L) using EPA Method 1631 must be collected in tightly-capped fluoropolymer or glass bottles and preserved with BrCl or HCl solution within 48 hours of sample collection. The time to preservation may be extended to 28 days if a sample is oxidized in the sample bottle. A sample collected for dissolved trace level mercury should be filtered in the laboratory within 24 hours of the time of collection. However, if circumstances preclude overnight shipment, the sample should be filtered in a designated clean area in the field in accordance with procedures given in Method 1669. If sample integrity will not be maintained by shipment to and filtration in the laboratory, the sample must be filtered in a designated clean area in the field within the time period necessary to maintain sample integrity. A sample that has been collected for determination of total or dissolved trace level mercury must be analyzed within 90 days of sample collection.

¹⁸Aqueous samples must be preserved at $\leq 6^{\circ}\text{C}$, and should not be frozen unless data demonstrating that sample freezing does not adversely impact sample integrity is maintained on file and accepted as valid by the regulatory authority. Also, for purposes of NPDES monitoring, the specification of " $\leq 6^{\circ}\text{C}$ " is used in place of the " 4°C " and " $< 4^{\circ}\text{C}$ " sample temperature requirements listed in some methods. It is not necessary to measure the sample temperature to three significant figures (1/100th of 1 degree); rather, three significant figures are specified so that rounding down to 6°C may not be used to meet the $\leq 6^{\circ}\text{C}$ requirement. The preservation temperature does not apply to samples that are analyzed immediately (less than 15 minutes).

¹⁹An aqueous sample may be collected and shipped without acid preservation. However, acid must be added at least 24 hours before analysis to dissolve any metals that adsorb to the container walls. If the sample must be analyzed within 24 hours of collection, add the acid immediately (see footnote 2). Soil and sediment samples do not need to be preserved with acid. The allowances in this footnote supersede the preservation and holding time requirements in the approved metals methods.

²⁰To achieve the 28-day holding time, use the ammonium sulfate buffer solution specified in EPA Method 218.6. The allowance in this footnote supersedes preservation and holding time requirements in the approved hexavalent chromium methods, unless this supersession would compromise the measurement, in which case requirements in the method must be followed.

²¹Holding time is calculated from time of sample collection to elution for samples shipped to the laboratory in bulk and calculated from the time of sample filtration to elution for samples filtered in the field.

²²Sample analysis should begin as soon as possible after receipt; sample incubation must be started no later than 8 hours from time of collection.

²³For fecal coliform samples for sewage sludge (biosolids) only, the holding time is extended to 24 hours for the following sample types using either EPA Method 1680 (LTB-EC) or 1681 (A-1): Class A composted, Class B aerobically digested, and Class B anaerobically digested.

²⁴The immediate filtration requirement in orthophosphate measurement is to assess the dissolved or bio-available form of orthophosphorus (*i.e.*, that which passes through a 0.45-micron filter), hence the requirement to filter the sample immediately upon collection (*i.e.*, within 15 minutes of collection).

■ 3. Amend § 136.6 by adding paragraph (b)(4)(xxiii) to read as follows:

§ 136.6 Method modifications and analytical requirements.

* * * * *

(b) * * *

(4) * * *

(xxiii) When analyzing metals by inductively coupled plasma-atomic emission spectroscopy, inductively coupled plasma-mass spectrometry, and stabilized temperature graphite furnace atomic absorption, closed-vessel microwave digestion of wastewater samples is allowed as alternative

heating source for Method 200.2— “Sample Preparation Procedure for Spectrochemical Determination of Total Recoverable Elements” for the following elements: Aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, molybdenum, nickel, potassium, selenium, silver, sodium, thallium, tin, titanium, vanadium, zinc, provided the performance specifications in the relevant determinative method are met. (Note that this list does not include Mercury.) Each laboratory determining total recoverable metals is

required to operate a formal quality control (QC) program. The minimum requirements include initial demonstration of capability, method detection limit (MDL), analysis of reagent blanks, fortified blanks, matrix spike samples, and blind proficiency testing samples, as continuing quality control checks on performance. The laboratory is required to maintain performance records on file that define the quality of the data generated.

* * * * *

[FR Doc. 2021-09596 Filed 5-18-21; 8:45 am]

BILLING CODE 6560-50-P

TAB D



Commonwealth of Virginia

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Michael S. Rolband, PE, PWD, PWS Emeritus
Director
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October 30, 2023

MEMORANDUM

TO: Board Members

FROM: Meghan Mayfield, Director, Office of Water Permitting

SUBJECT: Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Nonmetallic Mineral Mining (VAG 84); Amendments to 9VAC25-190 and Reissuance of General Permit

The current VPDES General Permit Regulation for Nonmetallic Mineral Mining will expire on June 30, 2024, and the regulation establishing this general permit is being amended to reissue this general permit for another five-year term. The Virginia Department of Environmental Quality (DEQ) staff is bringing this regulation before the State Water Control Board (the Board) to request adoption of the amendments to the VPDES General Permit Regulation for Nonmetallic Mineral Mining. The staff will also recommend that the Board affirm that it will receive, consider, and respond to petitions by any person at any time with respect to reconsideration or revision of this regulation, as provided by the Administrative Process Act.

The proposed regulation took into consideration the recommendations of a technical advisory committee (TAC) formed for this regulatory action. The TAC consisted of representatives of state government, industry, a trade association, and DEQ staff. A list of the TAC membership is attached.

The Notice of Public Comment (NOPC) and Hearing was approved by the Board on March 23, 2023, the comment period was May 22, 2023, to July 21, 2023, with a public hearing held on June 26, 2023. Two members of the public attended the hearing.

Two commenters submitted written comments including the primary points below (responses are in the TH-09 document):

- Virginia Transportation Construction Alliance (VTCA):

- In the new emergency dewatering provision, the total suspended solids (TSS) limit of 100 mg/l may not be high enough to permit rapid dewatering in an extreme storm (VTCA made this same comment at the public hearing).
- In the new dewatering provision, daily monitoring is excessive.
- Jen Fulton, Acting Chief, Clean Water Branch, US EPA Mid-Atlantic Region:
 - DEQ has not documented that annual stormwater benchmark monitoring is representative (the 2021 MSGP provides for quarterly benchmark monitoring).
 - EPA recommends incorporating indicator and benchmark monitoring parameters (e.g. nitrate plus nitrite nitrogen, Polycyclic Aromatic Hydrocarbons, Chemical Oxygen Demand (COD)) consistent with the 2021 EPA MSGP.
 - EPA recommends defining “representative sample.”
 - EPA recommends specifying that the Stormwater Pollution Prevention Plan (SWPPP) be reviewed, and amended as appropriate, when monitoring exceeds the benchmark values. In addition, a maximum time timeframe for implementing or modifying a Best Management Practice (BMP) should be included.
 - The monitoring and records standard condition language contained in 40 C.F.R. §122.41(j)(5) was not included in the draft permit.
 - Note: DEQ did not make changes to the regulation in response to the five comments above (see the TH-09). The summary of changes to the regulation below indicates where DEQ did make a change in response to additional EPA comments. The additional EPA comments are not included in the bullets above.

Two commenters offered the following comments at the public hearing:

- VTCA made the same comment as stated above regarding the emergency dewatering limit.
- Sam Connors, Nestle Purina Petcare, asked if the substance of the representative stormwater outfall provision was changing.

DEQ made certain revisions in response to EPA comments and submitted a revised general permit/ regulation package to EPA Region 3. EPA indicated that they had further comments on the revised documents.

The final proposed regulation, Agency Background Document (TH-09), and Fact Sheet are attached.

The Office of the Attorney General will be sent the regulation for certification of authority to adopt the amendments.

Select revisions required under Senate Bill 657 (regarding SWCB authority) were made “exempt final” during the August 25, 2022 Board meeting. In this action, the balance of the general permit/ regulation is changing the term “board” to “department” where the reference is to a permit action.

Substantive changes to the general permit regulation are:

9VAC25-190

Section 15 – *Applicability of incorporated references based on the dates that they became effective.* Updated the Code of Federal Regulations (CFR) publication date referenced to be July 1, 2023.

Section 20 – *Purpose; effective date of permit.* Updated the general permit term. The reissued VPDES general permit will become effective on July 1, 2024 and expire on June 30, 2029.

Section 20 – *Purpose; effective date of permit.* Use the term “process wastewater” in place of the term “wastewater.” Change made following the NOPC in response to a comment by EPA. (Same change has been made in sections 60 and 70). Changes made to increase internal consistency and clarity.

Section 50 – *Authorization to discharge.* Changed the name “Virginia Department of Mines, Minerals and Energy” to “Virginia Energy, Division of Mineral Mining” to reflect the agency name change. Specified that compliance with the general permit constitutes compliance with CWA section 405(a) and (b) for consistency with federal regulatory language and other VPDES general permits.

Section 60 – *Registration statement.* Replaced facility operator with facility contact. This is to standardize registration statements and facilitate electronic reporting, which is required under federal and state regulations. Added NAIC code requirement for permittees. Revised the substantially identical and representative stormwater outfall language to remove reference to a single DMR and request the location of the outfalls and explanation why they are expected to discharge substantially identical effluent. Changed the name “Virginia Department of Mines, Minerals and Energy” to “Virginia Energy, Division of Mineral Mining” to reflect the agency name change. Added a requirement to indicate ownership type, whether located on Indian lands, and existing VPDES permit numbers. Finally, added a conditional electronic submittal requirement for registration statements, which provides for notice and a 3-month period before it becomes effective. These changes are necessary to implement federal electronic reporting requirements.

Section 70 – *General permit.* Revised the term of the general permit. The reissued VPDES general permit will become effective on July 1, 2024 and expire on June 30, 2029. Specified that for visual monitoring of stormwater discharges, samples must be in a clean, colorless glass or plastic container and examined in a well-lit area.

Section 70 – General permit. In Part I.A.1, designated the process wastewater limits and monitoring table as Table 1. Revised Note 3 to Table 1 to state that instead of alternative standards, the most stringent pH limit (technology-based or water quality based) shall apply. This change was made in response to a comment submitted by EPA. This change is necessary to be consistent with federal regulations.

Section 70 – General permit. In Part I.A.2.a, designated the industrial stormwater limits and monitoring table as Table 2. Renamed the middle column in Table 2 from “Discharge Limitations” to be “Evaluation Value Monitoring.” Also added 100 mg/l for the TSS daily maximum evaluation value. In Note 3 to Table 2, moved the 100 mg/l evaluation value to Table 2. Revised Note 3 to reference the evaluation value indicated in Table 2. These changes were made following the NOPC in response to a comment by EPA to better clarify the requirements of the permit.

Section 70 – General permit. Revised the Total Maximum Daily Load (TMDL) special condition so it is not limited to stormwater and to be consistent with VPDES requirements and other permits. Following notice, this requires the implementation of measures and controls that are consistent with the assumptions and requirements of the TMDL and, where there is a numeric wasteload allocation, monitoring and measures to meet that allocation. At permit reissuance, the permittee must submit a demonstration with the registration statement to show the wasteload allocation is being met.

Section 70 – General permit. Added Special Condition 18, discharge requirements for emergency dewatering during flooded conditions. This provision provides a time-limited, conditional exception from the TSS limits applicable to process wastewater for mine pit dewatering discharges resulting from a storm equal to or greater than a 10-year, 24-hour storm event that has caused flood conditions within the mine such that normal operation at the active portion of the mine cannot continue. Dewatering discharges shall not exceed a daily maximum of 100 mg/l during emergency dewatering, are subject to daily monitoring, and must meet additional conditions including providing notice to DEQ. This provision was added to the proposed regulation in response to issues raised by the TAC.

Section 70 – General permit. Revised the representative outfalls provision to coordinate with edits to the registration statement. Removed the reference to the registration statement and to requesting submittal of one DMR. Specified that permittees with substantially identical stormwater outfalls can monitor the effluent stormwater of just one of the outfalls and report that the observations also apply to the substantially identical outfall.

Section 70 – General permit. Under Storm Water Pollution Prevention Plan (SWPPP) deadlines, simplified the reference to continuing coverage by removing the year of the general permit.

Section 70 – General permit. Supplemented the language for review and amendment of the SWPPP to include any other process, observation, or event results in a determination that modifications to the SWPPP are necessary. Also added where the department notifies the

permittee that a TMDL has been developed and applies to the permitted facility. These reflect corrective action language.

Section 70 – General permit. For authorized non-stormwater discharges, clarified that firefighting includes firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia, and that building washdown is managed in a manner to avoid an instream impact. These reflect revisions to the Industrial Stormwater General Permit.

Section 70 – General permit. Under standard conditions, added a conditional electronic submittal requirement for DMRs, which provides for notice and a 3-month period before it becomes effective. This implements federal electronic reporting requirements.

Section 70 – General permit. Under noncompliance reporting, revised the 24-hours reporting language and updated the link for online reporting, which is now preferred. Specified that for reporting outside of normal working hours, online reporting is required. For emergency calls, changed “Virginia Department of Emergency Services” to “Virginia Department of Emergency Management’s Emergency Operations Center.”

Section 70 – General permit. For inspection and entry, clarified that an authorized representative of the director includes an authorized contractor acting as a representative of the administrator. This reflects a prior EPA comment.

Attachments: TAC Membership
General Permit Regulation Amendments
Agency Background Document (Town Hall TH-09)
Fact Sheet

TAC MEMBERS FOR THE NONMETALLIC MINERAL MINING GENERAL PERMIT
REGULATION

Mark Vigil	Luck Stone Corp.
Michael Smith	VA Energy/ DMME
Rob Lanham	Virginia Transportation Construction Alliance
Gus Buttar	Martin Marietta
Walter Beck	Vulcan Construction Materials
Mark Williams	Luck Stone Corp. (alternate)
Allan Brockenbrough	DEQ CO VPDES Permits
Peter Sherman	DEQ CO VPDES Permits

DEQ Staff Technical Liaisons

Troy Nipper	CO Compliance
Elleanore Daub	CO VPDES Permits
Tony Edwards	SWRO VPDES Permitting
Nick Sturgill	SWRO Compliance
Sarah Siver	NRO Water Permits, Planning, and Monitoring Manager
Amy Dooley	NRO Water Compliance
Amy Hagerdon	NRO Water Compliance
Mark Evans	NRO Water Compliance
Arlo Baker	PRO Water Compliance
Amy Webster	TRO Groundwater and Remediation



townhall.virginia.gov

Exempt Action: Final Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-190
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Nonmetallic Mineral Mining
Action title	Amend and Reissue the Existing General Permit Regulation
Final agency action date	November 30, 2023
Date this document prepared	September 27, 2023

This information is required for executive branch review pursuant to Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19. In addition, this information is required by the Virginia Registrar of Regulations pursuant to the Virginia Register Act (§ 2.2-4100 et seq. of the Code of Virginia). Regulations must conform to the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Nonmetallic Mineral Mining has existed since 1994. This general permit contains effluent limitations, monitoring requirements and special conditions for discharges of process wastewater, which may be commingled with stormwater, as well as stormwater associated with industrial activity, to surface waters. The changes to the regulation are being made to reissue this general permit and in response to Technical Advisory Committee suggestions, comments, and staff requests to revise, update and clarify the permit conditions.

Primary substantive changes include adding items to and editing items on the registration statement, adding language that conditionally allows dewatering during flooded conditions, adding a conditional electronic reporting requirement for registration statements and DMRs, revising language regarding updating the SWPPP, revising two authorized non-stormwater discharge provisions,

revising the 24-hour noncompliance reporting provision and updating the web link, and establishing a new term of July 1, 2024 – June 30, 2029.

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, “mandate” has the same meaning as defined in the ORM procedures, “a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part.”

VPDES permits are limited to a term of five years. The existing VPDES Nonmetallic Mineral Mining General Permit regulation expires on June 30, 2024, and it must be reissued for another five-year term to remain available to mine operators that conduct in-scope activities. If this permit is not re-issued in a timely manner, no new coverage is available to any additional operators and such operators would be required to obtain individual VPDES permits. Process wastewater and industrial stormwater have been determined to be point source discharges and if the general permit is not available such dischargers will need to apply for and obtain individual VPDES permits, which impose significantly greater burden and costs on permittees and increased administrative burden on DEQ.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the “Definitions” section of the regulation.

- APA: Administrative Process Act
- BMP: Best Management Practices
- CFR: Code of Federal Regulations
- COD: Chemical oxygen demand
- DEQ: Department of Environmental Quality
- DMR: Discharge Monitoring Reports
- EPA: (U.S. EPA): United States Environmental Protection Agency
- MSGP: U.S. EPA Multi-Sector General Permit
- NAIC: North American Industry Classification [System]
- NMMM: Nonmetallic Mineral Mining
- NPDES: National Pollutant Discharge Elimination System
- PAH: Polycyclic Aromatic Hydrocarbons
- SIC: Standard Industrial Classification [Codes]
- SWPPP- Storm Water Pollution Prevention Plan
- TAC: Technical Advisory Committee
- TMDL: Total maximum daily load
- TSS: Total suspended solids
- USC: United States Code
- VAC: Virginia Administrative Code
- VPDES: Virginia Pollutant Discharge Elimination System

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

On November 30, 2023, the State Water Control Board adopted 9VAC25-190, the Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Nonmetallic Mineral Mining, as a

final regulation and affirmed that the Board will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Legal Basis

Identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity’s overall regulatory authority.

The basis for this regulation is § 62.1-44.2 et seq. of the Code of Virginia. Specifically, § 62.1-44.15(5) authorizes the Board to issue permits for the discharge of treated sewage, industrial wastes or other wastes into or adjacent to state waters and § 62.1-44.15(7) authorizes the Board to adopt rules governing the procedures of the Board with respect to the issuance of permits. Further, § 62.1-44.15(10) authorizes the Board to adopt such regulations as it deems necessary to enforce the general water quality management program, §62.1-44.15(14) authorizes the Board to establish requirements for the treatment of sewage, industrial wastes and other wastes, § 62.1-44.16 specifies the Board's authority to regulate discharges of industrial wastes or other wastes, § 62.1-44.20 provides that agents of the Board may have the right of entry to public or private property for the purpose of obtaining information or conducting necessary surveys or investigations, and § 62.1-44.21 authorizes the Board to require owners to furnish information necessary to determine the effect of the wastes from a discharge on the quality of state waters.

Section 402 of the Clean Water Act (33 USC § 1251 et seq.) authorizes states to administer the NPDES permit program under state law. The Commonwealth of Virginia received such authorization in 1975 under the terms of a Memorandum of Understanding with the U.S. EPA. This Memorandum of Understanding was modified on May 20, 1991 to authorize the Commonwealth to administer a General VPDES Permit Program.

Changes to this chapter of the Virginia Administrative Code are exempt from Article 2 of the Administrative Process Act (§ 2.2-4006 A 8).

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it’s intended to solve.

This regulatory action is needed to amend and reissue the existing VPDES general permit for nonmetallic mineral mining, which expires on June 30, 2024. The goal of the regulatory action is to continue to make available the general permit, which establishes standard language for control of these point source discharges through effluent limitations, monitoring requirements and special conditions to ensure protection of the environment and public health, safety, and welfare.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the “Detail of Changes” section below.

Substantive changes to the existing regulation include:

- Revised the term of the general permit regulation to July 1, 2024 - June 30, 2029;
- Changed the name “Virginia Department of Mines, Minerals and Energy” to “Virginia Energy, Division of Mineral Mining” to reflect the agency name change (made October 1, 2021);
- Clarified use of the term wastewater per an EPA comment;
- Changed “board” to “department” when the reference is to a permit action;

- For registration statement requirements:
 - Replaced facility operator with facility contact;
 - Added a NAIC code requirement for permittees;
 - Revised the substantially identical and representative stormwater outfall language; [Revised the representative stormwater outfall provision in section 60 to standardize the language consistent with electronic DMR (eDMR) reporting requirements]
 - Added a requirement to indicate ownership type, whether located on Indian lands, and existing permits;
 - Added a conditional electronic submittal requirement for registration statements, which provides for notice and a 3-month period before it becomes effective.
- Specified that for visual monitoring of stormwater discharges, samples must be in a clean, colorless glass or plastic container and examined in a well-lit area;
- In Section 70, Part I.A.1, designated the process wastewater limits and monitoring table as Table 1, and in Part I.A.2, designated the industrial stormwater limits and monitoring table as Table 2.
- In section 70, Note 3 to Table 1, clarified the use of alternate pH standards, per an EPA comment;
- In section 70, Table 2, moved the TSS evaluation value (100 mg/l) to the table and made conforming edits, per an EPA comment;
- Clarified sample containment and examination in section 70 Part I A 2 b;
- Revised the TMDL special condition so it is not limited to stormwater and for consistency with VPDES requirements and other permits;
- Added a new special condition 18 that conditionally allows emergency dewatering during extreme storm conditions;
- Revised the representative stormwater outfall language in section 70 Part II for program consistency and to meet electronic reporting requirements;
- Under storm water pollution prevention plan (SWPPP) deadlines, simplified the reference to continuing coverage by removing the year of the general permit;
- Supplemented the language triggering review and amendment of the SWPPP to include any other process, observation, or event results in a determination that modifications to the SWPPP are necessary. Also added when the department notifies the permittee that a TMDL has been developed and applies to the permitted facility;
- For authorized non-stormwater discharges, clarified that firefighting includes firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia, and that building washdown is managed in a manner to avoid an instream impact;
- Under standard conditions, added a conditional electronic submittal requirement for DMRs, which provides for notice and a 3-month period before it becomes effective;
- Under noncompliance reporting, revised the 24-hours reporting language and updated the link for online reporting, which is now preferred. Specified that for reporting outside of normal working hours, online reporting is required. For emergency calls, changed “Virginia Department of Emergency Services” to “Virginia Department of Emergency Management’s Emergency Operations Center.”
- For inspection and entry, clarified that an authorized representative of the director includes an authorized contractor acting as a representative of the administrator.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The advantages to the public, regulated community, and the agency of reissuing this permit are that a VPDES general permit will continue to be available to facilities with eligible discharges enabling them to discharge to surface waters in a manner that is protective of those waters without the increased cost and more complicated application process associated with issuing an individual permit. There are no known disadvantages to the public, regulated community, or agency.

Requirements More Restrictive than Federal

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any requirement of the regulatory change which is more restrictive than applicable federal requirements. If there are no changes to previously reported information, include a specific statement to that effect.

There are no requirements that exceed applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any other state agencies, localities, or other entities that are particularly affected by the regulatory change. If there are no changes to previously reported information, include a specific statement to that effect.

There are no changes to previously reported information concerning agencies, localities and entities particularly affected.

Other State Agencies Particularly Affected

There are no state agencies particularly affected by the regulation.

Localities Particularly Affected

There are no localities likely to bear any identified disproportionate material impact by the regulation as the regulation applies statewide.

Other Entities Particularly Affected

In-scope covered operations that conduct mineral mining must do so in a manner consistent with this general permit. No other entities are particularly affected by the regulation.

For purposes of "Locality Particularly Affected" under the Board's statutes

There is no locality particularly affected under the Board's statutes.

Public Comment

Summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. Ensure to include all comments submitted: including any received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

Comments received and DEQ responses are presented below.

Commenter	Comment	Agency response
Virginia Transportation Construction Alliance (VTCA)	VTCA Aggregate Producers greatly appreciate the proposed – VPDES General Permit for Nonmetallic Mineral Mining Facilities that includes language that provides operators the ability to dewater	DEQ acknowledges the comment. See below for responses to substantive points.

Commenter	Comment	Agency response
	<p>pits that have become incapacitated due to significant flooding events.</p> <p>While the included language is helpful there are still a couple of modifications that would assist mineral mining operators commencing operations that have ceased as a result of flood conditions.</p> <p>VTCA has concerns with the below language (bulleted) and offers potential language considerations to the General Permit for pits that have ceased to operate because of flooding conditions:</p>	
<p>VTCA (cont.)</p> <p>[Note: VTCA also made this comment at the public hearing held at DEQ PRO June 26, 2023.]</p>	<ul style="list-style-type: none"> • “Rather, the TSS levels in such dewatering discharges shall not exceed a daily maximum of 100 mg/l during emergency dewatering.” <p>The daily maximum limit of 100 mg/l may not be high enough to permit rapid dewatering given the emergency conditions that would surround significant flooding. We understand the charge of the Department to ensure clean water, however quarries and pit that become flooded to the point of ceased operations is generally a result of a stream breach or otherwise upset condition that is not in the normal design or drainage area of waters that are normally directed into the pits.</p> <p>Given this consideration, is it feasible for the above language to be amended to permit operators to discharge water from the flooded pits meeting the listed conditions without daily TSS limits for a short period (5 days) or until the TSS levels in the discharged water are below the TSS levels in the receiving system?</p>	<p>The new dewatering special condition, combined with the use of required BMPs, provides industry with additional flexibility while ensuring the protection of water quality. Waiving TSS limits for a short period, as suggested, could create an incentive to dewater rapidly and is not consistent with the requirement to maximize the settling of stormwater prior to and during dewatering, as specified in Part I.B.18. Likewise, waiving TSS limits until the discharged TSS level is below that of the receiving stream, if the receiving stream TSS is greater than 100 mg/L, also discourages settling and allows the discharge to increase the load to the already storm-impacted receiving stream. No changes are being made to the regulation in response to this comment.</p>
<p>VTCA (Cont.)</p>	<ul style="list-style-type: none"> • During emergency dewatering, the permittee shall monitor for TSS daily and notify DEQ of any exceedances... <p>Daily monitoring is excessive. Will the department consider weekly (or less frequent) monitoring?</p>	<p>Daily monitoring during emergency dewatering is necessary to verify changing conditions during such dewatering. Such monitoring also serves as an indicator that required practices being implemented to protect water quality are effective. No changes are being made to the regulation in response to this comment.</p>
<p>VTCA (Cont.)</p>	<p>Again, these are our only concerns with the proposed language for the reissuance of this permit. Virginia’s Aggregate Producers thank the State Water Control Board and the Department of Environmental Quality for the consideration of our concerns for rapidly dewatering pits following significant flooding events.</p>	<p>DEQ acknowledges the comment.</p>
<p>Jen Fulton, Acting Chief, Clean Water Branch</p>	<p>1.Part I.A.1 – Footnote 3 states that where the water quality standards establish alternate standards for pH, those standards shall be the minimum and maximum pH</p>	<p>DEQ has revised footnote 3 in the table in Part I.A.1 to reflect EPA’s comment. Note 3 now reads “Where the Water Quality Standards (9VAC25-260) establish alternate standards</p>

Commenter	Comment	Agency response
US EPA Mid-Atlantic Region	limits. This statement should be corrected so that the most stringent limit, considering both the technology-based and water quality-based effluent limit, is used.	for pH, the most stringent limit (technology-based or water quality-based) shall be the minimum and maximum pH effluent limits.”
Jen Fulton, Acting Chief, Clean Water Branch US EPA Mid-Atlantic Region	<p>2. Part I.A.2 – The draft permit requires benchmark monitoring on an annual basis. Type, intervals, and frequency of monitoring must yield sufficient data to be representative of the monitored activity. See 40 C.F.R. § 122.48(b). A rationale was not provided, nor was any data/information provided that was used to determine that collecting only one sample per year for stormwater discharges is appropriate and representative. Consistent with the requirements at 40 C.F.R. §§ 124.8 and 124.56, the fact sheet needs to be updated to include an explanation regarding how the sampling frequencies in the draft permit will yield representative information.</p> <p>EPA, as documented in the 2021 MSGP, has determined that quarterly benchmark monitoring is representative. EPA’s 2021 MSGP requires quarterly benchmark monitoring, and permittees with no benchmark exceedances for two years may discontinue monitoring. EPA’s fact sheet for the 2021 MSGP explains that quarterly stormwater event samples collected over one year are inadequate to characterize industrial stormwater discharges or describe industrial BMP performance. As a result, the benchmark monitoring in EPA’s MSGP was extended to the first and fourth year of permit coverage. This monitoring schedule combined with quarterly inspections under the 2021 MSGP aims to ensure that operators have current data on their industrial stormwater discharges and stormwater control measure effectiveness and will help identify any adverse effects from modifications in facility operations and personnel over time.</p>	<p>This industry has had annual benchmark (i.e., “evaluation value”) monitoring since the first nonmetallic mineral mining general permit in 1999. DEQ will add to the fact sheet some discussion of how the annual sampling is representative given the specific monitoring parameters (within 30 minutes of storm event, 72-hours since the last storm event) and supported by quarterly visual monitoring and site inspections. The fact sheet indicates that this general permit is coordinated with state mining regulations and requires that each facility hold a mining permit under which each facility must meet several requirements that address runoff, including provisions addressing operation and reclamation, drainage and sediment control, sediment basins (including installation, basin sizing, and maintenance of capacity), protection of intermittent or perennial streams, protection of natural drainage ways, diversions to address erosion and water pollution, and compliance with applicable water quality standards.</p> <p>DEQ compared the percent of exceedances in annual stormwater TSS benchmark data from this general permit with the semi-annual data from similar industrial stormwater sectors regulated under the VPDES Industrial Stormwater General Permit. NMMM General Permit stormwater data for 1/10/18-12/31/22 shows 13.6% of reported numeric TSS values were above the evaluation value (100 mg/l). Data analyzed for the VPDES 2019 Industrial Stormwater General Permit reissuance showed semi-annual TSS benchmark (100 mg/l) monitoring exceedances for the sectors most similar to nonmetallic mining to be: Sector D (Asphalt) – 12%; Sector E (Glass/Clay/ Cement) – 13%; and Sector G (Metal Mining) – 11%. These data suggest that the annual stormwater TSS monitoring in this general permit is reasonably similar in its representativeness to semi-annual monitoring for similar industrial stormwater sectors.</p> <p>No changes are being made to the regulation in response to this comment.</p>
Jen Fulton, Acting Chief, Clean Water Branch US EPA Mid-Atlantic Region	3. The fact sheet includes outdated references to the 2015 EPA MSGP. References should be updated to reflect the current 2021 EPA MSGP.	Relevant references have been updated to reflect the current 2021 EPA MSGP.

Commenter	Comment	Agency response
<p>Jen Fulton, Acting Chief, Clean Water Branch US EPA Mid-Atlantic Region</p>	<p>4. Part I.A.2 - The presentation of benchmark monitoring requirements is unclear. The table contains only discharge limitations and includes benchmark monitoring levels as a footnote. We recommend clearly defining the benchmark monitoring pollutant levels in the table and not as a footnote.</p>	<p>The benchmark monitoring requirement, which is identified as an evaluation value in the general permit based on discussions with prior TACs, has been moved to the limits/monitoring Table under Part I.A.2.a and the phrase “Discharge Limitations” in the table has been deleted and only the phrase “Evaluation Value Monitoring” remains.</p>
<p>Jen Fulton, Acting Chief, Clean Water Branch US EPA Mid-Atlantic Region</p>	<p>5. Part I.B.8 – It appears as though the terms “process water” and “wastewater” are being used interchangeably. EPA recommends replacing the terms with “process wastewater” to be consistent with terminology used throughout the draft permit, or defining the terms “process water” and “wastewater” if they are, in fact, distinct.</p>	<p>The term “wastewater” has been replaced with the term “process wastewater,” which is defined in section 10 of the general permit/regulation. The term “process water” has been replaced with the term “process wastewater” in special conditions 8, 9 and 10.</p>
<p>Jen Fulton, Acting Chief, Clean Water Branch US EPA Mid-Atlantic Region</p>	<p>6. EPA recommends incorporating indicator and benchmark monitoring parameters (e.g. nitrate plus nitrite nitrogen, Polycyclic Aromatic Hydrocabons, COD) consistent with the 2021 EPA MSGP requirements for Sector J, Non-Metallic Mineral Mining and Dressing for SIC codes covered under VAG84.</p>	<p>EPA’s 2021 MSGP provides for indicator monitoring for PAHs at facilities with industrial stormwater discharges from surfaces paved or re-sealed with coal-tar sealcoat. Nonmetallic mineral mines covered under this general permit typically do not conduct industrial activities on paved portions of the respective sites. Thus, it is not clear that this indicator parameter is applicable to these facilities or would provide needed or useful information.</p> <p>Regarding indicator monitoring for COD, the waste streams associated with nonmetallic mineral mining (NMMM) facilities do not contain significant organic matter. Thus, DEQ does not see a reasonable basis for the imposing the cost and burden associated with requiring indicator COD monitoring.</p> <p>As for the 2021 MSGP benchmark monitoring for nitrate plus nitrite nitrogen (applicable to sand and gravel), DEQ’s current general permit does not include this benchmark parameter, nor does the proposed 2024 reissuance. The current (2019) NMMM general permit does include a special condition requiring the use of BMPs to ensure that contaminants do not enter surface waters as a result of blasting (a potential source of nitrogen), and that special condition is carried forward in the reissuance. No changes are being made to the regulation in response to this comment.</p>
<p>Jen Fulton, Acting Chief, Clean Water Branch US EPA Mid-Atlantic Region</p>	<p>7. Part II.A.2 – EPA recommends defining the term “representative sample.”</p>	<p>The use and meaning of “representative sample” in Part II A.2. is self- explanatory and consistent with the term’s use in the base VPDES regulation which requires that “Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity” (9VAC25-31-190 J), which is the same language used in 40 CFR 122.41(j). DEQ has not identified a definition of “representative sample” in the 2021 MSGP or</p>

Commenter	Comment	Agency response
		<p>in the NPDES regulations. No changes are being made to the regulation in response to this comment.</p>
<p>Jen Fulton, Acting Chief, Clean Water Branch US EPA Mid-Atlantic Region</p>	<p>8. Part II.G. – EPA recommends specifying that the SWPPP be reviewed, and amended as appropriate, when monitoring exceeds the benchmark values. In addition, a maximum time timeframe for implementing or modifying a BMP should be included.</p>	<p>The process for addressing any exceedance of the benchmark/ evaluation value in this general permit is based both on the MSGP as well as TAC input over several reissuances, including consideration of the requirements imposed under state mining permit regulations. The process is comparable to the approach specified in the MSGP, and consistent with applicable VPDES program requirements.</p> <p>Under the NMMM general permit (Part I.A.2.a. Note 3), if there is an exceedance of the TSS evaluation value, the permittee must conduct a routine inspection within five days, maintain documentation per Part II.H.3, and deficiencies must be corrected within 60 days. Routine inspections include assessing the adequacy and effectiveness of BMPs, and follow-up actions including updating the SWPPP as appropriate - see Part II.H.3.d). No changes are being made to the regulation in response to this comment.</p>
<p>Jen Fulton, Acting Chief, Clean Water Branch US EPA Mid-Atlantic Region</p>	<p>9. The monitoring and records standard condition language contained in 40 C.F.R. §122.41(j)(5) was not included in the draft permit.</p>	<p>The conditions in 40 CFR § 122.41(j)(5) are not included in the NMMM general permit regulation or the VPDES regulation standard conditions because this administrative penalty language is in state statute at § 62.1-44.32 of the Code of Virginia.</p> <p>Under § 62.1-44.32(a) violations of the chapter, an order of the Board or of a court can be subject to civil penalties not to exceed \$32,500 per violation.</p> <p>Under § 62.1-44.32(b) any person who knowingly makes any false statement in any form required to be submitted under this chapter or knowingly renders inaccurate any monitoring device or method required to be maintained under this chapter, shall be guilty of a felony punishable by a term of imprisonment of not less than one year nor more than three years, or in the discretion of the jury or the court trying the case without a jury, confinement in jail for not more than 12 months and a fine of not less than \$5,000 nor more than \$50,000 for each violation.</p> <p>§62.1-44.15 of the Code of Virginia does allow the agency to unilaterally assess administrative civil penalties under certain conditions of up to \$32,500 per violation, not to exceed \$100,000 per special order. (See, (8)(a)).</p>

Commenter	Comment	Agency response
		The certification required for registration statements and reports acknowledges penalties for submitting false information. No changes are being made to the regulation in response to this comment.
Sam Connors, Nestle Purina Petcare [Comment from public hearing held at DEQ PRO June 26, 2023.]	With regard to stormwater discharge monitoring, is the substance of the provision that allows for reporting the results of a "representative" outfall in place of all "substantially identical" outfalls changing?	The substance of the provisions that allow for reporting the results of a "representative" stormwater outfall in place of all "substantially identical" stormwater outfalls is not changing. The wording of the provisions has changed slightly to achieve consistency across general permits and to be consistent with federally required electronic reporting requirements. No changes are being made to the regulation in response to this comment.

Details of Changes Made Since the Previous Stage

List all changes made to the text since the previous stage was published in the Virginia Register of Regulations and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.

Changes made since the proposed stage are identified below.

Current chapter-section number	New chapter-section number, if applicable	New requirement from previous stage	Updated new requirement since previous stage	Change, intent, rationale, and likely impact of updated requirements
9VAC25-190-15		Code of Federal Regulations (CFR) publication date referenced is July 1, 2022.	Code of Federal Regulations (CFR) publication date referenced is July 1, 2023.	Cite is to most recent update. This maintains consistency with federal regulations.
9VAC25-190-20 [Also in 60 and 70]			Use the term "process wastewater" in place of the term "wastewater."	Change in response to EPA comment. Makes terminology consistent and clear.
9VAC25-190-60		C.19. Requests existing VPA permit number	C.19. Requests existing VPDES permit number	Corrects permit type and maintains consistency with nForm.
9VAC25-190-70			In Part I.A.1, designated the process wastewater limits and monitoring table as Table 1, and in Part I.A.2, designated the	Improve the clarity and organization of key permit information.

Current chapter-section number	New chapter-section number, if applicable	New requirement from previous stage	Updated new requirement since previous stage	Change, intent, rationale, and likely impact of updated requirements
			industrial stormwater evaluation value monitoring table as Table 2	
9VAC25-190-70			I.A.1 Note 3 in Table 1. In place of alternative standards, state that the most stringent pH limit (technology-based or water quality based) shall apply	Change in response to EPA comment. Clarifies that the most stringent pH limit (technology-based or water quality based) would apply.
9VAC25-190-70			I.A.2.a., Table 2. Renamed the middle column in table from "Discharge Limitations" to be "Evaluation Value Monitoring." Also added 100 mg/l for TSS daily maximum evaluation value.	Change in response to EPA comment. Makes the evaluation value monitoring requirement clear.
9VAC25-190-70			I.A.2.a. Note 3 in Table 2. Moved 100 mg/l evaluation value in Note 3 to the table. Revised Note 3 to reference evaluation value indicated in Table 2.	Change in response to EPA comment. Makes the evaluation value monitoring requirement clear.

Details of All Changes Proposed in this Regulatory Action

*List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

Changes to the Nonmetallic Mineral Mining General Permit regulation include the following:

Current section number	New section number, if applicable	Current requirement in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-190-15. Applicability of incorporated references based on the dates that they became effective		Code of Federal Regulations (CFR) publication date referenced is July 1, 2018.	Code of Federal Regulations (CFR) publication date referenced is July 1, 2023. <i>Updated the CFR reference to reflect the most recent update.</i>
9VAC25-190-20. Purpose; effective date of permit		B. This general permit will become effective on July 1, 2019 and will expire June 30, 2024.	B. This general permit will become effective on July 1, 2024 and will expire June 30, 2029. <i>Revised the permit term to reflect reissuance for another five-year term.</i>
9VAC25-190-20. Purpose; effective date of permit [Also in 60 and 70]		Use the term “process wastewater” in place of the term “wastewater.”	<i>Change in response to EPA comment to make terminology consistent and clear throughout the regulation.</i>
9VAC25-190-50, 60 and 70		Various provisions reference the term “board.”	Revised to be consistent with Senate Bill 657 (2022) which limited the authority of the State Water Control Board to promulgating regulations. The “department” (DEQ) is responsible for permitting, orders, etc. <i>This change is based on SB 657 (2022).</i>
9VAC25-190-50 Authorization to discharge		A. 4. The owner has and maintains during such authorization a mineral mining permit for the operation to be covered by this general permit that has been approved by the Virginia Department of Mines, Minerals and Energy, Division of Mineral Mining (or an associated waived program, locality, or state agency) under provisions and requirements of Title 45.1 of the Code of Virginia.	A. 4. The owner has and maintains during such authorization a mineral mining permit for the operation to be covered by this general permit that has been approved by Virginia Energy, Division of Mineral Mining (or an associated waived program, locality, or state agency) under provisions and requirements of Title 45.1 of the Code of Virginia. <i>Changed DMME to Virginia Energy to reflect the agency’s name change.</i> <i>(The same name change is also in 190-60 c 4.)</i>

Current section number	New section number, if applicable	Current requirement in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-190-50. Authorization to discharge		C. Compliance with this general permit constitutes compliance for purposes of enforcement with §§ 301, 302, 306, 307, 318, 403, and 405(b) of the federal Clean Water Act and the State Water Control Law, with the exceptions stated in 9VAC25-31-60 of the VPDES Permit Regulation.	C. Compliance with this general permit constitutes compliance for purposes of enforcement with §§ 301, 302, 306, 307, 318, 403, and 405(a) through (b) of the federal Clean Water Act and the State Water Control Law, with the exceptions stated in 9VAC25-31-60 of the VPDES Permit Regulation. <i>Revised the language to also reference CWA § 405(a) for consistency with federal regulatory language and other VPDES general permits.</i>
9VAC25-190-60. Registration statement		C. 1. Facility owner and operator or other contact name, address, email address, and telephone number;	C. 1. Facility owner and facility contact name, address, email address, and telephone number; <i>Replaced facility operator with facility contact. This is to standardize registration statements and facilitate electronic reporting, which is required under federal and state regulations.</i>
9VAC25-190-60. Registration statement		C.4. Primary and secondary SIC codes;	C.4. Primary and secondary SIC and NAIC codes; <i>Added NAIC codes for consistency with electronic reporting requirements.</i>
9VAC25-190-60. Registration statement		C.5.f. Indicate which stormwater outfalls will be representative outfalls that require a single discharge monitoring report (DMR). For stormwater outfalls that are to be represented by other outfall discharges, provide a description of the activities associated with those outfalls and explain why they are substantially the same as the representative outfall to be sampled;	C.5.f. Indicate which stormwater outfalls could operate as substantially identical or representative outfalls (if any). Provide the following for each: a) The locations of the outfalls; b) Why the outfalls are expected to discharge substantially identical effluents including, where available, evaluation of monitoring data; <i>Revised the substantially identical and representative stormwater outfall language to remove reference to a single DMR and request the location of the outfalls and explanation why they are expected to discharge substantially identical effluent. These changes promote consistency with electronic reporting requirements and other general permits.</i>
9VAC25-190-60. Registration statement		C.19. Certification of signee.	Renumbered certification as 20.

Current section number	New section number, if applicable	Current requirement in VAC	Change, intent, rationale, and likely impact of new requirements
			<p>Added new 19: Ownership type, whether located on Indian lands, and existing VPDES permits;</p> <p><i>Standardizing electronic registration statements consistent with federal and state electronic reporting requirements.</i></p>
9VAC25-190-60. Registration statement		E. Where to submit. The registration statement shall be delivered to the department by either postal or electronic mail and shall be submitted to the DEQ regional office serving the area where the industrial facility is located.	<p>* Added to E: Following notification from the department of the start date for the required electronic submission of Notices of Intent to discharge forms (i.e., registration statements), as provided for in 9VAC25-31-1020, such forms submitted after that date shall be electronically submitted to the department in compliance with this section and 9VAC25-31-1020. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms must be submitted electronically.</p> <p><i>The new language facilitates electronic reporting, which is required under federal and state regulations.</i></p>
9VAC25-190-70. General permit		Effective Date: July 1, 2019 Expiration Date: June 30, 2024	<p>Effective Date: July 1, 2024 Expiration Date: June 30, 2029</p> <p><i>Revised to reflect the new permit term.</i></p>
9VAC25-190-70. General permit		Part I.A.1 includes a limits and monitoring table for process wastewater discharges. Part I.A.2 includes a limits and monitoring table for industrial stormwater discharges.	<p>In Part I.A.1, designated the process wastewater limits and monitoring table as Table 1, and in Part I.A.2, designated the industrial stormwater limits and monitoring table as Table 2</p> <p><i>Improve the clarity and organization of key permit information.</i></p>
9VAC25-190-70. General permit		I.A.1, Note 3. Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH, those standards shall be the minimum and maximum pH effluent limits.	<p>Revised Note 3 (to what is now Table 1) to read: “Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH, the most stringent limit (technology-based or water quality-based) shall be the minimum and maximum pH effluent limits.”</p> <p><i>Change made in response to EPA comment and to achieve consistency with federal regulation.</i></p>

Current section number	New section number, if applicable	Current requirement in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-190-70. General permit		I.A.2.a. Middle column in table identified as "Discharge Limitations."	I.A.2.a. Renamed middle column in what is now Table 2 from "Discharge Limitations" to be "Evaluation Value Monitoring." <i>Change made in response to EPA comment and to make the monitoring requirement clear.</i>
9VAC25-190-70. General permit		I.A.2.a. Note 3 Permittees shall review the results of the TSS monitoring required by Part I A 2 a to determine if changes to the stormwater pollution prevention plan (SWPPP) may be necessary. If the TSS monitoring results are greater than the evaluation value of 100 mg/l, then the permittee shall perform a routine facility inspection within five days of becoming aware of the exceedance and maintain documentation as described in Part II H 3 d for that outfall. Any deficiencies noted during the inspection shall be corrected within 60 days of being identified.	I.A.2.a. Note 3 (to what is now Table 2). Moved TSS 100 mg/l evaluation value in Note 3 to the table. Revised Note 3 to reference evaluation value indicated in Table I A 2 a. <i>Change made in response to EPA comment and to make the monitoring requirement clear.</i>
9VAC25-190-70. General permit		No Part or heading specified at beginning of section.	Added heading "Part I Effluent Limitations, Monitoring Requirements, and Special Conditions" <i>Improve clarity, ease of use, and to make consistent with other general permits.</i>
9VAC25-190-70. General permit		Part I.A.2.b.	Part I A.2.b. <u>Added</u> : Samples will be in a clean, colorless glass or plastic container and examined in a well-lit area. <i>Added language to improve consistency with other general permits.</i>
9VAC25-190-70. General permit		Part I.B.12. Discharges to waters subject to TMDL wasteload allocations. Owners of facilities that are a source of the specified pollutant of concern to waters for which a total maximum daily load (TMDL) wasteload	Part I B.12. Discharges to waters with an approved total maximum daily load (TMDL). Owners of facilities that are a source of the specified pollutant of concern to waters where a TMDL has been approved prior to the term of this permit shall implement measures and controls that are consistent with the

Current section number	New section number, if applicable	Current requirement in VAC	Change, intent, rationale, and likely impact of new requirements
		<p>allocation has been approved prior to the term of this permit shall incorporate measures and controls into the SWPPP required by Part II that are consistent with the assumptions and requirements of the TMDL. The department will provide written notification to the owner that a facility is subject to the TMDL requirements. If the TMDL establishes a numeric wasteload allocation that applies to discharges from the facility, the owner shall perform any required monitoring in accordance with Part I A and implement measures necessary to meet that allocation.</p>	<p>assumptions and requirements of the TMDL. The department will provide written notification to the owner that a facility is subject to the TMDL requirements. If the TMDL establishes a numeric wasteload allocation that applies to discharges from the facility, the owner shall perform monitoring for the pollutant of concern in accordance with the monitoring frequencies in Part I A and implement measures necessary to meet that allocation. At permit reissuance, the permittee shall submit a demonstration with the registration statement to show the wasteload allocation is being met.</p> <p><i>Revised the TMDL special condition so that it is clear it is not limited to stormwater and for consistency with VPDES requirements and other permits.</i></p>
<p>9VAC25-190-70. General permit</p>		<p>I.B Special conditions.</p>	<p><i>* Added Special Condition 18, Discharge requirements for emergency dewatering during flooded conditions. This provision provides a time-limited, conditional exception from the TSS limits applicable to process wastewater for mine pit dewatering discharges resulting from a storm equal to or greater than a 10-year, 24-hour storm event that has caused flood conditions within the mine such that normal operation at the active portion of the mine cannot continue. Dewatering discharges shall not exceed a daily maximum of 100 mg/l during emergency dewatering, are subject to daily monitoring, and must meet additional conditions including providing notice to DEQ.</i></p> <p><i>This provision is in response to concerns raised by the TAC that extreme storms can flood the pit and impair a mines ability to operate. This provision facilitates greater flexibility to dewater while protecting water quality. The impact of this provision should be limited since very large storms are rare and water quality remains protected</i></p>

Current section number	New section number, if applicable	Current requirement in VAC	Change, intent, rationale, and likely impact of new requirements
			<i>through BMPs and an alternative TSS limit..</i>
9VAC25-190-70. General permit		Part II.B. Representative outfalls. If a facility has two or more exclusively stormwater outfalls that discharge substantially identical effluents, based on similarity of industrial activity, significant materials, frequency of discharges, and management practices and activities within the area drained by the outfalls, then the permittee may submit information with the registration statement substantiating the request for only one DMR to be issued for the outfall to be sampled that represents one or more substantially identical outfalls. The permittee shall document representative outfalls in the SWPPP and list on the DMR of the outfall to be sampled all outfall locations that are represented by the discharge. The representative outfall monitoring provisions apply to Part I A 2 a monitoring and quarterly visual monitoring.	Part II B. Representative outfalls. If a facility has two or more exclusively stormwater outfalls that discharge substantially identical effluents, based on similarity of industrial activity, significant materials, frequency of discharges, and management practices and activities within the area drained by the outfalls, then the permittee may monitor the effluent stormwater of just one of the outfalls and report that the observations also apply to the substantially identical outfall. The permittee shall document representative outfalls in the SWPPP. The representative outfall monitoring provisions apply to Part I A 2 a monitoring and quarterly visual monitoring. <i>Revised the representative stormwater outfall provision to be consistent with E-reporting requirements (remove mention of submitting only one DMR) and other general permits.</i>
9VAC25-190-70 General permit		II. E. Owners of existing facilities that were covered under the 2014 Nonmetallic Mineral Mining General Permit that are continuing coverage under this general permit shall update and implement any revisions to the SWPPP within 60 days of the department granting coverage under this permit.	II.E. Owners of existing facilities who are continuing coverage under this general permit shall update and implement any revisions to the SWPPP within 60 days of the department granting coverage under this permit. <i>Simplified the reference to continuing coverage by removing the year of the general permit.</i>
9VAC25-190-70 General permit		II.G. 3. Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;	II.G. 3. Inspections by local, state, or federal officials determine, or any other process, observation, or event results in a determination that modifications to the SWPPP are necessary;

Current section number	New section number, if applicable	Current requirement in VAC	Change, intent, rationale, and likely impact of new requirements
			<p>* <u>Added new</u>: 6. The department notifies the permittee that a TMDL has been developed and applies to the permitted facility.</p> <p><i>Supplemented the language for review and amendment of the SWPPP to include "...any other process, observation, or event results in a determination..." that modifications to the SWPPP are necessary. Also added where the department notifies the permittee that a TMDL has been developed and applies to the permitted facility. These reflect corrective action language.</i></p>
<p>9VAC25-190-70 General permit</p>		<p>II.1. 1. Discharges from emergency firefighting activities;</p> <p>7. Routine external building washdown that does not use detergents or hazardous cleaning products;</p>	<p>II.1. 1 Discharges from emergency firefighting activities or firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia;</p> <p>7. Routine external building washdown that does not use detergents or hazardous cleaning products and is managed in a manner to avoid an instream impact;</p> <p><i>Updated consistent with revisions being made to the Industrial Stormwater General Permit.</i></p>
<p>9VAC25-190-70 General permit</p>		<p>III.C.2. Monitoring results shall be reported on a discharge monitoring report (DMR) or on forms provided, approved or specified by the department.</p>	<p>* <u>Added to III.C.2.</u> Following notification from the department of the start date for the required electronic submission of monitoring reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with this section and 9VAC25-31-1020. There shall be at least a three-month notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.</p> <p><i>To facilitate electronic reporting, which is required under federal and state regulations.</i></p>

Current section number	New section number, if applicable	Current requirement in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-190-70 General permit		III.I.2 The permittee shall report all instances of noncompliance not reported under Parts III I 1 a or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part III I 2.	III.I.2. The permittee shall report all instances of noncompliance not reported under Parts III I 1 a or 1 b, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part III I 1 b. <i>Corrected two cross-references.</i>
9VAC25-190-70 General permit		I. Note: Provides information for 24-hour noncompliance reports, including online links, reporting outside working hours, and emergencies.	<i>Made Note into new subsection I.3. Revised the 24-hours reporting language and updated the link for online reporting, which is now preferred. Specified that for reporting outside of normal working hours, online reporting is required. For emergency calls, changed "Virginia Department of Emergency Services" to "Virginia Department of Emergency Management's Emergency Operations Center."</i> <i>Revised language consistent with current online reporting capability. Making consistent across all general permits.</i>
9VAC25-190-70 General permit		III.W. Inspection and entry.	<i>For inspection and entry, clarified that an authorized representative of the director includes an authorized contractor acting as a representative of the administrator. This reflects a prior EPA comment.</i>

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

This action is primarily the reissuance of the VPDES General Permit Regulation for Nonmetallic Mineral Mining so that it remains available to existing and new permittees. VPDES permits are required by federal and state law for point source discharges of pollutants. The reissuance of this VPDES general permit accomplishes the objectives of applicable law and minimizes the application burden and permit implementation costs to affected small business owners. Without the general permit, a small business

owner would be required to obtain an individual permit, which would increase the complexity of a permit application, implementation, and compliance costs. As a general permit, this regulation imposes lower costs and a reduced permit application burden on permittees compared with individual permits. The requirements in this permit also have been coordinated with requirements in the mining permit regulations to avoid duplication to the extent possible.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

This regulation will have no direct impact on the institution of the family or family stability.

1 **Project 7006 - Exempt Final**

2 **State Water Control Board**

3 **Chapter 190 2024 Amendment and Reissuance of the Existing General Permit Regulation**
4 **9VAC25-190-15. Applicability of incorporated references based on the dates that they**
5 **became effective.**

6 Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in
7 Title 40 of the Code of Federal Regulations is referenced or adopted in this chapter and
8 incorporated by reference that regulation shall be as it exists and has been published as of July
9 1, ~~2018~~ [~~2022~~ 2023] .

10 **9VAC25-190-20. Purpose; effective date of permit.**

11 A. The purpose of this chapter is to establish General Permit Number VAG84 to regulate [process]
12 wastewater and stormwater discharges to surface waters from nonmetallic mineral
13 mines as follows:

14 1. For active and inactive nonmetallic mineral mining facilities in [~~SIC~~ Standard Industrial
15 Classification (SIC)] Major Group 14, this general permit covers discharges composed
16 entirely of stormwater associated with industrial activity.

17 2. This general permit authorizes the discharge of process wastewater as well as
18 stormwater associated with industrial activity from active and inactive mineral mines
19 classified under:

- 20 a. SIC Code 1411 - NAICS Code 212311,
- 21 b. SIC Code 1422 - NAICS Code 212312,
- 22 c. SIC Code 1423 - NAICS Code 212313,
- 23 d. SIC Code 1429 - NAICS Code 212319,
- 24 e. SIC Code 1442 - NAICS Code 212321,
- 25 f. SIC Code 1455 - NAICS Code 212324,
- 26 g. SIC Code 1459 - NAICS Code 212325, excluding bentonite and magnesite mines,
- 27 h. SIC Code 1475 - NACIS Code 212392, and
- 28 i. SIC Code 1499 - NAICS Code 212399, excluding gypsum, graphite, asbestos,
29 diatomite, jade, novaculite, wollastonite, tripoli or asphaltic mineral mines.

30 3. Coal mining, metal mining, and oil and gas extraction are not covered by this general
31 permit.

32 B. This general permit will become effective on July 1, ~~2019~~ 2024, and will expire June 30,
33 2024 ~~2029~~. For any covered owner, this general permit is effective upon compliance with all the
34 provisions of 9VAC25-190-50 and the receipt of this general permit.

35 **9VAC25-190-50. Authorization to discharge.**

36 A. Any owner governed by this general permit is authorized to discharge process wastewater
37 and stormwater as described in 9VAC25-190-20 A 1 and 2 to surface waters of the
38 Commonwealth of Virginia provided that:

- 39 1. The owner submits a registration statement in accordance with 9VAC25-190-60, and
40 that registration statement is accepted by the ~~board~~ department;
- 41 2. The owner submits the required permit fee;
- 42 3. The owner complies with the applicable effluent limitations and other requirements of
43 9VAC25-190-70;

- 44 4. The owner has and maintains during such authorization a mineral mining permit for the
45 operation to be covered by this general permit that has been approved by the Virginia
46 Department of ~~Mines, Minerals and Energy~~, Division of Mineral Mining (or an associated
47 waived program, locality, or state agency) under provisions and requirements of Title
48 ~~45.4~~ 45.2 of the Code of Virginia. Mineral mines located in bordering states with
49 discharges in Virginia shall provide documentation that they have a mining permit from the
50 appropriate state authority. Mineral mines owned and operated by governmental bodies
51 not subject to the provisions and requirements of Title ~~45.4~~ 45.2 of the Code of Virginia
52 are exempt from this requirement; and
- 53 5. The ~~board~~ department has not notified the owner that the discharge is not eligible for
54 coverage in accordance with subsection B of this section.
- 55 B. The ~~board~~ department will notify an owner that the discharge is not eligible for coverage
56 under this general permit in the event of any of the following:
- 57 1. The owner is required to obtain an individual permit in accordance with 9VAC25-31-170
58 B 3 of the [~~VPDES~~ Virginia Pollutant Discharge Elimination System (VPDES)] Permit
59 Regulation;
- 60 2. The owner is proposing to discharge to state waters specifically named in other board
61 regulations that prohibit such discharges;
- 62 3. The discharge violates or would violate the antidegradation policy in the water quality
63 standards at 9VAC25-260-30; or
- 64 4. The discharge is not consistent with the assumptions and requirements of an approved
65 [~~TMDL~~ Total Maximum Daily Load (TMDL)] .
- 66 C. Compliance with this general permit constitutes compliance for purposes of enforcement
67 with §§ 301, 302, 306, 307, 318, 403, and ~~405(b)~~ 405(a) and (b) of the federal Clean Water Act
68 and the State Water Control Law, with the exceptions stated in 9VAC25-31-60 of the VPDES
69 Permit Regulation. Approval for coverage under this general permit does not relieve any owner
70 of the responsibility to comply with any other applicable federal, state, or local statute, ordinance,
71 or regulation.
- 72 D. Continuation of permit coverage.
- 73 1. Permit coverage shall expire at the end of the applicable permit term. However, expiring
74 permit coverages are automatically continued if the owner has submitted a complete
75 registration statement at least 60 days prior to the expiration date of the permit, or a later
76 submittal date established by the ~~board~~ department, which cannot extend beyond the
77 expiration date of the permit. The permittee is authorized to continue to discharge until
78 such time as the ~~board~~ department either:
- 79 a. Issues coverage to the owner under this general permit; or
80 b. Notifies the owner that the discharge is not eligible for coverage under this general
81 permit.
- 82 2. When the owner that was covered under the expiring or expired general permit has
83 violated or is violating the conditions of that permit, the ~~board~~ department may choose to
84 do any or all of the following:
- 85 a. Initiate enforcement action based upon the general permit coverage that has been
86 continued;
- 87 b. Issue a notice of intent to deny coverage under the reissued general permit. If the
88 general permit coverage is denied, the owner would then be required to cease the
89 discharges authorized by the continued coverage or be subject to enforcement action
90 for discharging without a permit;

- 91 c. Issue an individual permit with appropriate conditions; or
- 92 d. Take other actions authorized by the VPDES Permit Regulation (9VAC25-31).

93 **9VAC25-190-60. Registration statement.**

94 A. Any owner seeking coverage under this general permit shall submit a complete VPDES [
95 ~~general permit registration statement~~ General Permit Registration Statement] in accordance with
96 this section, which shall serve as a notice of intent for coverage under the VPDES general permit
97 for nonmetallic mineral mining facilities.

98 1. New facilities. Any owner proposing a discharge shall submit a complete registration
99 statement at least 60 days prior to the date planned for commencement of the discharge
100 or a later submittal date established by the ~~board~~ department.

101 2. Existing facilities.

102 a. Any owner covered by an VPDES individual permit that is proposing to be covered
103 by this general permit shall submit a complete registration statement at least 240 days
104 prior to the expiration date of the individual VPDES permit.

105 b. Any owner that was authorized to discharge under the expiring VPDES general
106 permit for nonmetallic mineral mining and that intends to continue coverage under this
107 general permit shall submit a complete registration statement to the ~~board~~ department
108 at least 60 days prior to the expiration of the existing permit or a later submittal date
109 established by the ~~board~~ department.

110 B. Late registration statements. Registration statements for existing facilities covered under
111 subdivision A 2 b of this section will be accepted after the expiration date of this permit, but
112 authorization to discharge will not be retroactive.

113 C. The required registration statement shall contain the following information:

114 1. Facility owner and ~~operator or other~~ facility contact name, address, email address, and
115 telephone number;

116 2. Facility name, county, and location;

117 3. Description of mining activity;

118 4. Primary and secondary SIC and NAIC codes;

119 5. Discharge information including:

120 a. A list of outfalls identified by outfall numbers;

121 b. Characterization of the type of each listed outfall's discharge as either process
122 wastewater, stormwater, or process wastewater commingled with stormwater;

123 c. Characterization of the source of each listed outfall's discharge as either mine pit
124 dewatering, stormwater associated with industrial activity (see definition in 9VAC25-
125 190-10), stormwater not associated with industrial activity, groundwater infiltration, [
126 process] wastewater from vehicle or equipment degreasing activities, vehicle washing
127 and return water from operations where mined material is dredged, mined material
128 washing, noncontact cooling water, miscellaneous plant cleanup wastewater,
129 collocated facility discharges (identify the collocated facility), other discharges not listed
130 here (describe), or any combination of the ~~above~~ items listed in this subdivision c;

131 d. The receiving stream, including wetlands for each outfall listed;

132 e. The latitude and longitude for each outfall listed; and

133 f. Indicate which stormwater outfalls ~~will be representative outfalls that require a single~~
134 ~~discharge monitoring report (DMR). For stormwater outfalls that are to be represented~~
135 ~~by other outfall discharges, provide a description of the activities associated with those~~
136 ~~outfalls and explain why they are substantially the same as the representative outfall~~

- 137 ~~to be sampled; could operate as substantially identical or representative outfalls (if~~
138 ~~any). Provide the following for each:~~
- 139 (1) The locations of the outfalls; and
140 (2) Why the outfalls are expected to discharge substantially identical effluents
141 including, where available, evaluation of monitoring data;
- 142 6. Indicate if the facility has a current VPDES permit and the permit number if it does;
143 7. Description of [process] wastewater treatment, reuse or recycle systems, or both;
144 8. List of any treatment chemicals added to [process] wastewater or stormwater that
145 could be discharged. Include safety data sheets, the maximum proposed dosing rates,
146 and a demonstration that application or use will not result in aquatic toxicity;
147 9. List of colocated facilities;
148 10. Indicate if the facility is a hazardous waste treatment, storage, or disposal facility;
149 11. Schematic drawing showing water flow from source to water-using industrial
150 operations to waste treatment and disposal, and disposal of any solids removed from [process]
151 wastewater;
152 12. Aerial photo or scale map that clearly shows the property boundaries, plant site,
153 drainage areas associated with each outfall, locations of all mine pit dewatering, existing,
154 significant sources of materials exposed to precipitation, stormwater or process
155 wastewater outfalls, and [~~the~~] receiving streams;
156 13. Evidence, such as the permit-license to operate a mine page, that the operation to be
157 covered by this general permit has a mining permit that has been approved by the Virginia
158 Department of ~~Mines, Minerals and Energy~~, Division of Mineral Mining (or associated
159 waived program) under the provisions and requirements of Title ~~45.4~~ 45.2 of the Code
160 of Virginia (or appropriate bordering state authorization). Mineral mines owned and
161 operated by governmental bodies not subject to the provisions and requirements of Title
162 ~~45.4~~ 45.2 of the Code of Virginia are exempt from this requirement;
163 14. Mining permit number;
164 15. Whether the permitted facility will discharge to a municipal separate storm sewer
165 system (MS4). If yes, the facility owner shall notify the MS4 owner of the existence of the
166 discharge at the time of registration under this permit and include that notification with the
167 registration statement. The notification shall include the following information: the name of
168 the facility, a contact person and contact information, the location of the discharge, the
169 nature of the discharge, and the facility's VPDES general permit number if assigned by
170 DEQ;
171 16. Indicate if there are vehicle or equipment degreasing activities performed on site. If
172 yes, indicate if there is any process wastewater generated from these activities;
173 17. Provide certification that the process wastewater system is designed to operate as "no
174 discharge" if special condition 9VAC25-190-70 Part I B 15 is to apply to the facility. Identify
175 the emergency outfall number;
176 18. State Corporation Commission entity identification number if the facility is required to
177 obtain an entity identification number by law; ~~and~~
178 19. Ownership type, whether located on Indian lands, and existing [~~VPA~~ VPDES]
179 permits; and
180 20. The following certification:
181 "I certify under penalty of law that this document and all attachments were prepared
182 under my direction or supervision in accordance with a system designed to assure that

183 qualified personnel properly gather and evaluate the information submitted. Based on
184 my inquiry of the person or persons who manage the system or those persons directly
185 responsible for gathering the information, the information submitted is to the best of
186 my knowledge and belief true, accurate, and complete. I am aware that there are
187 significant penalties for submitting false information including the possibility of fine and
188 imprisonment for knowing violations."

189 D. The registration statement shall be signed in accordance with 9VAC25-31-110.

190 E. Where to submit. The registration statement shall be delivered to the department by either
191 postal or electronic mail and shall be submitted to the DEQ regional office serving the area where
192 the industrial facility is located. Following notification from the department of the start date for the
193 required electronic submission of Notice of Intent to Discharge forms (i.e., registration
194 statements), as provided for in 9VAC25-31-1020, such forms submitted after that date shall be
195 electronically submitted to the department in compliance with this section and 9VAC25-31-1020.
196 There shall be at least a three-month notice provided between the notification from the department
197 and the date after which such forms must be submitted electronically.

198 **9VAC25-190-70. General permit.**

199 Any owner whose registration statement is accepted by the ~~board~~ department will receive
200 coverage under the following general permit and shall comply with the requirements in the general
201 permit and be subject to all requirements of 9VAC25-31-190.

202 General Permit No.: VAG84
203 Effective date: July 1, ~~2019~~ 2024
204 Expiration date: June 30, ~~2024~~ 2029

205 GENERAL PERMIT FOR NONMETALLIC MINERAL MINING

206 AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE
207 ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

208 In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the
209 State Water Control Law and regulations adopted pursuant to it, owners of nonmetallic mineral
210 mines are authorized to discharge to surface waters within the boundaries of the Commonwealth
211 of Virginia, except those specifically named in board regulations that prohibit such discharges.

212 The authorized discharge shall be in accordance with the information submitted with the
213 registration statement, this cover page, Part I - Effluent Limitations, Monitoring Requirements, and
214 Special Conditions, Part II - Stormwater Management, and Part III - Conditions Applicable to All
215 VPDES Permits, as set forth in this permit.

216 Part I

217 Effluent Limitations, Monitoring Requirements, and Special Conditions

218 A. Effluent limitations and monitoring requirements.

219 1. During the period beginning with the permittee's coverage under this general permit and
220 lasting until the permit's expiration date, the permittee is authorized to discharge process
221 wastewater and commingled stormwater associated with industrial activity from outfalls.

222 Such discharges shall be limited and monitored by the permittee as specified below in the
223 following table [(Table 1)] :

[Table 1]

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Monthly Average	Daily Minimum	Daily Maximum	Frequency ⁽¹⁾	Sample Type
Flow (MGD)	NL	NA	NL	1/3 Months	Estimate
Total Suspended Solids (mg/l) ⁽²⁾	30	NA	60	1/3 Months	Grab
pH (standard units) ⁽²⁾⁽³⁾	NA	6.0	9.0	1/3 Months	Grab

NL = No Limitation, monitoring required
 NA = Not Applicable
⁽¹⁾1/3 Months equals the following three-month periods each year of permit coverage: January through March, April through June, July through September, and October through December. Discharge Monitoring Reports (DMRs) of quarterly monitoring shall be submitted to the [DEQ department's applicable] regional office no later than the 10th day of April, July, October, and January.
⁽²⁾See Special Condition 18 with regard to conditions applicable to emergency dewatering.
⁽³⁾Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH, [~~these standards~~ the most stringent limits (technology-based or water quality based)] shall be the minimum and maximum pH effluent limits.

225 2. During the period beginning with the permittee's coverage under the general permit and
 226 lasting until the permit's expiration date, the permittee is authorized to discharge
 227 stormwater associated with industrial activity that does not combine with other [process]
 228 wastewaters prior to discharge from outfalls.

229 a. Such discharges shall be [~~limited and~~] monitored by the permittee as specified
 230 ~~below~~ in the following table [(Table 2)] :

[Table 2]

EFFLUENT CHARACTERISTICS	[DISCHARGE LIMITATIONS EVALUATION VALUE MONITORING]			MONITORING REQUIREMENTS	
	Monthly Average	Daily Minimum	Daily Maximum	Frequency ⁽¹⁾	Sample Type
Flow (MG)	NA	NA	NL	1/Year	Estimate ⁽²⁾
Total Suspended Solids (mg/l)	NA	NA	[<u>NL 100</u>] ⁽³⁾	1/Year	Grab
pH (standard units)	NA	NL	NL	1/Year	Grab

NL = No Limitation, monitoring required
 NA = Not applicable
⁽¹⁾Discharge Monitoring Reports (DMRs) of yearly monitoring (January 1 to December 31) shall be submitted to the [DEQ department's applicable] regional office no later than the 10th day of January.

(2) Estimate of the total volume of the discharge during the storm event.

(3) Permittees shall review the results of the TSS monitoring required by Part I A 2 a to determine if changes to the [~~stormwater pollution prevention plan~~ Stormwater Pollution Prevention Plan] (SWPPP) may be necessary. If the [~~TSS total suspended solids (TSS)~~] monitoring results are greater than the evaluation value [~~of 100 mg/l,~~ indicated in Table 2] then the permittee shall perform a routine facility inspection within five days of becoming aware of the exceedance and maintain documentation as described in Part II H 3 d for that outfall. Any deficiencies noted during the inspection shall be corrected within 60 days of being identified.

232 b. The permittee shall conduct calendar quarterly visual monitoring of stormwater
233 discharges associated with [the] industrial activity. The monitoring shall include
234 examination of stormwater samples representative of storm event discharges from the
235 facility and observation of color, odor, clarity, floating solids, settled solids, suspended
236 solids, foam, oil sheen, and other obvious indicators of stormwater pollution. Samples
237 will be in a clean, colorless glass or plastic container and examined in a well-lit area.
238 Documentation of visual monitoring of stormwater shall be maintained onsite in the
239 SWPPP and include the examination date and time, examination personnel, outfall
240 location, the nature of the discharge (i.e., runoff or snowmelt), visual quality of the
241 stormwater discharge and probable sources of any observed stormwater
242 contamination. Part II A regarding monitoring instructions, Part II B regarding
243 representative outfalls, and Part II C regarding sampling waivers shall apply to the
244 taking of samples for visual monitoring except that the documentation required by
245 these sections shall be retained with the SWPPP rather than submitted to the
246 department. Calendar quarters equal the following three-month periods each year of
247 permit coverage: January through March, April through June, July through September,
248 and October through December.

249 B. Special conditions.

250 1. Vehicles and equipment utilized during the industrial activity on a site must be operated
251 and maintained in such a manner as to prevent the potential or actual point source
252 pollution of the surface or groundwaters of the state. Fuels, lubricants, coolants, and
253 hydraulic fluids, or any other petroleum products, shall not be disposed of by discharging
254 on the ground or into surface waters. Spent fluids shall be disposed of in a manner so as
255 not to enter the surface or groundwaters of the state and in accordance with the applicable
256 state and federal disposal regulations. Any spilled fluids shall be cleaned up and disposed
257 of in a manner so as not to allow their entry into the surface or groundwaters of the state.

258 2. No sewage shall be discharged from this mineral mining activity except under the
259 provisions of another VPDES permit specifically issued for that purpose.

260 3. There shall be no chemicals added to the discharge, other than those listed on the
261 owner's approved registration statement, unless prior approval of the chemical is granted
262 by the ~~board~~ department.

263 4. The permittee shall submit a new registration statement if the mining permit approved
264 by the Division of Mineral Mining (or associated waived program, or bordering state mine
265 authority) is modified or reissued in any way that would affect the outfall location or the
266 characteristics of a discharge covered by this general permit. Government owned and
267 operated mines without mining permits shall submit the registration statement whenever
268 outfall location or characteristics are altered. The new registration statement shall be filed
269 within 30 days of the outfall relocation or change in the characteristics of the discharge.

270 5. The permittee shall notify the department as soon as they know or have reason to
271 believe:

272 a. That any activity has occurred or will occur that would result in the discharge, on a
273 routine or frequent basis, of any toxic pollutant that is not limited in this permit, if that
274 discharge will exceed the highest of the following notification levels:
275 (1) One hundred micrograms per liter (100 µg/l) of the toxic pollutant;
276 (2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five
277 hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-
278 dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
279 (3) Five times the maximum concentration value reported for that pollutant in the permit
280 application; or
281 (4) The level established by the ~~board~~ department.

282 b. That any activity has occurred or will occur that would result in any discharge, on a
283 nonroutine or infrequent basis, of a toxic pollutant that is not limited in this permit, if
284 that discharge will exceed the highest of the following notification levels:
285 (1) Five hundred micrograms per liter (500 µg/l) of the toxic pollutant;
286 (2) One milligram per liter (1 mg/l) for antimony;
287 (3) Ten times the maximum concentration value reported for that pollutant in the permit
288 application; or
289 (4) The level established by the ~~board~~ department in accordance with 9VAC25-31-220
290 F.

291 6. Any and all product, materials, industrial wastes, or other wastes resulting from the
292 purchase, sale, mining, extraction, transport, preparation, or storage of raw or intermediate
293 materials, final product, by-product, or wastes shall be handled, disposed of, or stored in
294 such a manner and consistent with best management practices, so as not to permit a
295 discharge of such product, materials, industrial wastes, or other wastes to state waters,
296 except as expressly authorized.

297 7. There shall be no discharge of process wastewater pollutants from colocated asphalt
298 paving materials operations. For the purposes of this special condition, process
299 wastewater pollutants are any pollutants present in water used in asphalt paving materials
300 manufacturing that come into direct contact with any raw materials, intermediate product,
301 by-product, or product related to the asphalt paving materials manufacturing process.

302 8. Process [~~water~~ wastewater] may be used on site for the purpose of dust suppression.
303 Dust suppression shall be carried out as a best management practice but not as a [
304 process] wastewater disposal method provided that ponding or direct runoff from the site
305 does not occur during or immediately following its application. Dust suppression shall not
306 occur during a storm event that results in an actual discharge from the site.

307 9. Process [~~water~~ wastewater] from mine dewatering may be provided to local property
308 owners for beneficial agricultural use.

309 10. There shall be no:
310 a. Discharge of floating solids or visible foam in other than trace amounts from process
311 [~~water~~ wastewater] discharges;
312 b. Solids deposition to surface water as a result of a discharge associated with
313 industrial activity; or
314 c. Oil sheen resulting from petroleum products discharged to surface water as a result
315 of the industrial activity.

316 11. The permittee shall report at least two significant digits for a given parameter.
317 Regardless of the rounding convention used (i.e., five always rounding up or to the nearest

318 even number) by the permittee, the permittee shall use the convention consistently and
319 shall ensure that consulting laboratories employed by the permittee use the same
320 convention.

321 12. Discharges to waters ~~subject to TMDL wasteload allocations~~ with an approved total
322 maximum daily load (TMDL). Owners of facilities that are a source of the specified
323 pollutant of concern to waters ~~for which where a total maximum daily load (TMDL)~~
324 ~~wasteload allocation~~ has been approved prior to the term of this permit shall ~~incorporate~~
325 implement measures and controls ~~into the SWPPP required by Part II~~ that are consistent
326 with the assumptions and requirements of the TMDL. The department will provide written
327 notification to the owner that a facility is subject to the TMDL requirements. If the TMDL
328 establishes a numeric wasteload allocation that applies to discharges from the facility, the
329 owner shall perform any required monitoring for the pollutant of concern in accordance
330 with the monitoring frequencies in Part I A and implement measures necessary to meet
331 that allocation. At permit reissuance, the permittee shall submit a demonstration with the
332 registration statement to show the wasteload allocation is being met.

333 13. The discharges authorized by this permit shall be controlled as necessary to meet
334 applicable water quality standards.

335 14. Inactive and unstaffed facilities (including temporarily inactive and unstaffed facilities).

336 a. A waiver of the process and stormwater monitoring and routine inspections may be
337 exercised by the ~~board~~ department at a facility that is both inactive and unstaffed as
338 long as the facility remains inactive and unstaffed. Such a facility is required to conduct
339 ~~an annual~~ a site inspection in accordance with the requirements in Part II H 3 d. No
340 DMR reports will be required to be submitted when a facility is approved as inactive
341 and unstaffed.

342 b. An inactive and unstaffed sites waiver request shall be submitted to the ~~board~~
343 department for approval and shall include the name of the facility; the facility's VPDES
344 general permit registration number; a contact person, ~~phone~~ telephone number, and
345 email address (if available); the reason for the request; and the date the facility became
346 or will become inactive and unstaffed. The waiver request shall be signed and certified
347 in accordance with Part III K. If this waiver is granted, a copy of the request and the
348 ~~board's~~ department's written approval of the waiver shall be maintained with the
349 SWPPP.

350 c. To reactivate the site the permittee shall notify the department within 30 days or an
351 alternate timeframe if written approval is received in advance from the ~~board~~
352 department, and all process and stormwater monitoring and routine inspections shall
353 be resumed immediately. This notification must be submitted to the department,
354 signed in accordance with Part III K, and retained on site at the facility covered by this
355 permit in accordance with Part III B.

356 d. The ~~board~~ department retains the authority to revoke this waiver when it is
357 determined that the discharge causes, has a reasonable potential to cause, or
358 contributes to a water quality standards violation.

359 15. Process wastewater systems designed to operate as "no discharge" shall have no
360 discharge of [process] wastewater or pollutants, except in storm events greater than a
361 25-year, 24-hour storm event. In the event of such a discharge, the permittee shall report
362 an unusual or extraordinary discharge per Part III H of this permit. No sampling or DMR is
363 required for these discharges as they are considered to be discharging in emergency
364 discharge conditions. These discharges shall not contravene the Water Quality Standards
365 (9VAC25-260), ~~as adopted and amended by the board~~, or any provision of the State Water

366 Control Law. Any other discharge from this type of system is prohibited, and shall be
367 reported as an unauthorized discharge per Part III G of this permit.

368 16. Best management practices for blasting. The permittee shall utilize best management
369 practices to ensure that contaminants do not enter surface water as a result of blasting at
370 the site.

371 17. Notice of termination.

372 a. The owner may terminate coverage under this general permit by filing a complete
373 notice of termination. The notice of termination may be filed after one or more of the
374 following conditions have been met:

375 (1) Operations have ceased at the facility and there are no longer discharges of
376 process wastewater or stormwater associated with the industrial activity;

377 (2) A new owner has assumed responsibility for the facility. A notice of termination
378 does not have to be submitted if a VPDES Change of Ownership Agreement Form has
379 been submitted;

380 (3) All discharges associated with this facility have been covered by a VPDES
381 individual permit or an alternative VPDES permit; or

382 (4) Termination of coverage is being requested for another reason, provided the ~~board~~
383 department agrees that coverage under this general permit is no longer needed.

384 b. The notice of termination shall contain the following information:

385 (1) Owner's name, mailing address, telephone number, and email address (if
386 available);

387 (2) Facility name and location;

388 (3) VPDES general permit registration number for the facility; and

389 (4) The basis for submitting the notice of termination, including:

390 (a) A statement indicating that a new owner has assumed responsibility for the facility;

391 (b) A statement indicating that operations have ceased at the facility, and there are no
392 longer discharges from the facility;

393 (c) A statement indicating that all discharges have been covered by a VPDES
394 individual permit; or

395 (d) A statement indicating that termination of coverage is being requested for another
396 reason (state the reason).

397 c. The following certification:

398 "I certify under penalty of law that all [process] wastewater and stormwater discharges
399 from the identified facility that are authorized by this VPDES general permit have been
400 eliminated, or covered under a VPDES individual or alternative permit, or that I am no
401 longer the owner of the facility, or permit coverage should be terminated for another
402 reason listed above. I understand that by submitting this notice of termination, that I
403 am no longer authorized to discharge nonmetallic mineral mining [process]
404 wastewater or stormwater in accordance with the general permit, and that discharging
405 pollutants to surface waters is unlawful where the discharge is not authorized by a
406 VPDES permit. I also understand that the submittal of this notice of termination does
407 not release an owner from liability for any violations of this permit or the Clean Water
408 Act."

409 d. The notice of termination shall be submitted to the [~~DEQ~~ department's applicable]
410 regional office serving the area where the facility discharge is located and signed in
411 accordance with Part III K.

412 18. Discharge requirements for emergency dewatering during flooded conditions. For
413 covered facilities except for those in SIC 1475, the monthly average and daily maximum
414 discharge limitations for [TSS Total Suspended Solids (TSS)] in Part I A 1 [Table 1] do
415 not apply to mine pit dewatering discharges resulting from a storm equal to or greater than
416 a 10-year, 24-hour storm event that has caused flood conditions within the mine such that
417 normal operation at the active portion of the mine cannot continue. Rather, the TSS levels
418 in such dewatering discharges shall not exceed a daily maximum of 100 mg/l during
419 emergency dewatering. The operator must conduct such dewatering by pumping from the
420 surface of the flooded area through a filtered mechanism to minimize the discharge of
421 solids. The operator shall notify DEQ of such flooded conditions as an unusual or
422 extraordinary discharge as described in Part III H of the permit. The emergency
423 dewatering TSS limitation remains in effect until operation at the active portion of the mine
424 resumes or the emergency dewatering activity has ceased, whichever occurs first. In no
425 case shall the emergency dewatering TSS limit be applicable for more than 30 days from
426 the beginning of the relevant 10-year, 24-hour storm event, unless otherwise approved by
427 DEQ. The permittee shall take actions to maximize the settling of stormwater prior to and
428 during dewatering. Cationic settling agents shall not be used during dewatering without
429 prior DEQ approval of a demonstration that the use will not result in aquatic toxicity. During
430 emergency dewatering, the permittee shall monitor for TSS daily and notify DEQ of any
431 exceedances. Dewatering discharges shall not contravene the Water Quality Standards
432 (9VAC25-260) or any provision of the State Water Control Law.

434 Part II

435 Stormwater Management

436 A. Monitoring instructions.

437 1. Collection and analysis of samples. Sampling requirements shall be assessed on an
438 outfall-by-outfall basis. Samples shall be collected and analyzed in accordance with the
439 requirements of Part III A.

440 2. When and how to sample.

441 a. In the case of snowmelt or a discharge from a stormwater management structure,
442 a representative sample shall be taken at the time the discharge occurs.

443 b. For all other types of stormwater discharges, a minimum of one grab sample shall
444 be taken resulting from a storm event that results in a discharge from the site (~~defined~~
445 ~~as a "measurable storm event"~~), providing the interval from the preceding ~~measurable~~
446 storm event discharge is at least 72 hours. The 72-hour storm interval is waived if the
447 permittee is able to document with the discharge monitoring report (DMR) that less
448 than a 72-hour interval is representative for local storm events during the sampling
449 period. The grab sample shall be taken during the first 30 minutes of the discharge. If
450 it is not practicable to take the sample during the first 30 minutes, the sample may be
451 taken during the first three hours of discharge provided that the permittee explains with
452 the DMR why a grab sample during the first 30 minutes was impracticable and
453 maintains that documentation with the SWPPP.

454 B. Representative outfalls. If a facility has two or more exclusively stormwater outfalls that
455 discharge substantially identical effluents, based on similarity of industrial activity, significant
456 materials, frequency of discharges, and management practices and activities within the area
457 drained by the outfalls, then the permittee may ~~submit information with the registration statement~~
458 ~~substantiating the request for only one DMR to be issued for the outfall to be sampled that~~

459 ~~represents one or more substantially identical outfalls~~ monitor the effluent stormwater of just one
460 of the outfalls and report that the observations also apply to the substantially identical outfall. The
461 permittee shall document representative outfalls in the SWPPP and ~~list on the DMR of the outfall~~
462 ~~to be sampled all outfall locations that are represented by the discharge.~~ The representative outfall
463 monitoring provisions apply to Part I A 2 a monitoring and quarterly visual monitoring.

464 The permittee must include the following information in the SWPPP:

- 465 1. The locations of the outfalls; and
466 2. An evaluation, including available monitoring data, indicating why the outfalls are
467 expected to discharge substantially identical effluents.

468 C. Sampling waivers. When a permittee is unable to conduct quarterly stormwater monitoring
469 required under Part I A 2 b within the specified sampling period due to no ~~measurable~~ storm event
470 discharge or adverse weather conditions, documentation shall be submitted explaining the
471 permittee's inability to conduct the stormwater monitoring. The documentation must include the
472 dates and times that the outfalls were viewed and sampling was attempted. Adverse weather
473 conditions that may prohibit the collection of samples include weather conditions that create
474 dangerous conditions for personnel (such as local flooding, high winds, hurricane, tornadoes, or
475 electrical storms, etc.). Acceptable documentation includes National Climatic Data Center
476 weather station data, local weather station data, facility rainfall logs, and other appropriate
477 supporting data. All documentation shall also be maintained with the SWPPP. This waiver is not
478 applicable to annual monitoring required under Part I A 2 a.

479 D. Stormwater [~~pollution prevention plans (SWPPP)~~ Pollution Prevention Plan (SWPPP)] .
480 An SWPPP shall be developed and implemented for the facility. The plan shall include best
481 management practices (BMPs) that are reasonable, economically practicable, and appropriate [
482 in light of considering] current industry practices. The BMPs shall be selected, designed, installed,
483 implemented, and maintained in accordance with good engineering practices to eliminate or
484 reduce the pollutants in all stormwater discharges from the facility. The SWPPP shall also include
485 all control measures necessary for the stormwater discharges to meet applicable water quality
486 standards.

487 The SWPPP requirements of this general permit may be fulfilled, in part, by incorporating by
488 reference other plans or documents, such as an erosion and sediment control plan, a mine
489 drainage plan as required by the Virginia [Department of Energy's] Division of Mineral Mining, a
490 [~~spill prevention control and countermeasure (SPCC)~~ Spill Prevention Control and
491 Countermeasure (SPCC)] [~~plan~~ Plan] developed for the facility under § 311 of the federal Clean
492 Water Act, or BMP programs otherwise required for the facility provided that the incorporated plan
493 meets or exceeds the SWPPP requirements of Part II H (contents of SWPPP). All plans
494 incorporated by reference into the SWPPP become enforceable under this permit. If a plan
495 incorporated by reference does not contain all of the required elements of Part II H, the permittee
496 must develop the missing SWPPP elements and include them in the required SWPPP.

497 E. Deadlines for SWPPP preparation and compliance.

498 1. Owners of existing facilities ~~that were covered under the 2014 Nonmetallic Mineral~~
499 ~~Mining General Permit~~ that are continuing coverage under this general permit shall update
500 and implement any revisions to the SWPPP within 60 days of the ~~board~~ department
501 granting coverage under this permit.

502 2. Owners of new facilities, facilities previously covered by an expiring individual permit,
503 and existing facilities not currently covered by a VPDES permit that elect to be covered
504 under this general permit shall prepare and implement the SWPPP prior to submitting the
505 registration statement.

506 3. Where the owner of an existing facility that is covered by this permit changes, the new
507 owner of the facility shall update and implement any revisions to the SWPPP within 60
508 days of ownership change.

509 4. Upon a showing of good cause, the director may establish a later date in writing for the
510 preparation and compliance with the SWPPP.

511 F. Signature and SWPPP review.

512 1. The SWPPP shall be signed in accordance with Part III K (signatory requirements), and
513 be retained on site at the facility covered by this permit in accordance with Part III B
514 (records) of this permit. When there are no on-site buildings or offices in which to store the
515 plan, it shall be kept at the nearest company office [to the facility location] .

516 2. The permittee shall make the SWPPP, routine inspection documentation, or other
517 information available to the department upon request.

518 3. The director, or an authorized representative, may notify the permittee at any time that
519 the SWPPP, BMPs, or other components of the facility's stormwater program do not meet
520 one or more of the requirements of this part. Such notification shall identify specific
521 provisions of the permit that are not being met and may include required modifications to
522 the stormwater program, additional monitoring requirements, and special reporting
523 requirements. Within 60 days of such notification from the director, or as otherwise
524 provided by the director, or an authorized representative, the permittee shall make the
525 required changes to the plan and shall submit to the department a written certification that
526 the requested changes have been made.

527 G. Maintaining an updated SWPPP. The permittee shall review and amend the SWPPP as
528 appropriate whenever:

529 1. There is construction or a change in design, operation, or maintenance that has a
530 significant effect on the discharge or the potential for the discharge of pollutants to surface
531 waters;

532 2. Routine inspections determine that there are deficiencies in the BMPs;

533 3. Inspections by local, state, or federal officials determine or any other process,
534 observation, or event results in a determination that modifications to the SWPPP are
535 necessary;

536 4. There is a spill, leak, or other release at the facility; or

537 5. There is an unauthorized discharge from the facility; or

538 6. The department notifies the permittee that a TMDL has been developed and applies to
539 the permitted facility.

540 SWPPP modifications shall be made within 60 calendar days after discovery, observation, or
541 an event requiring an SWPPP modification. Implementation of new or modified BMPs (distinct
542 from regular preventive maintenance of existing BMPs described in Part II H 3 b (preventative
543 maintenance) shall be initiated before the next storm event if possible, but no later than 60 days
544 after discovery, or as otherwise provided or approved by the director. The amount of time taken
545 to modify a BMP or implement additional BMPs shall be documented in the SWPPP.

546 If the SWPPP modification is based on a release or unauthorized discharge, include a
547 description and date of the release, the circumstances leading to the release, actions taken in
548 response to the release, and measures to prevent the recurrence of such releases. Unauthorized
549 releases and discharges are subject to the reporting requirements of Part III G of this permit.

550 H. Contents of SWPPP. The SWPPP shall include, at a minimum, the following items:

551 1. Pollution prevention team. Each plan shall identify the staff individuals by name or title
552 who comprise the facility's stormwater pollution prevention team. The pollution prevention

553 team is responsible for assisting the facility or plant manager in developing, implementing,
554 maintaining, revising, and ensuring compliance with the facility's SWPPP. Specific
555 responsibilities of each staff individual on the team shall be identified and listed.

556 2. Summary of potential pollutant sources. The SWPPP shall identify where industrial
557 materials or activities at the facility are exposed to stormwater. The description shall
558 include:

559 a. Site map. The site map shall document:

560 (1) An outline of the drainage area of each stormwater outfall that are within the facility
561 boundaries, each existing structural control measure to reduce pollutants in
562 stormwater run-off, surface water bodies, locations where materials are exposed to
563 precipitation, locations where major spills or leaks identified under Part II H 2 c (spills
564 and leaks) of this permit have occurred, and the locations of the following activities
565 where such activities are exposed to precipitation: fueling stations, vehicle or
566 equipment degreasing, cleaning areas, loading or unloading, locations used for the
567 treatment, storage or disposal of wastes and wastewaters, liquid storage tanks,
568 processing areas, and storage areas. The map must indicate all outfall locations. The
569 types of discharges contained in the drainage areas of the outfalls must be indicated
570 either on the map or in an attached narrative.

571 (2) For each area of the facility that generates stormwater discharges associated with
572 industrial activity, locations of stormwater conveyances, including ditches, pipes,
573 swales, and inlets, and the directions of stormwater flow and an identification of the
574 types of pollutants that are likely to be present in stormwater discharges associated
575 with industrial activity. Factors to consider include the toxicity of the chemicals; quantity
576 of chemicals used, produced, or discharged; the likelihood of contact with stormwater;
577 and history of significant spills or leaks of toxic or hazardous pollutants. Flows with a
578 potential for causing erosion shall be identified.

579 b. Inventory of exposed materials. A list of the industrial materials or activities,
580 including material handling equipment or activities, industrial machinery, raw
581 materials, industrial production and processes, intermediate products, by-products,
582 final products, and waste products. Material handling activities include ~~to~~ the storage,
583 loading and unloading, transportation, disposal, or conveyance of any raw material,
584 intermediate product, final product, or waste product.

585 c. Spills and leaks. A list of significant spills and leaks of toxic or hazardous pollutants
586 that occurred at areas that are exposed to precipitation or that otherwise drain to a
587 stormwater conveyance at the facility after the date of three years prior to the date of
588 coverage under this general permit. Such list shall be updated as appropriate during
589 the term of the permit.

590 d. Sampling data. A summary of existing stormwater sampling data taken at the facility.
591 The summary shall include, at a minimum, any data collected during the previous three
592 years.

593 3. Stormwater controls. Control measures shall be implemented for all areas identified in
594 Part II H 2 b (inventory of exposed materials) to prevent or control pollutants in stormwater
595 discharges from the facility. All reasonable steps shall be taken to control or address the
596 quality of discharges from the site that may not originate at the facility. The SWPPP shall
597 describe the type, location, and implementation of all BMPs for each area where industrial
598 materials or activities are exposed to stormwater. The BMPs shall also address the
599 following minimum components, including a schedule for implementing such controls:

600 a. Good housekeeping. Good housekeeping requires the clean and orderly
601 maintenance of areas that [~~may~~ have the potential to] contribute pollutants to

602 stormwater discharges. The SWPPP shall describe procedures performed to minimize
603 contact of materials with stormwater runoff. Particular attention should be paid to areas
604 where raw materials are stockpiled, material handling areas, storage areas, liquid
605 storage tanks, vehicle fueling and maintenance areas, loading or unloading areas, and
606 vehicle entrance and exits. The permittee shall keep clean all exposed areas of the
607 facility that are potential sources of pollutants in stormwater. The permittee shall sweep
608 or vacuum paved surfaces of the site that are exposed to stormwater at regular
609 intervals or use other equivalent measures to minimize the potential discharge of these
610 materials in stormwater. Indicate in the SWPPP the frequency of sweeping,
611 vacuuming, or other equivalent measures.

612 b. Preventive maintenance. A preventive maintenance program shall involve regular
613 inspection, testing, maintenance, and repairing of all industrial equipment and systems
614 to avoid breakdowns or failures that could result in leaks, spills, and other releases.
615 All BMPs identified in the SWPPP shall be maintained in effective operating condition.
616 The SWPPP shall include a description of procedures and a regular schedule for
617 preventive maintenance and observation of all BMPs and shall include a description
618 of the back-up practices that are in place should a run-off event occur while a BMP is
619 off line or not operating effectively. The effectiveness of nonstructural BMPs shall also
620 be maintained by appropriate means (e.g., spill response supplies available and
621 personnel trained). If site inspections required by Part II H 3 d (routine facility
622 inspections) identify BMPs that are not operating effectively, repairs or maintenance
623 shall be performed before the next anticipated storm event. If maintenance prior to the
624 next anticipated storm event is not possible, maintenance shall be scheduled and
625 accomplished as soon as practicable. Documentation shall be kept with the SWPPP
626 of maintenance and repairs of BMPs, including the dates of regular maintenance,
627 dates of discovery of areas in need of repair or replacement, dates for repairs, dates
628 that the BMPs returned to full function, and the justification for an extended
629 maintenance or repair schedules. The maintenance program shall require periodic
630 removal of debris from discharge diversions and conveyance systems. Permittees
631 using settling basins to control their effluents must provide maintenance schedules for
632 such basins in the SWPPP.

633 c. Spill prevention and response procedures. The SWPPP shall describe the
634 procedures that will be followed for preventing and responding to spills and leaks,
635 including barriers between material storage and traffic areas, secondary containment
636 provisions, procedures for material storage and handling, response procedures for
637 notification of appropriate facility personnel, emergency agencies, and regulatory
638 agencies and procedures for stopping, containing, and cleaning up spills. Measures
639 for cleaning up hazardous material spills or leaks shall be consistent with applicable
640 RCRA regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may
641 cause, detect, or respond to a spill or leak shall be trained in these procedures and
642 have necessary spill response equipment available. If possible, one of these
643 individuals shall be a member of the pollution prevention team. Contact information for
644 individuals and agencies that must be notified in the event of a spill shall be included
645 in the SWPPP and in other locations where it will be readily available.

646 d. Routine facility inspections.

647 (1) Personnel who are familiar with the mining activity, the best management practices,
648 and the SWPPP shall be identified to conduct routine facility inspections. Such
649 inspections must include all areas where industrial materials or activities are exposed
650 to stormwater as identified in Part II H 2 b (inventory of exposed materials), including
651 material storage and handling areas, areas where aggregate is stockpiled outdoors,

652 liquid storage tanks, hoppers or silos, material handling vehicles, equipment, and
653 processing areas; off-site tracking of industrial or waste materials or sediment where
654 vehicles enter or exit the site; vehicle and equipment maintenance areas and cleaning
655 and fueling areas; best management practices; and discharge points.

656 (2) The inspection frequency shall be specified in the SWPPP based upon a
657 consideration of the level of industrial activity at the facility, but shall be a minimum of
658 quarterly. Inspections of best management practices shall include inspection of
659 stormwater discharge diversions, conveyance systems, sediment control and
660 collection systems, containment structures, vegetation, serrated slopes, and benched
661 slopes to determine their adequacy and effectiveness, the integrity of control
662 structures, if soil erosion has occurred, or if there is evidence of actual or potential
663 discharge of contaminated stormwater.

664 (3) Site inspection and best management practices inspection results must be
665 documented and maintained on-site with the SWPPP.

666 (4) A set of tracking or followup procedures shall be used to ensure that appropriate
667 actions are taken in response to the inspections. Such actions must include updating
668 pollution sources, updating pollution prevention measures and controls, and updating
669 the SWPPP as appropriate based on information developed during the inspections.

670 (5) The requirement for routine facility inspections is waived for facilities that have
671 maintained an active [~~VEEP E3/E4 status~~ Virginia Environmental Excellence Program
672 (VEEP) E3 (Exemplary Environmental Enterprise) or E4 (Extraordinary Environmental
673 Enterprise) status] .

674 e. Employee training. Employee training shall be conducted at least annually at active
675 mining sites and at those temporarily inactive sites that are staffed. Employee training
676 programs shall inform personnel responsible for implementing activities identified in
677 the SWPPP or otherwise responsible for stormwater management at all levels of
678 responsibility of the components and goals of the stormwater pollution prevention plan.
679 Training should address topics such as spill response, good housekeeping, and
680 material management practices. All employee training shall be documented in the
681 SWPPP.

682 f. Recordkeeping and internal reporting procedures. A description of incidents, such
683 as spills, or other discharges, along with other information describing the quality and
684 quantity of stormwater discharges, shall be included in the SWPPP required under this
685 part. Inspections and maintenance activities shall be documented and records of such
686 activities shall be incorporated into the SWPPP. Ineffective best management
687 practices must be recorded and the date of their corrective action noted in the SWPPP.

688 g. Sediment and erosion control. The plan shall identify areas that, due to topography,
689 land disturbance (e.g., construction, landscaping, site grading), or other factors, have
690 a potential for soil erosion. The permittee shall identify and implement structural,
691 vegetative, or stabilization BMPs to prevent or control on-site and off-site erosion and
692 sedimentation.

693 h. Management of runoff. The SWPPP shall describe the stormwater runoff
694 management practices (i.e., permanent structural BMPs) for the facility. These types
695 of BMPs are typically used to divert, infiltrate, reuse, or otherwise reduce pollutants in
696 stormwater discharges from the site. Appropriate measures may include: vegetative
697 swales and practices, reuse of collected stormwater (such as for a process or as an
698 irrigation source), inlet controls (such as oil/water separators), snow management
699 activities, infiltration devices, and wet detention or retention devices.

700 I. Authorized nonstormwater discharges. The following nonstormwater discharges are
701 authorized by this permit:

- 702 1. Discharges from emergency firefighting activities or firefighting training activities
703 managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the
704 Code of Virginia;
- 705 2. Fire hydrant flushing, managed in a manner to avoid an instream impact;
- 706 3. Potable water, including water line flushing, managed in a manner to avoid instream
707 impact;
- 708 4. Uncontaminated condensate from air conditioners, coolers, and other compressors and
709 from the outside storage of refrigerated gases or liquids;
- 710 5. Irrigation drainage;
- 711 6. Landscape watering, provided all pesticides, herbicides, and fertilizers have been
712 applied in accordance with approved labeling;
- 713 7. Routine external building washdown that does not use detergents or hazardous
714 cleaning products and is managed in a manner to avoid an instream impact;
- 715 8. Pavement wash waters where no detergents or hazardous cleaning products are used
716 and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled
717 material has been removed). Pavement wash waters shall be managed in a manner to
718 avoid instream impacts;
- 719 9. Uncontaminated groundwater or spring water;
- 720 10. Foundation or footing drains where flows are not contaminated with process materials;
721 and
- 722 11. Incidental windblown mist from cooling towers that collects on rooftops or adjacent
723 portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped"
724 cooling tower blowdown or drains).

725 Part III

726 Conditions Applicable to All VPDES Permits

727 A. Monitoring.

- 728 1. Samples and measurements taken as required by this permit shall be representative of
729 the monitored activity.
- 730 2. Monitoring shall be conducted according to procedures approved under 40 CFR Part
731 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless
732 other procedures have been specified in this permit.
- 733 3. The permittee shall periodically calibrate and perform maintenance procedures on all
734 monitoring and analytical instrumentation at intervals that will ensure accuracy of
735 measurements.
- 736 4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-
737 45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46,
738 Accreditation for Commercial Environmental Laboratories.

739 B. Records.

- 740 1. Records of monitoring information shall include:
 - 741 a. The date, exact place, and time of sampling or measurements;
 - 742 b. The individuals who performed the sampling or measurements;
 - 743 c. The dates and times analyses were performed;
 - 744 d. The individuals who performed the analyses;

- 745 e. The analytical techniques or methods used; and
746 f. The results of such analyses.

747 2. The permittee shall retain records of all monitoring information, including all calibration
748 and maintenance records and all original strip chart recordings for continuous monitoring
749 instrumentation, copies of all reports required by this permit, and records of all data used
750 to complete the registration statement for this permit, for a period of at least three years
751 from the date of the sample, measurement, report, or request for coverage. This period of
752 retention shall be extended automatically during the course of any unresolved litigation
753 regarding the regulated activity or regarding control standards applicable to the permittee,
754 or as requested by the ~~board~~ department.

755 C. Reporting monitoring results.

756 1. The permittee shall submit the results of the monitoring required by this permit not later
757 than the 10th day of the month after monitoring takes place, unless another reporting
758 schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the
759 department's regional office.

760 2. Monitoring results shall be reported on a discharge monitoring report (DMR) or on forms
761 provided, approved or specified by the department. Following notification from the
762 department of the start date for the required electronic submission of monitoring reports,
763 as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall
764 be electronically submitted to the department in compliance with this section and 9VAC25-
765 31-1020. There shall be at least a three-month notice provided between the notification
766 from the department and the date after which such forms and reports must be submitted
767 electronically.

768 3. If the permittee monitors any pollutant specifically addressed by this permit more
769 frequently than required by this permit using test procedures approved under 40 CFR Part
770 136 or using other test procedures approved by the U.S. Environmental Protection Agency
771 or using procedures specified in this permit, the results of this monitoring shall be included
772 in the calculation and reporting of the data submitted in the DMR or reporting form
773 specified by the department.

774 4. Calculations for all limitations that require averaging of measurements shall utilize an
775 arithmetic mean unless otherwise specified in this permit.

776 D. Duty to provide information. The permittee shall furnish to the department, within a
777 reasonable time, any information that the ~~board~~ department may request to determine whether
778 cause exists for terminating coverage under this permit or to determine compliance with this
779 permit. The ~~board~~ department may require the permittee to furnish, upon request, such plans,
780 specifications, and other pertinent information as may be necessary to determine the effect of the
781 wastes from its discharge on the quality of state waters, or such other information as may be
782 necessary to accomplish the purposes of the State Water Control Law. The permittee shall also
783 furnish to the department, upon request, copies of records required to be kept by this permit.

784 E. Compliance schedule reports. Reports of compliance or noncompliance with, or any
785 progress reports on, interim and final requirements contained in any compliance schedule of this
786 permit shall be submitted no later than 14 days following each schedule date.

787 F. Unauthorized discharges. Except in compliance with this permit or another permit issued
788 by the ~~board~~ department, it shall be unlawful for any person to:

- 789 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious or
790 deleterious substances; or

791 2. Otherwise alter the physical, chemical, or biological properties of such state waters and
792 make them detrimental to the public health, or to animal or aquatic life, or to the use of
793 such waters for domestic or industrial consumption, or for recreation, or for other uses.

794 G. Reports of unauthorized discharges. Any permittee who ~~who~~ that discharges or causes or
795 allows a discharge of sewage, industrial waste, other wastes, or any noxious or deleterious
796 substance into or upon state waters in violation of Part III F (unauthorized discharges); or who
797 discharges or causes or allows a discharge that may reasonably be expected to enter state waters
798 in violation of Part III F, shall notify the department of the discharge immediately upon discovery
799 of the discharge, but in no case later than 24 hours after said discovery. A written report of the
800 unauthorized discharge shall be submitted to the department within five days of discovery of the
801 discharge. The written report shall contain:

- 802 1. A description of the nature and location of the discharge;
- 803 2. The cause of the discharge;
- 804 3. The date on which the discharge occurred;
- 805 4. The length of time that the discharge continued;
- 806 5. The volume of the discharge;
- 807 6. If the discharge is continuing, how long it is expected to continue;
- 808 7. If the discharge is continuing, what the expected total volume of the discharge will be;
- 809 and
- 810 8. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the
- 811 present discharge or any future discharges not authorized by this permit.

812 Discharges reportable to the department under the immediate reporting requirements of other
813 regulations are exempted from this requirement.

814 H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge,
815 including a bypass or upset, should occur from a treatment works and the discharge enters or
816 could be expected to enter state waters, the permittee shall promptly notify (see NOTE in Part III
817 I 3), in no case later than 24 hours, the department after the discovery of the discharge. This
818 notification shall provide all available details of the incident, including any adverse effects on
819 aquatic life and the known number of fish killed. The permittee shall reduce the report to writing
820 and shall submit it to the department within five days of discovery of the discharge in accordance
821 with Part III I 2. Unusual and extraordinary discharges include any discharge resulting from:

- 822 1. Unusual spillage of materials resulting directly or indirectly from processing operations;
- 823 2. Breakdown of processing or accessory equipment;
- 824 3. Failure or taking out of service some or all of the treatment works; and
- 825 4. Flooding or other acts of nature.

826 I. Reports of noncompliance.

827 1. The permittee shall report any noncompliance that may adversely affect state waters or
828 may endanger public health.

829 a. An oral report shall be provided within 24 hours from the time the permittee becomes
830 aware of the circumstances. The following shall be included as information that shall
831 be reported within 24 hours under this subdivision:

- 832 (1) Any unanticipated bypass; and
- 833 (2) Any upset that causes a discharge to surface waters.

834 b. A written report shall be submitted within five days and shall contain:

- 835 (1) A description of the noncompliance and its cause;

836 (2) The period of noncompliance, including exact dates and times, and if the
837 noncompliance has not been corrected, the anticipated time it is expected to continue;
838 and

839 (3) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the
840 noncompliance.

841 The ~~board~~ department may waive the written report on a case-by-case basis for reports
842 of noncompliance under Part III I if the oral report has been received within 24 hours and
843 no adverse impact on state waters has been reported.

844 2. The permittee shall report all instances of noncompliance not reported under ~~Parts~~ Part
845 III I 1 a or 2 1 b, in writing, at the time the next monitoring reports are submitted. The
846 reports shall contain the information listed in Part III I 2 1 b.

847 ~~NOTE: 3.~~ The immediate (within 24 hours) reports required in Part III G, H, and I ~~may~~ shall
848 be made to the department's regional office. Reports may be made by telephone or online
849 at

850 [http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.](http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx)
851 [asp](http://www.deq.virginia.gov/get-involved/pollution-response)x [<https://www.deq.virginia.gov/get-involved/pollution-response> (online reporting
852 preferred) <https://www.deq.virginia.gov/our-programs/pollution-response> (online reporting
853 preferred)] . For reports outside normal working hours, ~~leave a message and this shall~~
854 ~~fulfill the immediate reporting requirement~~ the online portal shall be used. For
855 emergencies, call the Virginia Department of Emergency ~~Services maintains a 24-hour~~
856 ~~telephone service~~ Management's Emergency Operations Center (24-hours) at 1-800-468-
857 8892.

858 J. Notice of planned changes.

859 1. The permittee shall give notice to the department as soon as possible of any planned
860 physical alterations or additions to the permitted facility. Notice is required only when:

861 a. The permittee plans alteration or addition to any building, structure, facility, or
862 installation from which there is or may be a discharge of pollutants, the construction of
863 which commenced:

864 (1) After promulgation of standards of performance under § 306 of the federal Clean
865 Water Act that are applicable to such source; or

866 (2) After proposal of standards of performance in accordance with § 306 of the federal
867 Clean Water Act that are applicable to such source, but only if the standards are
868 promulgated in accordance with § 306 within 120 days of their proposal;

869 b. The alteration or addition could significantly change the nature or increase the
870 quantity of pollutants discharged. This notification applies to pollutants that are subject
871 neither to effluent limitations nor to notification requirements specified elsewhere in
872 this permit; or

873 c. The alteration or addition results in a significant change in the permittee's sludge
874 use or disposal practices and such alteration, addition, or change may justify the
875 application of permit conditions that are different from or absent in the existing permit,
876 including notification of additional use or disposal sites not reported during the permit
877 registration process or not reported pursuant to an approved land application plan.

878 2. The permittee shall give advance notice to the department of any planned changes in
879 the permitted facility or activity that may result in noncompliance with permit requirements.

880 K. Signatory requirements.

881 1. Registration statement. All registration statements shall be signed as follows:

882 a. For a corporation: by a responsible corporate officer. For the purposes of this
883 section, a responsible corporate officer means: (i) a president, secretary, treasurer, or
884 vice-president of the corporation in charge of a principal business function, or any other
885 person who performs similar policy- making or decision-making functions for the
886 corporation, or (ii) the manager of one or more manufacturing, production, or operating
887 facilities provided the manager is authorized to make management decisions that
888 govern the operation of the regulated facility, including having the explicit or implicit
889 duty of making capital investment recommendations, and initiating and directing other
890 comprehensive measures to ~~assure~~ ensure long-term environmental compliance with
891 environmental laws and regulations; the manager can ensure that the necessary
892 systems are established or actions taken to gather complete and accurate information
893 for permit registration requirements; and where authority to sign documents has been
894 assigned or delegated to the manager in accordance with corporate procedures;

895 b. For a partnership or sole proprietorship: by a general partner or the proprietor,
896 respectively; or

897 c. For a municipality, state, federal, or other public agency: by either a principal
898 executive officer or ranking elected official. For purposes of this section, a principal
899 executive officer of a public agency includes: (i) the chief executive officer of the
900 agency or (ii) a senior executive officer having responsibility for the overall operations
901 of a principal geographic unit of the agency.

902 2. Reports and other information. All reports required by permits, and other information
903 requested by the ~~board,~~ department shall be signed by a person described in Part III K 1
904 or by a duly authorized representative of that person. A person is a duly authorized
905 representative only if:

906 a. The authorization is made in writing by a person described in Part III K 1;

907 b. The authorization specifies either an individual or a position having responsibility for
908 the overall operation of the regulated facility or activity such as the position of plant
909 manager, operator of a well or a well field, superintendent, position of equivalent
910 responsibility, or an individual or position having overall responsibility for
911 environmental matters for the company. A duly authorized representative may thus be
912 either a named individual or any individual occupying a named position; and

913 c. The written authorization is submitted to the department.

914 3. Changes to authorization. If an authorization under Part III K 2 is no longer accurate
915 because a different individual or position has responsibility for the overall operation of the
916 facility, a new authorization satisfying the requirements of Part III K 2 shall be submitted
917 to the department prior to or together with any reports or information to be signed by an
918 authorized representative.

919 4. Certification. Any person signing a document under Part III K 1 or 2 shall make the
920 following certification:

921 "I certify under penalty of law that this document and all attachments were prepared under
922 my direction or supervision in accordance with a system designed to assure that qualified
923 personnel properly gather and evaluate the information submitted. Based on my inquiry of
924 the person or persons who manage the system, or those persons directly responsible for
925 gathering the information, the information submitted is, to the best of my knowledge and
926 belief, true, accurate, and complete. I am aware that there are significant penalties for
927 submitting false information, including the possibility of fine and imprisonment for knowing
928 violations."

929 L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit
930 noncompliance constitutes a violation of the State Water Control Law and the federal Clean Water
931 Act, except that noncompliance with certain provisions of this permit may constitute a violation of
932 the State Water Control Law but not the federal Clean Water Act. Permit noncompliance is
933 grounds for enforcement action, for permit coverage termination, or for denial of permit coverage.

934 M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after
935 the expiration date of this permit, the permittee shall apply for and obtain coverage under a new
936 permit. All permittees with currently effective permit coverage shall submit a new registration
937 statement at least 60 days before the expiration date of the existing permit, unless permission for
938 a later date has been granted by the ~~board~~ department. The ~~board~~ department shall not grant
939 permission for registration statements to be submitted later than the expiration date of the existing
940 permit.

941 N. Effect of a permit. This permit does not convey any property rights in either real or personal
942 property or any exclusive privileges, ~~nor~~. This permit does ~~it~~ not authorize any injury to private
943 property or invasion of personal rights or any infringement of federal, state, or local laws or
944 regulations.

945 O. State law. Nothing in this permit shall be construed to preclude the institution of any legal
946 action under, or relieve the permittee from any responsibilities, liabilities, or penalties established
947 pursuant to, any other state law or regulation or under authority preserved by § 510 of the federal
948 Clean Water Act. Except as provided in permit conditions on "bypass" (as described in Part III U)
949 and "upset" (as described in Part III V), nothing in this permit shall be construed to relieve the
950 permittee from civil and criminal penalties for noncompliance.

951 P. Oil and hazardous substance liability. Nothing in this permit shall be construed to preclude
952 the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or
953 penalties to which the permittee is or may be subject under §§ 62.1-44.34:14 through 62.1-
954 44.34:23 of the State Water Control Law.

955 Q. Proper operation and maintenance. The permittee shall at all times properly operate and
956 maintain all facilities and systems of treatment and control (and related appurtenances) that are
957 installed or used by the permittee to achieve compliance with the conditions of this permit. Proper
958 operation and maintenance also ~~includes~~ include effective plant performance, adequate funding,
959 adequate staffing, and adequate laboratory and process controls, including appropriate quality
960 assurance procedures. This provision requires the operation of back-up or auxiliary facilities or
961 similar systems that are installed by the permittee only when the operation is necessary to achieve
962 compliance with the conditions of this permit.

963 R. Disposal of solids or sludges. Solids, sludges, or other pollutants removed in the course of
964 treatment or management of pollutants shall be disposed of in a manner so as to prevent any
965 pollutant from such materials from entering state waters.

966 S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any
967 discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of
968 adversely affecting human health or the environment.

969 T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an
970 enforcement action that it would have been necessary to halt or reduce the permitted activity in
971 order to maintain compliance with the conditions of this permit.

972 U. Bypass.

973 1. "Bypass" means the intentional diversion of waste streams from any portion of a
974 treatment facility. The permittee may allow any bypass to occur that does not cause
975 effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure

976 efficient operation. These bypasses are not subject to the provisions of Parts III U 2 and
977 U 3.

978 2. Notice.

979 a. Anticipated bypass. If the permittee knows in advance of the need for a bypass,
980 prior notice shall be submitted if possible at least 10 days before the date of the
981 bypass.

982 b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass
983 as required in Part III I (reports of noncompliance).

984 3. Prohibition of bypass.

985 a. Bypass is prohibited, and the ~~board~~ department may take enforcement action
986 against a permittee for bypass, unless:

987 (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property
988 damage;

989 (2) There were no feasible alternatives to the bypass, such as the use of auxiliary
990 treatment facilities, retention of untreated wastes, or maintenance during normal
991 periods of equipment downtime. This condition is not satisfied if adequate back-up
992 equipment should have been installed in the exercise of reasonable engineering
993 judgment to prevent a bypass that occurred during normal periods of equipment
994 downtime or preventive maintenance; and

995 (3) The permittee submitted notices as required under Part III U 2.

996 b. The ~~board~~ department may approve an anticipated bypass, after considering its
997 adverse effects, if the ~~board~~ department determines that it will meet the three
998 conditions listed in Part III U 3 a.

999 V. Upset.

1000 1. An upset constitutes an affirmative defense to an action brought for noncompliance with
1001 technology-based permit effluent limitations if the requirements of Part III V 2 are met. A
1002 determination made during administrative review of claims that noncompliance was
1003 caused by upset, and before an action for noncompliance, is not a final administrative
1004 action subject to judicial review.

1005 2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate,
1006 through properly signed, contemporaneous operating logs or other relevant evidence that:

1007 a. An upset occurred and that the permittee can identify the cause of the upset;

1008 b. The permitted facility was at the time being properly operated;

1009 c. The permittee submitted notice of the upset as required in Part III I; and

1010 d. The permittee complied with any remedial measures required under Part III S.

1011 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of an
1012 upset has the burden of proof.

1013 W. Inspection and entry. The permittee shall allow the director or an authorized representative
1014 (including an authorized contractor acting as a representative of the administrator), upon
1015 presentation of credentials and other documents as may be required by law, to:

1016 1. Enter upon the permittee's premises where a regulated facility or activity is located or
1017 conducted or where records must be kept under the conditions of this permit;

1018 2. Have access to and copy, at reasonable times, any records that must be kept under the
1019 conditions of this permit;

1020 3. Inspect at reasonable times any facilities, equipment (including monitoring and control
1021 equipment), practices, or operations regulated or required under this permit; and

1022 4. Sample or monitor at reasonable times, for the purposes of ensuring permit compliance
1023 or as otherwise authorized by the federal Clean Water Act and the State Water Control
1024 Law, any substances or parameters at any location.

1025 For purposes of this section, the time for inspection shall be deemed reasonable during
1026 regular business hours and whenever the facility is discharging. Nothing contained ~~herein~~ in this
1027 general permit shall make an inspection unreasonable during an emergency.

1028 X. Permit actions. Permit coverage may be terminated for cause. The filing of a request by
1029 the permittee for a permit modification, revocation and reissuance, or termination, or a notification
1030 of planned changes or anticipated noncompliance does not stay any permit condition.

1031 Y. Transfer of permit coverage.

1032 1. Permit coverage is not transferable to any person except after notice to the department.

1033 2. Coverage under this permit may be automatically transferred to a new permittee if:

1034 a. The current permittee notifies the department at least 30 days in advance of the
1035 proposed transfer of the title to the facility or property unless permission for a later date
1036 has been granted by the department;

1037 b. The notice includes a written agreement between the existing and new permittees
1038 containing a specific date for transfer of permit responsibility, coverage, and liability
1039 between them; and

1040 c. The ~~board~~ department does not notify the existing permittee and the proposed new
1041 permittee of its intent to deny the permittee coverage under the permit. If this notice is
1042 not received, the transfer is effective on the date specified in the agreement mentioned
1043 in Part III Y 2 b.

1044 Z. Severability. The provisions of this permit are severable, and if any provision of this permit
1045 or the application of any provision of this permit to any circumstance is held invalid, the application
1046 of such provision to other circumstances and the remainder of this permit shall not be affected
1047 thereby.

**COMMONWEALTH OF VIRGINIA
STATE WATER CONTROL BOARD**

**FACT SHEET
REISSUANCE OF A GENERAL VPDES PERMIT
FOR NONMETALLIC MINERAL MINING
2024 REISSUANCE
Revised October 2023**

The State Water Control Board (board) has authorized the reissuance of the Virginia Pollutant Discharge Elimination System (VPDES) general permit for point source discharges from nonmetallic mineral mining facilities. This general permit will replace VAG84, which expires June 30, 2024. Owners covered under the expiring general permit, who wish to continue to discharge under a general permit, must register for coverage under the new general permit.

Permit Number: VAG84

Name of Permittee: Any owner of a qualifying nonmetallic mineral mining facility with point source discharges that obtains coverage under the terms of this general permit.

Facility Location: Commonwealth of Virginia

Receiving Waters: Surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in board regulations that prohibit such discharges.
Discharge to surface waters may be through a municipal separate storm sewer system.

Based on preliminary review and application of lawful standards and regulations, the board has proposed to reissue the general permit subject to certain conditions and has prepared a general permit. The board has determined that this category of discharges is appropriately controlled under a general permit as it involves facilities with the same or similar types of operations that discharge the same or similar types of wastes. The general permit requires that all covered facilities meet standardized effluent limitations, conditions and monitoring requirements and that all covered facilities develop a site-specific stormwater pollution prevention plan.

The staff contact for questions or obtaining information about this general permit may be reached at:

Peter Sherman
Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218
TEL: (804) 659-2666
[E-mail: peter.sherman@deq.virginia.gov](mailto:peter.sherman@deq.virginia.gov)

I. Activities Covered by This General Permit

The general permit will cover point source discharges associated with nonmetallic mineral mining operations classified in Standard Industrial Classification Major Group 14. The general permit will cover stormwater discharges for all qualifying facilities within this major group that have stormwater discharges only and, for specific SIC Codes, it will also provide coverage for process wastewater. Some of the Major Group 14 SIC codes or specific mining activities are excluded from the process wastewater coverage because the mining activities are subject to more stringent effluent limits under EPA effluent guidelines at 40 CFR Part 436. These facilities will require a separate, individual VPDES permit to discharge process wastewater.

Facilities for which the discharge of process wastewater is covered are those classified under SIC Codes 1411, 1422, 1423, 1429, 1442, 1455, 1459 except bentonite and magnesite mines, 1475 and 1499 except gypsum, graphite, asbestos, diatomite, jade, novaculite, wollastonite, tripoli and asphaltic mineral mining operations. As of the 2019 reissuance, DEQ included in the regulation North American Industry Classification Codes (NAICS) since these reflect the current classification system maintained by the federal government.

This general permit does not cover coal mining, metal mining, or oil and gas extraction.

Nonmetallic mineral mines may have other industrial activities co-located within the mine permit area. These activities may involve further processing of the mined material and discharges associated with them have characteristics similar to those of the mining operation. If the mineral mine is the primary industrial activity on the site and the characteristics of the wastewater from co-located industrial activities are similar to those of the mineral mine, the co-located activity discharges are also regulated under the general permit.

This permit does not allow discharge of process wastewater pollutants from co-located asphalt paving materials operations. For the purposes of this special condition, process wastewater pollutants are any pollutants present in water used in asphalt paving materials manufacturing which come into direct contact with any raw materials, intermediate product, by-product or product related to the asphalt paving materials manufacturing process.

No owner or operator of a mineral mine will be covered under the general permit until a mineral mining permit has been issued to the relevant facility by Virginia Energy, Division of Mineral Mining (DMM). In Virginia, mining activities that disturb the land surface and remove minerals at any site are required to have a mineral mining permit under the requirements of the Minerals Other Than Coal (MOTC) Surface Mining Law, Chapter 16, Title 45.1 of the Code of Virginia. The mineral mining permits are administered by DMM. The Surface Mining Law requires that no operator shall engage in mining without having first obtained from DMM an operating permit that covers the affected land. The exception to this requirement is for mineral mines owned and operated by governmental bodies, which are not required to have a mining permit, but will be eligible for coverage under VAG84. Mineral mining permits require the implementation of an erosion and sedimentation control plan as an enforceable part of the permit. The mineral mining permit application also requires the applicant to provide an acceptable mine reclamation plan that provides for adequate measures to prevent erosion and sedimentation from the reclaimed site. The mining permit and its requirements for erosion and sedimentation control are administered and enforced in such a manner as to provide protection of water quality and beneficial uses in the receiving waters from pollution caused by eroding material from mining activities. These requirements in the mineral mining permit satisfy many of the stormwater pollution prevention plan requirements of the general permit.

The reissued VPDES general permit will become effective on July 1, 2024, and expire on June 30, 2029.

II. Effluent Limitations and Monitoring Requirements

The effluent limitations and monitoring requirements specified in the general permit are depicted in items A and B below.

A. Discharge of process wastewater and commingled stormwater runoff:

<u>Parameter</u>	<u>Limitation</u>
Flow	Report average and maximum
Total Suspended Solids	30 mg/L monthly average, 60 mg/L daily maximum
pH	6.0 minimum, 9.0 maximum ¹

Discharge Monitoring Reports (DMRs) of quarterly monitoring shall be submitted to the applicable DEQ regional office no later than the 10th day of April, July, October and January. Monitoring frequency of once per every three months (1/3 Months) equals the following three-month periods each year of permit coverage: January through March, April through June, July through September, and October through December.

B. Discharge of stormwater associated with industrial activity that does not combine with other wastewater:

<u>Parameter</u>	<u>Monitoring Requirement</u>
Flow	Report volume discharged during monitored storm event
Total Suspended Solids	Report maximum
pH	Report minimum and maximum

Monitoring and reporting of grab sample analysis results are required once per year for a storm event that produces a discharge from the site. A discharge from a stormwater management structure must be sampled at the time the discharge occurs and must be representative. All other stormwater discharges must be taken when the discharge occurs, provided the interval from the preceding measurable storm event is at least 72 hours. The sample must also be taken during the first 30 minutes of the discharge. There are some exemptions to these timing requirements.

DMRs of yearly stormwater monitoring (January 1st to December 31st) must be submitted to the applicable DEQ regional office no later than the 10th day January.

For stormwater that is not combined with other wastewater, if total suspended solids (TSS) monitoring results exceed 100 mg/L daily maximum, the stormwater pollution prevention plan (SWPPP) must be reviewed for necessary changes, a routine facility inspection must be performed within five days of becoming aware of the exceedance, documentation must be maintained as specified, and any deficiencies must be corrected.

Permittees also must conduct calendar quarterly visual monitoring of discharges of stormwater associated with industrial activity. This monitoring must include examination of representative storm event discharges from the facility including observations regarding color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution.

III. Basis for Part I Effluent Limits and Monitoring Requirements for Commingled Wastewater

Mining area wastewaters are recycled as a source of processing water, lost by evaporation or discharged. The discharges that are not recycled are controlled by limitations in this general permit. These discharges may

¹ Where the Water Quality Standards establish alternate standards for pH, those standards shall be the minimum and maximum pH effluent limits.

consist of stormwater associated with industrial activity which has come in contact with overburden, raw material, intermediate product, finished product, byproduct or waste product; process wastewater which may include water used in the process of washing mined materials, vehicle or equipment degreasing wastewater, miscellaneous plant cleanup wastewater and mine pit dewatering, which may include the above collected discharges along with accumulated groundwater that enters the mine. Treatment usually consists of sedimentation.

The discharge parameters to be limited are pH and Total Suspended Solids (TSS).

The pH limitation is based upon Virginia's water quality standards and federal effluent guidelines (40 CFR Part 436). Effluent guidelines (40 CFR Part 436) require pH limits of 6.0 – 9.0 Standard Units (SU). Stream standards for pH are in most cases in the range of 6 to 9 SU; however, there are special standards in effect in some areas (e.g., 6.5 – 9.5 in some valley streams or 3.7 – 8.0 in some swamp waters). However, because DEQ comports with federal effluent guidelines for its general permits, pH limits cannot go below 6.0 or above 9.0. For example, a 6.5 to 9.5 special stream standard will necessitate a 6.5 to 9.0 effluent limit and a 3.7 – 8.0 special stream standard will necessitate a 6.0 – 8.0 effluent limit.

TSS limitations are based on federal effluent guidelines for some of the industrial categories covered by the general permit and at levels that, based on the Department's experience with individual VPDES permits, are achievable and will prevent the buildup of solids on the bottoms of receiving waters.

The monitoring frequency and sample type have been established after considering the consistency and nature of these operations, the existing analytical data and the potential environmental risk and consequences of the discharges. Reporting of monitoring data is required quarterly.

IV. Basis for Part I Storm Event Monitoring Requirement

Stormwater associated with industrial activity that is not combined with process wastewater may be discharged from mining activities covered by this permit subject to the applicable conditions of the permit, including annual monitoring for TSS and pH. This stormwater may have come in contact with or been exposed to overburden, raw material, intermediate product, finished product or byproduct and it may contain sediments eroded from the exposed surfaces of the mine, stockpiles, overburden storage, processing areas, or overburden disposal areas. It is necessary for the protection of water quality in the streams receiving the stormwater runoff from a mining operation that appropriate erosion and sedimentation controls and practices be designed and implemented at these facilities. The erosion and sedimentation control practices mandated by the Virginia Department of Energy (DOE - formerly the Virginia Department of Mines, Minerals and Energy) regulations and imposed on the owners or operators of a mineral mine through their mining permit include adequate drainage, erosion and sediment control measures installed and maintained in accordance with a mandated and approved drainage plan, as well as requirements that temporary and permanent control facilities for mining operations be designed with outlets that can accommodate the rainfall from at least the 50-year and 100-year storm event, respectively. In addition, DOE regulations require that mineral mining sediment basins provide for 0.125 acre-feet per disturbed acre of storage capacity. Additional mining permit regulation requirements include provisions to protect intermittent or perennial streams, protection of natural drainage ways, diversions to address erosion and water pollution, and compliance with applicable water quality standards. This general permit also includes stormwater management requirements (see Section VI).

Under this general permit, permittees are required to monitor stormwater discharges for pH and TSS once per year over the term of the general permit and report the results to the Department. If TSS levels exceed an evaluation value, follow-up actions are specified. These stormwater monitoring requirements are comparable to benchmark provisions under the U.S. EPA's Multi-sector General Permit (MSGP). Stormwater samples must be

representative of the stormwater discharge.² Provisions in the general permit that promote representative sampling include the requirement that such samples be taken at the time of the discharge (for discharges from stormwater management structures) or within 30 minutes for other stormwater discharges. In addition, for such other stormwater discharges, the interval between the preceding storm event discharge and the monitored discharges must be at least 72 hours so that conditions reflect normal industrial activity unless the permittee documents that less than 72 hours is representative of local storm events during the sampling period. Required quarterly visual monitoring and quarterly³ routine inspections supplement stormwater monitoring. Under the permit, the SWPPP must be amended when quarterly visual monitoring results in a determination that modification is necessary or when a routine inspection indicates deficiencies in the BMPs.

V. Basis for Special Conditions

The VPDES permit regulation (9VAC25-260-31) delineates the procedures and requirements applicable in VPDES permits pursuant to the Clean Water Act and the State Water Control Law. All special conditions protect water quality as required by the VPDES permit regulation. Additional explanations and citations are below.

A. Special Condition No. 1 requires that vehicles and equipment used in the industrial activity are to be operated and maintained in a manner that prevents pollution of surface or ground water. Petroleum products and other fluids are to be stored and handled in such a manner that the discharge of pollutants to state waters is prevented. The basis for this condition is the state water quality standards (9VAC25-260).

B. Special Condition No. 2 prohibits sewage discharges to surface waters under this general permit. Any sewage discharges would require coverage by a separate, individual permit. This condition is based on the typical characteristics of discharges from nonmetallic mineral mines and the corresponding absence of federal secondary sewage treatment standards in this permit.

C. Special Condition No. 3 prohibits the discharge of chemical additives other than those identified in the registration statement unless prior approval is granted by the department.

D. Special Condition No. 4 requires that the permittee submit a new registration statement if the DMM mining permit is modified or renewed in any way that would affect the location or characteristics of any discharge covered by the general permit. Any change to the mining facility that could impact discharge quality requires additional review before coverage under the general permit is continued. The basis for the condition is state water quality standards.

E. Special Condition No. 5 is a requirement for notification of discharges of any toxic pollutants not limited by the permit. The basis for the condition is 40 CFR 122.42(a) and 9VAC25-31-200 A.

F. Special Condition No. 6 requires that all materials, products and wastes resulting from the purchase, sale, mining, traction, transport, preparation, or storage of raw or intermediate materials, final product, by-product, or wastes, be handled and stored or disposed of consistent with best management practices and so as to not permit a discharge of such product, materials industrial wastes, or other wastes to state waters, except as expressly authorized. The basis for the condition is state water quality standards.

² DEQ maintains that annual stormwater TSS evaluation value monitoring is representative for purposes of this general permit. DEQ compared the percent of exceedances in annual TSS benchmark (i.e., evaluation value) data from this general permit with biannual TSS benchmark data from similar industrial stormwater sectors regulated under the VPDES Industrial Stormwater General Permit and found the data to be similar (13.6% for the NMMM General Permit and 11-13% for Asphalt, Cement and Metal Mining sectors).

³ Minimum frequency that is permissible.

- G. Special Condition No. 7 prohibits the discharge of process wastewater pollutants from co-located asphalt operations. The basis is 40 CFR Part 443.
- H. Special Condition No. 8 allows process water to be used for dust suppression on site. The basis for the condition is that, when implemented as a BMP, the use of process water as a dust suppressant can control or abate the discharge of pollutants. This condition also prohibits dust suppression during a storm event that results in an actual discharge from the site.
- I. Special Condition No. 9 allows process water from mine dewatering to be provided to local property owners for beneficial agricultural use. This language is included in keeping with DEQ's pollution prevention philosophy.
- J. Special Condition No. 10 prohibits the discharge of floating solids or visible foam in other than trace amount from process water discharges. This condition also prohibits solids deposition to surface water as a result of discharges associated with industrial activity. It further prohibits an oil sheen resulting from petroleum products discharged to surface water as a result of the industrial activity. Housekeeping and onsite BMPs should maintain this requirement. The prohibition of oil sheen reflects concerns that petroleum products are on the site and could lead to an oil discharge. Accidental spills of petroleum products are cleaned up immediately so as not to enter surface waters as per special condition No. 1. This special condition is an added measure of protection and something the inspector can look for to ensure proper BMPs, clean up measures or treatment is occurring. The citation in the water quality standards is 9VAC25-260-20.
- K. Special Condition No. 11 requires all effluent limitations to be written using two significant figures. The basis for this condition is Guidance Memo No. 06-2016, Significant Figures for Discharge Monitoring Reports.
- L. Special Condition No. 12 requires permittees subject to total maximum daily load (TMDL) waste load allocations established prior to this permit issuance to implement measures and controls that are consistent with the requirements and assumptions of the TMDL. The department will provide written notification to the owner that a facility is subject to the TMDL requirements. If the TMDL establishes a numeric wasteload allocation that is applicable to discharges from the facility, the owner must conduct monitoring in accordance with Part I A and implement measures necessary to meet the allocation. At permit reissuance, the permittee shall submit a demonstration with the registration statement to show the wasteload allocation is being met. The basis for this condition is Section 303(d) of the Clean Water Act, which requires that TMDLs be developed for streams listed as impaired, and 9VAC25-31-220 D. This provision has been revised so that implementation measures are not limited to the SWPPP, which makes it consistent with VPDES program requirements are other VPDES general permits. The demonstration documents compliance with any applicable wasteload allocation.
- M. Special Condition No. 13 requires discharges to be controlled as necessary to meet applicable water quality standards. This condition is consistent with VPDES regulations (9VAC25-220) and EPA recommendations.
- N. Special Condition No. 14 provides a waiver for monitoring and routine quarterly inspections at sites that are inactive and unstaffed (temporarily closed). An annual site inspection is still required. The waiver request must be submitted to the department for approval. Reactivation of the site also requires department notification within 30 days unless approval for an alternate timeframe is received in advance from the department. Inactive and unstaffed facilities covered under are not required to meet the "no industrial materials or activities exposed to stormwater" standard to be eligible for this waiver, consistent with the conditional exemption requirements established in Part 8 Sector J (Non-Metallic Mineral Mining and Dressing) of the EPA 2021 MSGP.

O. Special Condition No. 15 describes how process water systems designed to operate as “no discharge” must be implemented. These systems may not discharge except in storm events greater than a twenty-five-year, 24-hour storm event. In the event of such a discharge, the permittee must report an unusual or extraordinary discharge per Part III H of the permit. No sampling or DMR is required for these discharges as they are considered to be discharging in emergency discharge conditions. These discharges may not contravene the water quality standards, or any provision of the State Water Control Law. Any other discharge from this type of system is prohibited and shall be reported as an unauthorized discharge per Part III G of this permit. This special condition, which is a different design standard than the overflow provision in the pertinent ELGs, is based on best professional judgment of the staff and is consistent with the standard in Virginia’s Pollution Abatement permit regulation (9VAC25-32-30 A).

P. Special Condition No. 16 requires that permittees must use best management practices to ensure that contaminants do not enter surface waters as a result of blasting at the mining site. This condition addresses concerns with ammonia and nitrate deposition resulting from the use of explosives.

Q. Special Condition No. 17 describes how terminations of coverage under a general permit will be implemented. Permittees need to know this is an option available to them. This is being added to all general permits as they are reissued.

R. Special Condition No. 18 establishes (for other than SIC 1475) discharge requirements for emergency dewatering during flooded conditions. This provision provides a time-limited, conditional exception from the TSS limits applicable to process wastewater for mine pit dewatering discharges resulting from a storm equal to or greater than a 10-year, 24-hour storm event that has caused flood conditions within the mine such that normal operation at the active portion of the mine cannot continue. Dewatering discharges shall not exceed a daily maximum of 100 mg/l during emergency dewatering and are subject to daily monitoring. The operator must conduct such dewatering by pumping from the surface of the flooded area through a filtered mechanism to minimize the discharge of solids. The operator also must notify DEQ of such flooded conditions. The permittee must take actions to maximize the settling of stormwater prior to and during dewatering. Dewatering discharges shall not contravene the Water Quality Standards (9VAC25-260) or any provision of the State Water Control Law. This provision is being added to address a concern identified by the regulated community that at times extreme storms flood the active portion of the mineral mines and render them inoperable and that since these volumes of water are more similar to stormwater than process water, particularly after allowing for settling, there is a need for greater flexibility in allowing dewatering. DEQ established the TSS limits for process wastewater to protect surface waters. DEQ believes that given that such extreme storms are infrequent, combined with the BMPs being required under this special condition, that such dewatering can be conducted in a manner that continues to be protective of water quality.

It is believed that the above effluent limitations and special conditions will maintain state water quality standards.

VI. Basis for Requirements for Stormwater Management

Industrial stormwater management is required to reduce the potential for pollutants to reach state waters via stormwater discharges. Stormwater management requirements in Part II are generally current with stormwater management requirements in the VPDES General Permit for Discharges of Stormwater Associated with Industrial Activity (VAR05), which itself reflects the EPA 2021 MSGP, while taking into account the characteristics of the industry to be regulated under this general permit and existing state mining regulations.

Management of stormwater is to be achieved through the development of a Stormwater Pollution Prevention Plan (SWPPP). The SWPPP is intended to identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges as well as describe and ensure the implementation of

practices that will reduce the pollutants in stormwater discharges. The SWPPP requirement maintains the flexibility for a site-specific plan to be developed and implemented but identifies specific components that the plan must address. These components include the pollution prevention team, a description of pollutant sources, and a description of stormwater controls (including Best Management Practices (BMPs), good housekeeping measures, preventative maintenance, spill prevention and response, routine inspections, employee training, recordkeeping and internal reporting, sediment and erosion control, and run-off management).

Quarterly inspections are required to identify sources of pollution and to evaluate whether the pollution prevention measures are being effectively implemented. The inspections are considered a means of determining compliance with permit conditions without requiring extensive sampling programs. The permittee is required to maintain records summarizing the results of inspections. This permit provides that where a facility has an active and compliant E3 (Exemplary Environmental Enterprise) or E4 (Extraordinary Environmental Enterprise) status under Virginia's Environmental Excellence Program (VEEP), routine inspection requirements are waived. This is consistent with the VPDES General Permit for Discharges of Stormwater Associated with Industrial Activity and is based on the fact that such facilities are required under the VEEP program to implement an Environmental Management System (EMS), which includes implementation and evaluation components, as well as have a pollution prevention program and a record of sustained compliance with environmental requirements.

In its 2021 MSGP, U.S. EPA included provisions that address pre-mining earth-disturbing activities (i.e., section 8.J.4). Under Virginia law (§ 62.1-44.15:34) land-disturbing activities associated with surface mining are exempt from stormwater regulation provided such activities are conducted pursuant to a mining permit under Title 45.1. In addition, under § 62.1-44.15:55, permitted surface mining conducted under Title 45.1 is exempt from Virginia's erosion and sediment control law. Under state regulations, mining permits, which are required as a condition of this general permit, include an operation plan, drainage plan (including erosion and sediment control) and reclamation plan, and must meet performance standards that address topics including impoundments, drainage and sediment control, sediment basins, diversions, and water quality (4VAC25-31-10 through 570). These mining permit regulations apply starting with the first disturbance of any part of a site. Based on the statutory exclusions noted above and the existing state DMM permit regulations applicable to mineral mining, new pre-mining provisions are not included in VAG84.

VII. Administrative

The general permit will have a fixed term of five (5) years. Every authorization to discharge under this general permit will expire at the same time and most existing covered owners' authorizations to discharge will be renewed on the same date.

All persons desiring to be covered by this general permit must register with the Department by filing a registration statement and submitting applicable fees. Owners of nonmetallic mineral mining facilities that are discharging on the effective date of this general permit, and which have not been covered under the previous general permit or an individual VPDES permit and desire to be covered under this general permit, are required to submit the registration statement.

In this general permit DEQ has added a conditional electronic submittal requirement for registration statements. This provision establishes that, following notification from the department of the start date for the required electronic submission of registration statements, as provided for in 9VAC25-31-1020, such registration statements must be electronically submitted to the department in compliance with this permit and 9VAC25-31-1020. It also specifies that there will be at least a three-month notice provided between the notification from the department and the date after which such forms must be submitted electronically. Permittees will need to register at the myDEQ Portal (<https://portal.deq.virginia.gov/>) if they have not already done so. There is also a *Getting started with myDEQ* document available online to facilitate account registration, setup and use.

<https://www.deq.virginia.gov/home/showpublisheddocument/15678> . This provision implements federal (40 CFR Part 127) and state (9VAC25-31-1020) electronic reporting regulations.

The reissued general permit includes a requirement to include on the registration statement a list of chemicals added to wastewater or stormwater and that could be discharged, including Safety Data Sheets (SDS), the maximum proposed dosing rates, and a demonstration that the application or use will not result in aquatic toxicity to protect water quality in receiving streams. The use of chemicals, including cationic chemicals, by nonmetallic mineral mining facilities is a potential concern due to the potential aquatic toxicity of certain chemicals in particular settings (e.g., see 8.J.4.1.8 in the federal 2021 MSGP. This provision reflects EPA concerns regarding the aquatic toxicity of cationic chemicals, as discussed in the fact sheet to EPA's 2012 Construction General Permit). The additional information being requested is to ensure that permit staff have adequate information to evaluate the potential toxicity of any added chemicals that could be discharged and to approve, restrict or condition such use as appropriate. A demonstration that chemical use will not result in aquatic toxicity is somewhat flexible but must include information that allows DEQ to make informed judgements that discharges from these facilities will not contain chemicals at levels that pose aquatic toxicity. Such a demonstration should include a description of when, where and how the chemicals will be used, the manufacturer's specification regarding the use or recommended concentration of the chemical, and calculations of the maximum concentration expected in the effluent or other documentation showing that the maximum concentration expected in the effluent is not expected to adversely affect aquatic life. Additional information that could potentially support a demonstration includes why the chemical use is appropriate for the site conditions, whether the chemical is or is not a cationic polymer, if the chemical is used internally or as part of final treatment, controls or implementation procedures that protect water quality, and available toxicity data other than the SDS.

Owners of existing operations covered under an individual VPDES permit that wish to seek coverage under the general permit must file a registration statement at least 240 days prior to the expiration date of the individual VPDES permit. Owners of existing operations covered under the previous general permit seeking to retain coverage under the reissued general permit must file a new registration in accordance with the reissued general permit requirements at least 60 days prior to the expiration of the existing permit. For all new facilities that will begin activities after the effective date of this permit, the registration statement must be filed at least 60 days prior to the commencement of discharge.

This general permit does not cover activities or discharges covered by an individual VPDES permit until the individual permit has expired or has been terminated. Any person conducting an activity covered by an individual permit which could be covered by this general permit may request that the individual permit be terminated and register for coverage under this general permit. Any owner or operator not wishing to be covered or limited by this general permit may make application for an individual VPDES permit in accordance with VPDES permit application procedures.

To gain coverage under this general permit an owner must submit the registration information required in 9VAC25-190-60 (a registration statement form will be provided by the department), submit the required permit fee and comply with the applicable effluent limitations and other requirements of the permit. An additional requirement for this general permit is that the owner must have a mineral mining permit approved by the Virginia Department of Mines, Minerals and Energy, Division of Mineral Mining under provisions and requirements of Title 45.1 of the Code of Virginia. Owners of mineral mines in bordering states with discharges in Virginia must provide documentation that they have a mining permit from the appropriate state authority. Mineral mines owned and operated by governmental bodies not subject to the provisions and requirement of Title 45.1 are exempt from this requirement.

Coverage under this general permit will not be issued for any new or increased discharge that will result a violation of the board's antidegradation policy contained in the Virginia Water Quality Standards at 9VAC25-260-30 or to a facility where the discharge is not consistent with the assumptions and requirements of an approved TMDL for the receiving stream. Coverage under the general permit is also not available to owners that discharge to state waters that are specifically named in other board regulations that prohibit such discharges (e.g., exceptional or tier 3 waters).

In this general permit DEQ has added a conditional electronic submittal requirement for DMRs. This provision establishes that, following notification from the department of the start date for the required electronic submission of monitoring reports, as provided for in 9VAC25-31-1020, such forms and reports submitted after that date shall be electronically submitted to the department in compliance with this permit and 9VAC25-31-1020. It also specifies that there will be at least a three-month notice provided between the notification from the department and the date after which such reports must be submitted electronically. Permittees will need to register at the myDEQ Portal (<https://portal.deq.virginia.gov/>) if they have not already done so. There is also a *Getting started with myDEQ* document available online to facilitate account registration, setup and use. <https://www.deq.virginia.gov/home/showpublisheddocument/15678> . This provision implements federal (40 CFR Part 127) and state (9VAC25-31-1020) electronic reporting regulations.

Office of Regulatory Management

Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-190
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Nonmetallic Mineral Mining
Action title	2024 Amendment and Reissuance the Existing General Permit Regulation
Date this document prepared	10/3/2023
Regulatory Stage (including Issuance of Guidance Documents)	final exempt

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

VPDES general permit regulations expire every 5 years and must be re-issued in order for permit coverage to be available to new permittees and existing permittees that do not submit a registration statement in a timely manner. If the general permit is not re-issued, the regulated community will need to obtain an individual permit to conduct the regulated activity. For this reason, the costs associated with obtaining an individual permit are compared with the costs associated with general permit coverage. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. This form was completed initially for the proposed regulation. Only editorial changes and one clarification (per EPA comment) have been made between the proposed and final regulatory stages, the information on this Economic Review Form remains accurate.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>Presently there are 182 of regulated entities covered by this general permit. Reissuance of this general permit allows new entities to be able to obtain coverage for conducting this regulated activity. New requirements resulting from proposed regulatory changes are very limited, and include:</p> <ul style="list-style-type: none"> • Added a North American Industry Classification (NAIC) code requirement to the registration statement; • Added an “ownership type” requirement to the registration statement; • Replaced the existing registration statement and DMR submittal requirements with conditional electronic reporting requirements (effective following notice and a three-month period); • Clarified that where alternate pH standards exist the most stringent technology-based or water quality based pH limits apply; • Revised the Total Maximum Daily Load (TMDL) language such that at reissuance a demonstration is required that the applicable wasteload is being met; • Added Special Condition 18, discharge requirements for emergency dewatering during flooded conditions. • Supplemented the language triggering review and amendment of the SWPPP to include any other process, observation, or event that results in a determination that modifications to the SWPPP are necessary. Review is also required where the department notifies the permittee that a TMDL has been developed and applies to the permitted facility. <p>Direct Costs: Unknown. Expected to be minimal. No existing available cost analysis is broken down at the necessary level of detail.</p> <p>Direct Benefits: The re-issuance of this general permit provides the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity while continuing to be protective of human health and the environment.</p>
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	<p>In terms of industrial stormwater costs generally, the U.S. Environmental Protection Agency (EPA) estimated the average annual cost of complying with the 2015 MSGP is around \$2,752 for new facilities and \$2,199 for existing facilities. EPA also found that the requirements of the 2015 MSGP are economically practicable under Best Practicable Control Technology (BPT) criteria and economically achievable under Best Available Technology (BAT) criteria (U.S. Environmental Protection Agency 2015 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) – Fact Sheet, pages 20-21). The 2015 MSGP is generally relevant because it covers stormwater discharges from nonmetallic mineral mining and comprises the most recent general MSGP cost estimate. No quantitative cost estimate data for the regulation of nonmetallic mineral mining process wastewater have been identified. General permits impose lower administrative costs on permittees compared with individual permits. (See, Table 1.c).</p> <p>No existing quantitative benefit estimates applicable to the nonmetallic mineral mining general permit have been identified. However, in assessing BPT for the 2015 MSGP, EPA did consider the reasonableness of the relationship between the costs of application of technology in relation to the effluent reduction benefit derived, and found the requirements were economically practicable. (U.S. Environmental Protection Agency 2015 MSGP for Stormwater Discharges Associated with Industrial Activity – Fact Sheet, pages 20-21).</p> <p>This general permit already is coordinated with Virginia mining regulations to the greatest extent practicable. For example, this general permit does not require that the facility meet pre-mining requirements in the MSGP since Virginia Energy regulations address similar activities.</p> <p>New Special Condition 18 could allow facilities whose operations are impacted by an extreme storm to re-start operations more quickly.</p> <p>Indirect Benefits: The reissuance of the general permit may indirectly benefit economic development because it allows for the issuance of a general permit that is protective of human health and the environment that is less burdensome on the regulated community than an Individual VPDES permit. Regulating discharges into state waters benefits tourism and the seafood industry. Cleaner waters may also increase tourism related to recreational uses of state waters.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See above regarding direct costs. No indirect costs or benefits are expected due to the limited	(b) See above regarding direct and indirect benefits. No indirect costs or benefits are expected due to the limited extent of

	extent of changes being made to the general permit regulation.	changes being made to the general permit regulation.
(3) Net Monetized Benefit		
(4) Other Costs & Benefits (Non-Monetized)		
(5) Information Sources	U.S. Environmental Protection Agency 2015 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) – Fact Sheet https://www.epa.gov/sites/default/files/2015-10/documents/msgp2015_fs.pdf	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	Available general cost and benefit data is provided in Table 1.a. Given the general character of this data, it would also be applicable to the general permit under the status quo (i.e., no change to the regulation).	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) See information in table 1a.	(b) See information in table 1a.
(3) Net Monetized Benefit		
(4) Other Costs & Benefits (Non-Monetized)		
(5) Information Sources	See table 1a.	

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Point source discharges of pollutants and industrial stormwater from nonmetallic mineral mines must be authorized by a VPDES permit under the federal Clean Water Act and State Water Control Law. Thus, no non-regulatory options were determined to be available.</p> <p>Regulating activities through the issuance of general permit regulations is an alternative streamlined approach that is used to regulate entities that conduct similar activities. A benefit of this general permit is its lower cost to permittees relative to the cost of obtaining an individual VPDES permit. The permit fee for operators to obtain coverage under this general permit is \$600. Thus, the application fee total for five years of coverage</p>
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for 181 facilities is \$108,600. If this general permit were not available these operators would be required to obtain an individual VPDES permit, and the initial application fee would be \$3,300 (assumes industrial minor, standard limits). An annual permit maintenance fee of \$1,969 would also apply (the application and maintenance fee total would be \$11,176 per permittee/ 5-year permit term). Thus, individual permits for 181 facilities would cost \$2,022,856 over five years. This does not account for the longer lead time to obtain an individual permit and the increased burden on DEQ staff resources that would result.

For electronic submission of registration statement and Discharge Monitoring Reports (DMRs), no regulatory alternatives were considered during this phase of general permit reissuance. This is because the electronic submission of these items is required under federal and state regulations (9VAC25-31-1020).

EPA developed cost and benefit estimates for electronic reporting. Upon full implementation, EPA estimates that the net savings for authorized NPDES programs will be \$22.6 million, \$0.5 million for regulated entities. (Economic Analysis of the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Final Rule, Enforcement Targeting and Data Division, Office of Compliance, Office of Enforcement and Compliance Assurance, U.S. EPA, DCN 0197, September 14, 2015, Page ES xii, Docket No. EPA-HQ-OECA-2009-0274). EPA acknowledges that there will be up-front costs and predicts the break-even point in the fourth year.

The Virginia Department of Environmental Quality is not adopting several new provisions in the EPA 2021 MSGP. These include “report only” monitoring for pH, Total Suspended Solids and Chemical Oxygen Demand (COD) for all operators not subject to specified benchmarks, additional implementation measures, public sign requirement, revisions to impaired waters monitoring, a revised benchmark monitoring schedule, and consideration of enhanced stormwater control measures for facilities that could be impacted by major storm events. EPA estimates the incremental cost of these additional items is \$338-\$632 per operator per year. Reference: Cost Analysis for the U.S. Environmental Protection Agency’s (EPA) National Pollutant Discharge Elimination System (NPDES) 2021 Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity, U.S. EPA, January 2021, pg. 2.

(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)

(3) Net Monetized Benefit	
(4) Other Costs & Benefits (Non-Monetized)	
(5) Information Sources	<p>Economic Analysis of the National Pollutant Discharge Elimination System (NPDES) Electronic Reporting Final Rule, Enforcement Targeting and Data Division, Office of Compliance, Office of Enforcement and Compliance Assurance, U.S. EPA, DCN 0197, September 14, 2015, Page ES xii, Docket No. EPA-HQ-OECA-2009-0274. https://www.epa.gov/sites/default/files/2015-09/documents/npdesea.pdf</p> <p>Cost Analysis for the U.S. Environmental Protection Agency’s (EPA) National Pollutant Discharge Elimination System (NPDES) 2021 Multi-Sector General Permit (MSGP) for Stormwater Discharges Associated with Industrial Activity, U.S. EPA, January 2021.</p> <p>9VAC25-20-110. Fee schedules for individual VPDES and VPA new permit issuance, and individual VWP, SWW, and GWW new permit issuance and existing permit reissuance.</p> <p>9VAC25-20-130. Fees for filing registration statements or applications for general permits issued by the board.</p> <p>9VAC25-20-142. Permit maintenance fees.</p>

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	No cost or benefit impacts on local partners are expected due to the limited extent of changes being made to the general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, an individual permit would be required to conduct the regulated activity.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)

(3) Other Costs & Benefits (Non-Monetized)	
(4) Assistance	
(5) Information Sources	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on families are expected due to the limited extent of changes being made to the general permit regulation. Single family residences do not typically conduct an activity that would be regulated by this general permit.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)	Families could potentially benefit from industry’s use of general permits. If this general permit did not exist, individual permits would be required for these activities, and the additional costs would likely be passed on to consumers, which would potentially include families.	
(4) Information Sources		

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	No indirect costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, an individual permit would be required to conduct the regulated activity.
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a)	(b)
(3) Other Costs & Benefits (Non-Monetized)	No costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the general permit regulation. If this general permit did not exist, individual permits and their associated fees and application process would be required for these activities.	
(4) Alternatives		
(5) Information Sources		

Changes to Number of Regulatory Requirements

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Net Change
9VAC25-190-15	Statutory:	1	0	0	0
	Discretionary:				
9VAC25-190-20	Statutory:	0	0	0	0
	Discretionary:				
9VAC25-190-50	Statutory:	2	0	0	0
	Discretionary:				
9VAC25-190-60	Statutory:	11	3	0	3
	Discretionary:				
9VAC25-190-70	Statutory:	191	3	0	3
	Discretionary:				
Total Net Change of Statutory Requirements:					6
Total Net Change of Discretionary Requirements:					

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-190-entire chapter-see table 1a for further explanation	This is the reissuance of a general permit. If the general permit regulation did not exist, individual permits would be required to be obtained for these regulated activities.	\$11,176 per permittee/ 5-year permit term for an individual permit	\$600 for 5 year general permit coverage	Currently 182 regulated entities covered by this general permit. Cost savings of \$10,576 per permittee covered by the general permit. Cost savings to the regulated community-

				\$1,924,832 over 5 year permit term
9VAC25-190-entire chapter	Reissuance of the general permit reduces the time required to obtain permit coverage	Average amount of time to issue individual permit (FY2021 data*) - 322 days	Average amount of time to issue general permit coverage (FY2021 data*) - 79 days	Permittee obtains permit coverage on average 243 days sooner under the general permit.

*Processing time data obtained from General Assembly Report RD848 - Permit Fee Program Evaluation – January 2022

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
NA	NA	

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Length	New Length	Net Change in Length
NA			

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).

TAB E



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

MEMORANDUM

TO: State Water Control Board Members
FROM: Erica Duncan, Manager, Office of VPDES Permits *Erica M Duncan*
DATE: November 3, 2023
SUBJECT: Reissuance of VPDES General Permit Regulation for Storm Water Discharges
Associated with Industrial Activity, 9VAC25-151

The current Virginia Pollution Discharge Elimination System (VPDES) Industrial Stormwater General Permit will expire on June 30, 2024 and the regulation establishing this general permit is being amended to reissue another term. The staff is bringing this final regulatory amendment before the Board to request the adoption of the amendments.

The Board’s authorization of the proposal was received at the March 23, 2023 meeting. A Notice of Public Comment Period (NOPC) was held May 22, 2023 through July 21, 2023 with a public hearing held on June 26, 2023. There were five public attendees at the public hearing and one comment was received during the hearing. Additional public comments were received in writing during the comment period. EPA Region 3 provided comments prior to the beginning of the public comment period. The comments and responses are summarized in the attached Town Hall Agency Background Document.

Amendments showing proposed changes to the current regulation, the Agency Town Hall background document and the draft Fact Sheet are also attached. Substantive changes to the existing regulation are:

- Section 10 – Definitions – Removed definition for “measurable storm event” as it is no longer referenced in the regulation.
- Section 15 – Applicability of Incorporated References – Changed date to indicate that incorporated references are based on the Code of Federal Regulations published as of July 1, 2023.
- Section 40 – Effective Date of the Permit – Changed effective date to July 1, 2024, and expiration date to June 30, 2029.
- Section 50 – Authorization to Discharge, C.4 – Added firefighting training activities managed in a manner to avoid an instream impact as an authorized non-stormwater discharge in accordance with § 9.1-207.1 of the Code of Virginia. Updated pavement wash waters and building washdown to match the language in the Construction General Permit.

- Section 50 – Authorization to Discharge, C.6 – Clarified that facilities subject to 40 CFR 449 (discharges from primary airport deicing operations) may be covered under Sector AD of the permit. The authorization for these discharges was previously removed in the 2019 general permit; however, a handful of non-hub primary airports were subsequently covered under Sector AD (Nonclassified Facilities/Stormwater Discharges Designated by the Department as Requiring Permits) to avoid the unnecessary costs and administrative burden of coverage under an Individual VPDES Permit. Subsequent sections of the regulation have been updated accordingly and a new special condition has been added to Part III of the general permit to address deicing and anti-icing operations.
- Section 60 – Registration Statement and Stormwater Pollution Prevention Plan (SWPPP) – Added the following requirements: 1) Include a description of the primary industrial activity and all other industrial activities onsite, 2) identify the SIC codes or Industrial Activity Codes for each outfall, and 3) identify outfalls that collect runoff from mulch dyeing operations. Clarified that a new MS4 notification does not need to be made with each re-registration under the general permit. Removed statement regarding deicing operations not being authorized under the permit. Added that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry, registration statements shall be submitted electronically following three months’ notice by the department.
- Section 70 – General Permit – Revised effective and expiration dates. Added reference to a new Part V of the general permit which consolidates all the Chesapeake Bay TMDL compliance requirements into one section.
- Section 70 – General Permit, Part I.A – Updated benchmarks in accordance with EPA’s 2021 Multisector Stormwater General Permit (MSGP), the Virginia Water Quality Standards (WQS), and the recommendations of the Technical Advisory Committee (TAC). Clarified that facilities subject to 40 CFR 449 (discharges from primary airport deicing operations) may be covered under Sector AD of the permit. Clarified that Total Maximum Daily Load (TMDL) conditions are only applicable if the TMDLs are approved by EPA prior to the term of the permit. Clarified that sampling data collected during the 2019 industrial stormwater general permit term may be used to satisfy all or part of any TMDL monitoring requirements. Added language requiring facilities exceeding a TMDL wasteload allocation to prepare and submit a pollutant minimization plan (PMP) upon notification from the department. Replaced references to “measurable storm events” with “storm event discharges” to clarify that samples are required when a storm event results in a discharge from the site. Removed requirement to report the duration (in hours) of storm events.
- Section 70 – General Permit, Part I.B – Updated authorized non-stormwater discharges in accordance with Section 50 (Authorization to Discharge). Moved the entirety of the Chesapeake Bay TMDL conditions to a new Part V (9VAC25-151-400) to simplify the general permit.
- Section 70 – General Permit, Part II - Clarified that the immediate reports required by Part II G, H, and I shall be made to the Department’s regional office. Updated link to the online Pollution Response Preparedness (PReP) portal and clarified that the online portal shall be used for reports outside of normal working hours.
- Section 80 – Stormwater Pollution Prevention Plans, Part III – Added an Airport Deicing Operations condition to make it clear that they are covered by this permit (non-primary airports are covered under Sector AE, primary airports may be covered under Sector AD) and provide some control measure options for consideration. This condition is based on language in the 2021 EPA MSGP and language

used for “Sector S” in previous iterations of the general permit. Clarified that copies of the SWPPP retained onsite may be either in hard copy or in electronic format.

- Section 85 – Sector-Specific Permit Requirements, Part IV – Added this new Section delineating the beginning of Part IV. The permittee must only comply with the additional requirements of Part IV (9VAC25-151-90 et seq.) that apply to the sectors of industrial activity located at the facility.
- Sections 90 through 390 – Sector-Specific Permit Requirements, Part IV – Sector-specific benchmark monitoring parameters were updated in accordance with EPA’s 2021 MSGP, the Virginia Water Quality Standards (WQS), and the recommendations of the TAC. Benchmark concentrations are not effluent limitations and are merely levels used to determine if a stormwater discharge merits further monitoring to ensure that the facility has been successful in implementing a SWPPP.
- Section 400 – Chesapeake Bay TMDL Compliance, Part V - The entirety of the Chesapeake Bay TMDL conditions are moved to this new Part V of the general permit. Changes to the conditions are as follows:
 - The monitoring frequency has been changed to quarterly in order to meet the December 31, 2025 deadline of the Chesapeake Bay TMDL.
 - Total Suspended Solids reduction requirements have been removed in accordance with Virginia’s Final Phase III Watershed Implementation Plan (WIP) based on the recommendations of the 2019 Chesapeake Bay Program Principals’ Staff Committee.
 - Requirements are now separated into three distinct categories depending on the status of a facility’s demonstration of compliance with the Chesapeake Bay TMDL nutrient loading rates:
 - (1) Existing facilities under the 2019 permit that have already demonstrated compliance.
 - (2) Existing facilities under the 2019 permit that have not demonstrated compliance.
 - (3) Existing facilities that obtain initial coverage under the 2024 permit.Existing facilities registered under the 2019 permit after June 30, 2022, are subject to the same requirements as facilities obtaining initial coverage under the 2024 permit.
 - Facilities that have already demonstrated compliance with the nutrient loading rates are to maintain documentation of their demonstration with the SWPPP and continue to implement any Best Management Practices developed as part of their demonstration.
 - Reductions for existing facilities under the 2019 permit, if applicable, are to be achieved by December 31, 2025. Additionally, facilities with TMDL Action Plans that did not meet the required reductions by the end of the 2019 permit term must update and resubmit their action plan within 60 days of coverage. These facilities are to achieve ten percent of the remaining reductions by December 31, 2024, and all remaining reductions by December 31, 2025.
 - Reductions for existing facilities that obtain initial coverage under the 2024 permit, if applicable, are to be achieved two years following the fourth quarterly monitoring period.
 - Facilities may use applicable sampling data collected during the 2019 permit term to satisfy all or part of their monitoring requirements.
 - Alternative calculations may be proposed on a case-by-case basis to address facilities with outfalls that rarely discharge.

The Office of the Attorney General reviewed the proposed regulation and provided certification of statutory authority in a memo dated April 4, 2023.

Attachments: TAC Membership
Draft General Permit Regulation
Agency Background Document (Town Hall)
Draft Fact Sheet, ORM Economic Review Form

**TECHNICAL ADVISORY COMMITTEE MEMBERSHIP INDUSTRIAL STORMWATER
GENERAL PERMIT REGULATION**

<p>Steve Barten Waste Management of Virginia, Inc. 600 N. 28th Street Richmond, VA 23223 (757) 707-7587 sbarten@wm.com</p>	<p>James (Jay) Dillon Southeast Rural Community Assistance Project, Inc. 347 Campbell Ave SW Roanoke, VA 24016 (540) 345-1184 ext. 130 jdillon@sercap.org</p>
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<p>DEQ Staff: Allan Brockenbrough – CO VPDES Joseph Bryan – CO VPDES</p>	<p>DEQ Staff Technical Liaisons: Kevin Crider (BRRO, VPDES Permits) Amy Dooley (NRO, Water Compliance) Susan Mackert (NRO, VPDES Permits) Troy Nipper (CO, Water Compliance) Peter Sherman (CO, VPDES Permits) Sara Sivers (NRO, VPDES Permits) Edward Stuart (NRO, Water Compliance) Noel Thomas (VRO, VPDES Permits) Ethan Virts (SWRO, VPDES Permits) Somsiri Youngpattana (PRO, VPDES Permits)</p>



townhall.virginia.gov

Exempt Action: Final Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC 25 - 151
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Discharges of Stormwater Associated with Industrial Activity
Action title	Final 2024 Amendment and Reissuance of the VPDES Industrial Stormwater General Permit Regulation
Final agency action date	November 30, 2023
Date this document prepared	October 19, 2023

This information is required for executive branch review pursuant to Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19. In addition, this information is required by the Virginia Registrar of Regulations pursuant to the Virginia Register Act (§ 2.2-4100 et seq. of the Code of Virginia). Regulations must conform to the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

This action addresses the proposed reissuance of the Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Discharges of Stormwater Associated with Industrial Activity. The existing general permit regulation establishes limitations, monitoring requirements and other special conditions for point source discharges of stormwater associated with industrial activity to surface waters in order to maintain surface water quality. This regulatory action proposes to amend and reissue the existing general permit, which expires on June 30, 2024.

Mandate and Impetus

Identify the mandate for this regulatory change and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, “mandate” has the same meaning as defined in the ORM procedures, “a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part.”

This regulation (9VAC25-151) constitutes a VPDES general permit administered by Virginia DEQ, a U.S. EPA authorized permitting authority under § 402(b) of the Clean Water Act (CWA). Under CWA § 402(b)(1)(B), VPDES permits must be for fixed terms not to exceed five years. The existing general permit expires on June 30, 2024 and must be reissued for another term to remain available to permittees. If this permit is not re-issued in a timely manner, no new coverage is available to any new facility owner or operator and such owners or operators would be required to obtain individual VPDES permits, which require more time to develop and issue, and impose significantly greater burden and costs on permittees and increased administrative burden on DEQ. In addition, internal staff review and meetings with a Technical Advisory Committee identified areas where the general permit could be updated and improved.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the “Definitions” section of the regulation.

- Board: State Water Control Board
- CWA: Clean Water Act
- EPA (U.S. EPA): United States Environmental Protection Agency
- BMP: Best Management Practice
- DEQ: Department of Environmental Quality
- DMR: Discharge Monitoring Report
- ELG: Effluent Limitations Guidelines
- MSGP: Multi-Sector General Permit
- NOIRA: Notice of Intended Regulatory Action
- NPDES: National Pollutant Discharge Elimination System
- PFAS: Per- and Polyfluoroalkyl Substances
- PRoP: Pollution Response Preparedness
- SAV: Submerged aquatic vegetation
- SIC: Standard Industrial Classification
- SWPPP: Stormwater Pollution Prevention Plan
- TAC: Technical Advisory Committee
- TMDL: Total Maximum Daily Load
- TSS: Total Suspended Solids
- USC: United States Code
- VAC: Virginia Administrative Code
- VPDES: Virginia Pollutant Discharge Elimination System
- WIP: Watershed Implementation Plan
- WQS: Water Quality Standard

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

On November 30, 2023 the State Water Control Board adopted 9VAC25-151, the Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Discharges of Stormwater Associated with Industrial Activity, as a final regulation and affirmed that the Board will receive, consider and respond to petitions by any interested person at any time with respect to reconsideration or revision.

Legal Basis

Identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity’s overall regulatory authority.

The basis for this regulation is § 62.1-44.2 et seq. of the Code of Virginia. Specifically, § 62.1-44.15(5) authorizes the Board to issue permits for the discharge of treated sewage, industrial wastes or other wastes into or adjacent to state waters and § 62.1-44.15(7) authorizes the Board to adopt rules governing the procedures of the Board with respect to the issuance of permits. Further, § 62.1-44.15(10) authorizes the Board to adopt such regulations as it deems necessary to enforce the general water quality management program, §62.1-44.15(14) authorizes the Board to establish requirements for the treatment of sewage, industrial wastes and other wastes, § 62.1-44.16 specifies the Board’s authority to regulate discharges of industrial wastes or other wastes, § 62.1-44.20 provides that agents of the Board may have the right of entry to public or private property for the purpose of obtaining information or conducting necessary surveys or investigations, and § 62.1-44.21 authorizes the Board to require owners to furnish information necessary to determine the effect of the wastes from a discharge on the quality of state waters.

Section 402 of the Clean Water Act (33 USC § 1251 et seq.) authorizes states to administer the National Pollutant Discharge Elimination System (NPDES) permit program under state law. The Commonwealth of Virginia received such authorization in 1975 under the terms of a Memorandum of Understanding with the U.S. EPA. This Memorandum of Understanding was modified on May 20, 1991 to authorize the Commonwealth to administer a General VPDES Permit Program.

Changes to this chapter of the Virginia Administrative Code are exempt from Article 2 of the Administrative Process Act (§ 2.2-4006 A 8).

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it’s intended to solve.

This regulatory action is needed to establish permitting requirements for stormwater discharges associated with industrial activity to surface waters in order to maintain surface water quality and thus protect the health, safety and welfare of citizens. The existing general permit expires on June 30, 2024, and must be reissued to continue to authorize stormwater discharges associated with industrial activity through general permit coverage.

Other amendments to the general permit regulation that are required to maintain consistency with federal requirements and address stakeholder concerns include updates to sector-specific benchmarks, monitoring requirements, and special conditions.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the “Detail of Changes” section below.

The general permit establishes limitations and monitoring requirements for point source discharges of stormwater associated with industrial activity to surface waters. DEQ staff and members of the TAC reviewed effluent limits, monitoring requirements, and special conditions in the general permit to ensure that the permit is protective of water quality and consistent with federal requirements for discharges of stormwater associated with industrial activity to surface waters. The primary issue that is being addressed is that the existing general permit expires on June 30, 2024 and must be reissued in order to continue making it available after that date. Some general requirements in the permit that are being updated include sector-specific benchmarks, monitoring, and special conditions. A significant change was updating the Chesapeake Bay TMDL compliance language and consolidating the requirements into a new section (9VAC25-151-400).

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The advantages to the public, permittees and the agency of reissuing this general permit are that a Virginia Pollutant Discharge Elimination System (VPDES) General Permit will continue to be available to facilities with eligible discharges enabling them to discharge to surface waters in a manner that is protective of those waters. In addition, the continued availability of this general permit avoids the increased cost and more complicated application process for permittees associated with issuing an individual permit, and makes permit administration more reasonable for DEQ. There are no known disadvantages the public, agency, or regulated community.

Requirements More Restrictive than Federal

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any requirement of the regulatory change which is more restrictive than applicable federal requirements. If there are no changes to previously reported information, include a specific statement to that effect.

There are no requirements that exceed applicable federal requirements.

Agencies, Localities, and Other Entities Particularly Affected

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any other state agencies, localities, or other entities that are particularly affected by the regulatory change. If there are no changes to previously reported information, include a specific statement to that effect.

There are no changes to previously reported information concerning agencies, localities and entities particularly affected.

Other State Agencies Particularly Affected:

There are no state agencies particularly affected by the proposed regulation.

Localities Particularly Affected:

There are no localities that bear a disproportionate material impact as the general permit is available and applies statewide. The proposed amendments to the regulation apply statewide, except for the Chesapeake Bay TMDL Special Condition. The general permit regulation implements the Commonwealth of Virginia’s Chesapeake Bay TMDL Phase I Watershed Implementation Plan dated November 29, 2010, and the subsequent Phase II and III WIPs. The proposed amendments applicable throughout the

Chesapeake Bay watershed are not expected to impose a disproportionate material water quality impact on any locality that would not be experienced by the other localities in the Chesapeake Bay watershed.

Other Entities Particularly Affected:

There are no other entities that bear a disproportionate material impact as the general permit is available and applies statewide.

Public Comment

Summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. Ensure to include all comments submitted: including any received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

Commenter	Comment	Agency response
<p>Chesapeake Bay Foundation Patrick J. Fanning Virginia Staff Attorney</p>	<p>Nutrient Benchmark Monitoring.</p> <p>The current approach to nutrient and sediment benchmark monitoring would exempt, seemingly in perpetuity, any facility that happened to achieve four grab sampling events that showed results below the applicable benchmark from any future nutrient monitoring or reduction obligation. This approach fails to provide reasonable assurance that the covered facilities are not contributing nutrient and sediment discharges to Bay tributaries. At a minimum, DEQ should require a facility that completed benchmark monitoring and did not trigger the need for a TMDL action plan to complete benchmark monitoring in a subsequent permit cycle.</p> <p>Put simply, one benchmark monitoring set of four grab samples is insufficient to permanently exempt a facility from evaluating its potential for nutrient and sediment discharges.</p> <p>What is more, the current approach does not distinguish between facilities that had a demonstrated nutrient or sediment discharge and therefore should require enhanced, subsequent benchmark monitoring, from those facilities that had nutrient and sediment discharges below quantitation levels and could qualify for less frequent benchmark monitoring.</p> <p>In no event should one benchmark monitoring cycle exempt a facility from any future nutrient and sediment benchmark monitoring.</p>	<p>Benchmark monitoring requirements for nutrients and sediment are handled on a Sector-specific basis under Part IV of the permit (9VAC25-151-85, et seq.). DEQ has not proposed removing any of the Sector-specific nutrient or sediment benchmarks as part of this regulatory action.</p> <p>The TMDL monitoring associated with the Chesapeake Bay TMDL Compliance conditions (9VAC25-151-400) addresses existing conditions at existing facilities.</p> <p>Owners of existing facilities are required to submit a demonstration of compliance with the Chesapeake Bay TMDL loading rates. Demonstrations of compliance may include: (1) Calculations submitted to the department indicating that reductions were not necessary; (2) A completed TMDL Action Plan, including a description of the means and methods, such as management practices and retrofit programs, that were utilized to meet the required reductions; (3) Other means accepted by the Department indicating compliance with the Chesapeake Bay TMDL loading rates.</p> <p>Owners must also maintain documentation of their demonstration of compliance with the SWPPP and continue implementing any BMPs that may have been developed as part of that demonstration.</p> <p>Expansions of industrial area at existing facilities in the Chesapeake Bay watershed are addressed in 9VAC25-</p>

	<p>This infrequent benchmark monitoring is not an unreasonable burden on facilities that are already benefiting from reduced costs due to their coverage under the General Permit. As mentioned in the Office of Regulatory Management’s Economic Review Form for the General Permit, permittees covered by the General Permit enjoy significant cost savings of more than \$18,000 over a five-year permit term. Given this significant cost savings, it is reasonable, and necessary, to require permittees to conduct monitoring for nutrient benchmark exceedances rather than rely on dated, historic monitoring results.</p> <p>Industrial stormwater has the potential to be a significant source of pollution. A previous analysis of Virginia’s monitoring data from this permit illustrates that six facilities contributed a combined 8,000 pounds of phosphorous loading beyond Wasteload Allocation (WLA) basis levels. That is a staggering amount of pollution that would not have been addressed without monitoring. Recurrent water quality monitoring at these facilities is critical in order to detect and address problems such as these.</p>	<p>151-70, Part I.B.9. This section requires the owner to demonstrate no net increase of stormwater nutrient and sediment load as a result of the expansion of the industrial area.</p> <p>Similarly, newly constructed facilities are addressed in 9VAC25-151-60, C.13. This section requires newly constructed facilities to demonstrate at the time of registration that the industrial stormwater discharges do not exceed the nutrient and sediment loadings that were discharged before the land was developed for the industrial activity.</p> <p>An analysis of 2014-2022 Chesapeake Bay TMDL monitoring data, which consists mainly of monitoring data collected prior to the implementation of additional control measures, was presented and discussed during the TAC meetings. The data indicated that the industrial sector as a whole is already meeting the expected TMDL loads for this permit. Further, an analysis of “high-load” facilities and their current status was conducted and presented to the TAC. That analysis indicated that the top six facilities contributed a combined 6,545 pounds of phosphorus loading beyond the WLA basis levels. However, the facility with the highest contribution (2,848 lbs. beyond WLA basis) has been shut down and the remaining five are implementing TMDL Action Plans.</p> <p>No changes are being made to the regulation in response to this comment.</p>
<p>Chesapeake Bay Foundation Patrick J. Fanning Virginia Staff Attorney</p>	<p>CBF recommends DEQ develop SIC specific guidance on managing nutrient loads for SIC codes with high loading rates and for highly impervious facilities. Previous analyses have demonstrated some SICs (e.g., fertilizer facilities) have higher propensity for high nutrient loading rates.</p>	<p>Benchmark monitoring requirements and numeric effluent limitations for nutrients are handled on a Sector-specific basis under Part IV of the permit (9VAC25-151-85, et seq.).</p> <p>For example, Sector C (Chemical and Allied Products Manufacturing) has total nitrogen and/or total phosphorus benchmarks for the following industries: Agricultural Chemicals (SIC 2873-2879); Industrial Inorganic Chemicals (SIC 2812-2844); Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841-2844); Composting Facilities (SIC 2875).</p>

		<p>No changes are being made to the regulation in response to this comment.</p>
<p>Chesapeake Bay Foundation Patrick J. Fanning Virginia Staff Attorney</p>	<p>Removal of TSS [total suspended solids]/Sediment Requirements Is Illegal.</p> <p>CBF continues to strenuously object to DEQ's removal of sediment reduction requirements from permits, most recently in the Small Municipal Separate Storm Sewer System General Permit.</p> <p>Similar to the Small MS4 General Permit reissuance, DEQ noted this proposed change at the last moment of the stakeholder process and did not provide meaningful opportunity for stakeholder input. As noted in the minutes of the December 1 stakeholder meeting on the General Permit reissuance, questions were raised by stakeholders about the proposed removal of sediment language from the permit, in particular, related to anti-backsliding concerns. DEQ committed to examining this issue and addressing this concern, yet neither the agency background document nor any other materials associated with the reissuance provides any analysis or response to this concern. Rather, DEQ simply continues to cite a 2019 letter from the Chesapeake Bay Program Principals' Staff Committee (PSC). As we have previously stated, the proposed removal of sediment requirements from general permits, here in section 9VAC25-151-400 regarding Bay TMDL compliance, raises significant concerns about compliance with the Clean Water Act (CWA).</p> <p>First, removing the sediment reduction provisions from the General Permit would be unlawful because the CWA and Bay TMDL require National Pollutant Discharge Elimination System (NPDES) permits to be consistent with applicable TMDLs, including the Bay TMDL. According to 40 C.F.R. § 122.44(d)(1)(vii)(B), all NPDES discharge permits must include water-quality based effluent limitations that are "consistent with the assumptions and requirements of any available wasteload allocation," meaning the proposed General Permit will be unlawful unless it implements effluent</p>	<p>DEQ provided information on the removal of Chesapeake Bay TMDL TSS compliance requirements at the December 1, 2022 TAC meeting. The minutes of the TAC meeting were shared with the TAC members on December 28, 2022, and posted to the Virginia Register on January 12, 2023. The proposed amendments to the regulation were subject to a public hearing and a public comment period.</p> <p>The Fact Sheet has been revised to include additional information addressing the removal of the TSS loading rate requirements and clarifies that BMPs installed for the purposes of meeting the nutrient load reductions will continue to provide additional sediment reductions, ensuring that the permit is consistent with the Chesapeake Bay TMDL and will achieve the SAV/water clarity standards. That language states, in part:</p> <p><i>Notably, the TSS loading rate requirements previously required under this section have been removed for the 2024 general permit. On August 12, 2019, the Chesapeake Bay Program Principals' Staff Committee (PSC) approved the process, timeline, and proposed Phase III WIP language for developing the Phase III WIP sediment targets. The Commonwealth of Virginia included the PSC-approved language in its final Phase III WIP on Page 29, Section 5.2 (Sediment Targets). This language states in part, "Sediment loads are managed in the Bay TMDL to specifically address the water clarity/submerged aquatic vegetation (SAV) water quality standards. Intuitively, it makes sense that the more sediment suspended in the water, the less makes it down to the SAV. Interestingly, research in the Chesapeake Bay has shown that the water clarity/SAV water quality standard is generally more responsive to nutrient load reductions than it is to reduction in sediment loads. This is because the algae that are fueled by the nutrients can block as much, or more, light from reaching the SAV as</i></p>

	<p>limits that are consistent with the sediment WLA of the Bay TMDL. Removing sediment sampling and reductions (where necessary) in the proposed General Permit is inconsistent with this requirement.</p> <p>Second, the PSC letter does not have the authority to ratify this unlawful conduct. Nothing in the cited PSC letter altered or amended the enforceability of the sediment WLAs in the Bay TMDL. Rather, the PSC letter merely notes that water clarity/submerged aquatic vegetation (SAV) is more responsive to nutrient reductions than sediment load reductions. However, the PSC letter itself notes that “there are detrimental effects of sediment on the clarity/SAV [Water Quality Standard] and state-level regulatory frameworks of the tidal CBP States address the issue of sediment’s detrimental effects on water clarity and SAV.” See Letter at 1.4. At a minimum, it is not clear the extent to which the PSC may itself have been relying on the very sediment reductions in this permit in making such a statement, creating the potential that DEQ’s proposed action may in fact undermine, and be inconsistent with, the assumptions in the PSC letter. Further, as EPA explains in the PSC letter, the methodology for calculating sediment targets has not changed since the Phase II Watershed Implementation Plan (WIP), and thus, since the last reissuance of this permit. Therefore, it is challenging to understand why DEQ is choosing to make this change at this juncture.</p> <p>The Bay TMDL explicitly singles out sediment as one of the three pollutants that pose the greatest threat to the Bay. Virginia is responsible for 41% of the sediment loads delivered to the Bay. Half of the tidal segments of the Chesapeake Bay included in Virginia’s Integrated Report have been classified as impaired due to SAV/Water Clarity Issues. Even if this designated use is more responsive to nutrient reductions, sediment still degrades these designated uses and DEQ has the responsibility to manage the degradation from sediment for impaired</p>	<p><i>suspended sediments. <u>The sediment targets will not affect the BMPs called for in the WIP, and are not intended to be the driver for implementation moving forward...</u></i></p> <p><i>Given that the Phase III WIP does not intend for sediment targets to be the driver for implementation moving forward, DEQ is reissuing this general permit without the TSS loading rate requirements. The reissued general permit will continue to include the required nutrient load reductions for nitrogen and phosphorous.</i></p> <p><i>While the Commonwealth of Virginia has met the 2025 Sediment milestone target, it should be noted that the BMPs installed for the purposes of meeting the nutrient reductions will continue to provide additional sediment reductions as well, ensuring that the permit is consistent with the Chesapeake Bay TMDL.</i></p> <p><i>The removal of the sediment reduction requirements for the Chesapeake Bay TMDL does not relieve permittees of their responsibility to comply with the requirements of a local TMDL or impaired water without an approved TMDL as addressed under Part I.A.1.c(3) and (4) of this permit, respectively. Additionally, benchmarks and numeric effluent limitations for TSS continue to be applied on a sector-specific basis under Part IV of this permit.</i></p> <p><i>Anti-backsliding: The Clean Water Act, section 303(d)(4)(A) allows the establishment of a less stringent effluent limitation when the receiving water has been identified as not meeting applicable water quality standards (i.e., a nonattainment water) if the permittee meets two conditions: 1) the existing effluent limitation must have been based on a total maximum daily load (TMDL) or other wasteload allocation (WLA) established under CWA section 303, and 2) relaxation of the effluent limitation is only allowed if attainment of water quality standards will be ensured. The removal of the TSS loading rate requirements meets both criteria: 1) the limitation was based</i></p>
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	<p>waterways both within the Bay watershed and beyond, yet many lack local sediment TMDLs. Further, the Chesapeake Bay Program Partnership has suggested there is a need for additional analyses “in tributary open waters and shallow water habitats, where the estuary model currently struggles to predict water quality standards attainment.” The current “Comprehensive Evaluation of System Response” (CESR) effort has focused on the need to consider restoration efforts on shallow waters where aquatic species abound and where impacts of sediment are most acutely felt.</p> <p>Further, the quicker response to nutrient reductions could simply be driven by lag times whereby nutrients are flushed relatively quickly when sources are reduced whereas sediment loads may have longer lag times. If that is the case, it may take longer to see designated use response from sediment reductions. That, however, is not a reason not to manage this pollutant, and in fact, points to the importance of preventing sediment loads in order to avoid impairments that can last for long periods of time.</p> <p>Therefore, it is abundantly clear that reducing sediment loads from industrial facilities is an integral part of the Bay TMDL. DEQ cites the PSC’s statement that water clarity/SAV water quality is “generally more responsive to nutrient load reductions than it is to reduction in sediment loads;” however, industrial facilities should not lose sight of the sediment reductions they will achieve through BMPs they implement to address nitrogen and phosphorus—and such reductions should be tracked and reported where required in the existing permit.</p> <p>Finally, local streams within and outside the Bay watershed are impaired for sediment. Sediment in the watershed is already the subject of thousands of local sediment TMDLs in streams and rivers being implemented by the Chesapeake Bay Program partners. There are also many streams impaired for sediment for which TMDLs are yet to be completed.</p>	<p><i>on a TMDL established under CWA section 303 and 2) the water quality standard for clarity/SAV will still be attained, as noted above.</i></p> <p>No changes are being made to the regulation in response to this comment.</p>
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<p>Chesapeake Bay Foundation Patrick J. Fanning Virginia Staff Attorney</p>	<p>CBF supports DEQ's proposal to consolidate all Bay TMDL compliance language into new section 9 VAC 25-151-400.</p> <p>CBF also supports the proposed modifications to 9 VAC 25-151-70 Part I.B.1.a and g requiring that emergency firefighting and firefighting activity discharges and routine external building washdown discharges must be managed in a manner to avoid an instream impact.</p>	<p>Noted.</p> <p>No changes are being made to the regulation in response to this comment.</p>
<p>City of Alexandria, Virginia Jesse E. Maines Division Chief Stormwater Management, Transportation and Environmental Services</p>	<p>The City appreciates the additional context added to clarify that stormwater discharges should be 'managed in a manner to avoid an instream impact' which is similar to the Phase II MS4 updated language.</p>	<p>Noted.</p> <p>No changes are being made to the regulation in response to this comment.</p>
<p>City of Alexandria, Virginia Jesse E. Maines Division Chief Stormwater Management, Transportation and Environmental Services</p>	<p>The City agrees with the addition of requiring a pollutant minimization plan (PMP) when TMDL wasteload allocations are exceeded.</p>	<p>Noted.</p> <p>No changes are being made to the regulation in response to this comment.</p>
<p>City of Alexandria, Virginia Jesse E. Maines Division Chief Stormwater Management, Transportation and Environmental Services</p>	<p>The City supports DEQ's decision to remove total suspended solids/sediment from the Chesapeake Bay TMDL special condition in the permit.</p> <p>We agree with DEQ's statement in a letter to U.S. EPA's Region 3 Administrator that the "sediment targets will not affect the BMPs called for in the WIP [Watershed Implementation Plan], and are not intended to be the driver for implementation moving forward...".</p> <p>There is no scientific or practical basis for continued inclusion of sediment reductions in the GP.</p>	<p>Noted.</p> <p>No changes are being made to the regulation in response to this comment.</p>

<p>Southern Environmental Law Center, James River Association, and Wild Virginia Carroll Courtenay (SELC) Tom Dunlap (JRA) David Sligh (WV)</p>	<p>In order to ensure that application of the General Permit controls stormwater discharges “as necessary to meet applicable water quality standards,” DEQ must require facilities seeking coverage under the permit to disclose whether their stormwater discharges contain PFAS. DEQ should require any facility that discharges PFAS in stormwater to obtain a VPDES Individual Permit so DEQ can establish technology-based and water quality-based effluent limitations necessary to protect Virginia’s waters. If facilities that discharge PFAS in stormwater are still permitted to obtain coverage under the General Permit, DEQ should incorporate benchmark monitoring requirements for PFAS and PFAS-specific best management requirements into the General Permit.</p>	<p>As specified in 40 CFR 125.3, technology-based treatment requirements under CWA Section 301(b) represent the minimum level of control that must be imposed in NPDES permits (or VPDES permits for the Commonwealth of Virginia). NPDES/VPDES permits must include water quality-based effluent limits (WQBELs) as derived from water quality standards.</p> <p>There are currently no WQBELs and no EPA-approved methods in Part 136 of Title 40 of the Code of Federal Regulations for PFAS. EPA is currently validating Method 1633 in collaboration with the Department of Defense (DoD) for the determination of the PFAS in aqueous, solid, and tissue samples. As such, DEQ is not proposing monitoring or effluent limitations for PFAS in the amended regulation.</p>
<p>Virginia Municipal Stormwater Association (VAMSA) and Virginia Association of Municipal Wastewater Agencies (VAMWA) Michelle Ashworth Paralegal, AquaLaw</p>	<p>The ISWGP Should Not Require After-Hours Compliance Sampling (Parts I.A.2.b, VA Register, p. 2405 & V.B.2, VA Register, p. 2447-2448).</p> <p>VAMSA’s Membership includes municipal entities that manage covered facilities, like landfills and bus depots, under the Proposed ISWGP. These regulated facilities do not operate 24/7, and in many cases, the sampling access points are in remote, unlit areas of the property. VAMWA’s Membership includes small municipal POTWs that do not operate 24/7 and do not have laboratories that operate 24/7.</p> <p>VAMSA and VAMWA will not send their employees to take a sample alone in the dark in a remote location unless it is safe to do so.</p> <p>VAMSA and VAMWA request that DEQ revised the Proposed ISWGP language as follows:</p> <p>The grab sample shall be taken during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first three hours of the</p>	<p>The sampling frequency for benchmark monitoring parameters, numeric effluent limitations, and impaired waters monitoring under Part I.A.2 is semi-annual. Permittees thus have six months to obtain a minimum of one grab sample from a storm event for each reporting period. Given that Virginia averages over 40 inches of rainfall annually, it is expected that there will be ample opportunities for permittees to meet their sampling requirements, including permittees that have limited hours of operation. However, given the intermittent nature of storm events, permittees are strongly encouraged to obtain samples as early on in each monitoring period as practicable.</p> <p>Further, drought conditions are covered by Part I.A.3 of the permit which allows for substitute samples to be taken in the next monitoring period when adverse weather conditions prevent the collection of samples. Adverse weather conditions are those that are dangerous, create inaccessibility for personnel staff, or situations that otherwise make sampling impracticable (e.g. drought or extended frozen conditions).</p>

	<p>discharge, provided that the permittee explains why a grab sample during the first 30 minutes was impracticable. <u>Permittees are not required to conduct sampling outside of the covered facility's or its on-site lab's normal hours of operation, at any time when sending an employee to sample would leave the facility unattended or unstaffed, or at any time when sending an employee to sample would result in a risk to their health and/or safety. If a permittee is not able to obtain a sample for any of the reasons above, the permittee shall document why the sample was not taken and use best efforts to take a make-up sample during the following monitoring period.</u></p> <p>If the language above is not acceptable to DEQ, VAMSA and VAMWA suggest the following even more streamlined language:</p> <p>The grab sample shall be taken during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first three hours of the discharge, provided that the permittee explains why a grab sample during the first 30 minutes was impracticable. <u>A permittee who has health or safety concerns regarding obtaining a sample outside of the covered facility's normal hours of operation may contact DEQ regional staff to request an alternative sampling protocol to address these concerns.</u></p>	<p>Permittees that are faced with limited laboratory hours should make every attempt to obtain stormwater samples during a time when labs are available. However, in cases where a stormwater sample is obtained but laboratory hours fall outside of the holding time of a required parameter (e.g. 48-hour holding times for BOD₅, nitrate, nitrite), the sample should still be analyzed and a comment should be included with the DMR explaining that the holding time for the applicable parameter was exceeded.</p> <p>No changes are being made to the regulation in response to this comment.</p>
<p>Virginia Municipal Stormwater Association and Virginia Association of Municipal Wastewater Agencies Michelle Ashworth Paralegal, AquaLaw</p>	<p>VAMSA and VAMWA Supports Deferring PFAS Monitoring Requirements.</p> <p>VAMWA thanks DEQ for waiting to impose PFAS requirements on permittees rather than acting prematurely, given that EPA is still in the process of developing PFAS MCLs and testing methodologies and conducting a risk assessment for biosolids, among other things.</p>	<p>Noted.</p> <p>No changes are being made to the regulation in response to this comment.</p>

<p>Virginia Municipal Stormwater Association and Virginia Association of Municipal Wastewater Agencies Michelle Ashworth Paralegal, AquaLaw</p>	<p>Specific PMP Authorization Is the Preferred Approach (Part I.A.1.c.3.d, VA Register, p. 2404).</p> <p>The Proposed ISWGP includes a new provision which would require permittees to develop and implement pollutant minimization plans (PMPs) when notified by DEQ that the permittee's discharges are exceeding any applicable TMDL wasteload allocations.</p> <p>During one of the TAC meetings, DEQ stated that it has previously requested PMPs from permittees using the ISWGP's standard permit conditions (specifically, the "duty to provide information" condition). With the new language in the Proposed ISWGP, DEQ will have explicit authority to require these PMPs when appropriate.</p> <p>DEQ will not be relying on standard permit conditions to impose complex and costly compliance tasks on permittees.</p> <p>VAMWA agrees that this approach is preferable to the alternative.</p>	<p>Noted.</p> <p>No changes are being made to the regulation in response to this comment.</p>
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Additionally, the following significant comments were received from EPA prior to the beginning of the public comment period. The Agency responses provided below were reviewed and accepted by EPA.

Committer	Comment	Agency response
<p>U.S. EPA</p>	<p>The 2021 EPA MSGP lists the requirements for air transportation facilities in Sector S. The draft permit is not consistent with the requirements in the MSGP. The marked permit and fact sheet identify the instances where this happens and requests support/rationale for these inconsistencies. Additionally, there is an ELG associated with these facilities at 40 CFR 449.</p>	<p>Virginia's 2019 general permit removed authorization for coverage of discharges subject to effluent limitations in 40 CFR Part 449 as it was determined at the time that such facilities should be covered under Individual VPDES Permits. However, during the 2019 permit term a handful of such airports were covered under Sector AD (Nonclassified Facilities/Stormwater Discharges Designated By the Department As Requiring Permits) in order to avoid the additional cost and administrative burden of an Individual Permit. The use of Sector AD allowed coverage of these airports under the general permit at the department's discretion and allowed for the inclusion of the ELG requirements (40 CFR 449) and any other benchmarks deemed necessary.</p>

		<p>Benchmarks for Sector S were also removed during the 2019 reissuance due to low exceedance rates (0% for total petroleum hydrocarbons, 4% for TSS). Given that Sector S no longer had any benchmark monitoring requirements or numeric effluent limitations, the sector was repealed and the Air Transportation Facility SIC codes were grouped into Sector AE (Facilities with no analytical benchmark monitoring requirements).</p> <p>The proposed amendments in the 2024 general permit clarify that facilities subject to federal effluent guidelines at 40 CFR 449 may be covered under Sector AD. Coverage for Air Transportation Facilities not subject to federal effluent guidelines remains under Sector AE as noted above.</p> <p>DEQ does not intend on implementing indicator monitoring.</p>
<p>U.S. EPA</p>	<p>Compliance with Chesapeake Bay TMDL Requirement – The draft permit in Part V.A.2.a states that owners of facilities that submitted a Chesapeake Bay TMDL Action Plan during the 2019 permit term but did not achieve reductions by the end of the permit term are allowed to provide a demonstration that they have achieved their reductions by December 31, 2025. Without some type of enforcement mechanism, the reissued permit may not allow additional time to perform activities that were required to be completed by the end of the previous permit term. This could also violate the NPDES anti-backsliding prohibition.</p>	<p>Part V.A.2.a has been revised to include an enforcement mechanism as follows:</p> <p><i>Owners of facilities that submitted a Chesapeake Bay TMDL action plan during the 2019 industrial stormwater general permit term that did not achieve reductions by the end of the 2019 permit term shall update and resubmit their action plan to the department for approval no later than 60 days following coverage under this general permit. <u>Permittees shall achieve ten percent of the remaining reductions by December 31, 2024, and all remaining reductions by December 31, 2025. An annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the interim and final reductions.</u> A final report to demonstrate compliance shall be submitted to the department no later than January 10, 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.</i></p>

		<p>Additionally, the following information was added to the Fact Sheet to address anti-backsliding:</p> <p><i>NOTE: Facilities that fall into this category are considered out of compliance with the previous permit which required reductions to be completed by June 30, 2024. To address this, the above language enacts an enforcement mechanism with interim and final milestones. However, given that the enforcement mechanism language allows additional time to perform activities required to be completed by the end of the previous permit term, anti-backsliding needs to be addressed.</i></p> <p><i>Anti-backsliding: The Clean Water Act, section 303(d)(4)(A) allows the establishment of a less stringent effluent limitation when the receiving water has been identified as not meeting applicable water quality standards (i.e., a nonattainment water) if the permittee meets two conditions: 1) the existing effluent limitation must have been based on a total maximum daily load (TMDL) or other wasteload allocation (WLA) established under CWA section 303, and 2) relaxation of the effluent limitation is only allowed if attainment of water quality standards will be ensured.</i></p> <p><i>The enactment of the enforcement mechanism language meets both criteria: 1) the reduction requirements were based on a TMDL established under CWA section 303 and 2) the enforcement mechanism language will ensure the attainment of water quality standards.</i></p>
<p>U.S. EPA</p>	<p>Benchmark Monitoring – There are instances in the draft permit where the required benchmark parameters are not consistent with the 2021 EPA MSGP. EPA has identified these instances in the marked documents and recommends that the permit be revised to be consistent with the MSGP.</p> <p>Additionally, the permit requires that benchmark monitoring be performed only biannually, whereas the MSGP requires</p>	<p>The sources for each benchmark are identified in Table 3 of the Fact Sheet, including footnotes that explain the assumptions used for each parameter.</p> <p>Further, a discussion of the history of the benchmarks and numeric effluent limitations for each Sector has been added to the Fact Sheet for clarification.</p> <p>Semi-annual benchmark monitoring has been included in the Industrial</p>

	<p>quarterly benchmark monitoring. 40 CFR 122.41(j) states that “Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.” If VADEQ has a rationale for bi-annual sampling to be considered representative for stormwater discharges, it should be provided in the fact sheet.</p>	<p>Stormwater General Permit since the first issuance in 2004. DEQ has added rationale to the fact sheet explaining that the semi-annual monitoring frequency remains sufficient given the specific monitoring requirements (within 30 minutes of storm event, 72-hours since the last storm event) which are supported by quarterly visual monitoring and site inspections.</p>
<p>U.S. EPA</p>	<p>Two of this administration’s highest priorities are tackling climate change and environmental justice in regulatory/environmental programs, including the NPDES program. The draft documents presented to EPA make no mention of either of these topics. We urge DEQ to consider how these important subjects can be incorporated into the stormwater program and specifically this permit.</p>	<p>DEQ is in the process of addressing these concerns at a much higher level than specific permit requirements related to environmental justice and climate change. The Commonwealth of Virginia has proactively worked on the topics of environmental justice and climate resiliency within and outside the permitting process.</p> <p>In 2020, the Commonwealth enacted the Virginia Environmental Justice Act (Act), codified at §§ 2.2-234 and 2.2-235 of the Code of Virginia, which states that it is Virginia’s policy “to promote environmental justice and ensure that it is carried out throughout the Commonwealth, with a focus on environmental justice and fence line communities.” Further, DEQ’s enabling statute, § 10.1-1183 of the Code of Virginia, was amended to include in its statement of policy that DEQ’s purpose, among others, is “[t]o ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, faith, disability, or income with respect to the administration of environmental laws, regulations, and policies.” The policy statement was also amended to include a statement affirming that agency would “further environmental justice and enhance public participation in the regulatory and permitting processes.” A detailed overview of ongoing activities is available on DEQ’s Environmental Justice webpage. DEQ has recently released draft guidance, Environmental Justice in the Permitting Process, for public comment. Once finalized in accordance with Virginia’s Administration Process Act, this guidance document will serve as the guidepost for ensuring</p>

		<p>environmental justice is included in the permitting process.</p> <p>The Commonwealth of Virginia has established the Chief Resilience Officer as the primary coordinator of resilience and adaptation initiatives in Virginia pursuant to § 2.2-220.5 of the Code of Virginia. As such they are the primary point of contact regarding recurrent flooding, all flooding related pre-disaster hazard mitigation, and adaptation. The Secretary of Natural and Historic Resources, Travis A. Voyles, is the Chief Resilience Officer for the Commonwealth of Virginia, a Cabinet level position for the Commonwealth of Virginia. One of the primary responsibilities of the Chief Resilience Office is to create and oversee the implementation of a Virginia Flood Protection Master Plan and a Virginia Coastal Resilience Master Plan in accordance with § 10.1-602 of the Code of Virginia to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, health, the economy, and the environment. The Commonwealth of Virginia's Chief Resilience Officer coordinates these activities through the Department of Conservation and Recreation, specifically the Department of Conservation and Recreation's Office of Resilience Planning.</p> <p>DEQ believes the correct course of action is to include the background provided above in the Fact Sheet for informational purposes and not include additional language in permits as it is unnecessary and duplicative in nature.</p>
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Other editorial changes were made in response to EPA comments and are detailed in the following sections.

Details of Changes Made Since the Previous Stage

*List all changes made to the text since the previous stage was published in the Virginia Register of Regulations and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

Current chapter-section number	New chapter-section number, if applicable	New requirement from previous stage	Updated new requirement since previous stage	Change, intent, rationale, and likely impact of updated requirements
9VAC25-151-50. Authorization to discharge. C.4.g.			g. Pavement wash waters provided no soaps, solvents, detergents or hazardous cleaning products are used, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled or leaked material is removed prior to washing), and the wash water is filtered, settled, or similarly treated prior to discharge;	<p>Revised for consistency with the Construction Stormwater general permit language (9VAC25-880-30) and in response to EPA comments.</p> <p>The previous language required that pavement wash waters be “managed in a manner to avoid an instream impact.” The revisions replace that language and clarify what it means.</p> <p>No significant impact is expected due to this revision.</p>
9VAC25-151-50. Authorization to discharge. C.4.h		h. Routine external building washdown that does not use detergents or hazardous cleaning products and is managed in a manner to avoid an instream impact;	h. Routine external building washdown provided no soaps, solvents or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled, or similarly treated prior to discharge;	<p>Revised for consistency with the Construction Stormwater general permit language (9VAC25-880-30) and in response to EPA comments.</p> <p>The previous proposed language required that routine external building washdown be “managed in a manner to avoid an instream impact.” The revisions replace that language and clarify what it means.</p> <p>No significant impact is expected due to this revision.</p>
9VAC25-151-60. Registration		4. Late registration statements. Registration statements for	4. Late registration statements. Registration statements for	The final sentence of this section was removed as it is duplicative of 9VAC25-

<p>Statement. B.4</p>		<p>existing facilities covered under subdivision 1 a of this subsection will be accepted after June 30, 2024, but authorization to discharge will not be retroactive. Owners described in subdivision 1 a of this subsection that submit registration statements after May 1, 2024, are authorized to discharge under the provisions of 9VAC25-151-50 F (Continuation of permit coverage) if a complete registration statement is submitted before July 1, 2024.</p>	<p>existing facilities covered under subdivision 1 a of this subsection will be accepted after June 30, 2024, but authorization to discharge will not be retroactive.</p>	<p>151-50 F (Continuation of permit coverage). 9VAC25-151-60 B.1.a sets the registration statement submittal deadline for existing permittees. Section B.4 addresses late registration statement submittals and notes that while late submittals will be accepted, authorization to discharge will not be retroactive. No significant impact is expected due to this revision.</p>
<p>9VAC25-151-60. Registration Statement. C.10.g.</p>		<p>g. For primary airports, list the average deicing season and state which outfalls (if any) receive discharges from deicing or anti-icing operations;</p>	<p>g. For primary airports subject to 40 CFR 449 (1,000 or more annual departures of non-propeller aircraft), list the average deicing season and state which outfalls (if any) receive discharges from deicing or anti-icing operations;</p>	<p>Clarified that primary airports subject to 40 CFR 449 are those with 1,000 or more annual departures of non-propeller aircraft. This clarification was added in lieu of creating a new definition. No significant impact is expected due to this revision.</p>
<p>9VAC25-151-70. General Permit. Part I.B.1.g.</p>		<p>g. Routine external building washdown that does not use detergents or hazardous cleaning products and is managed in a manner to avoid an instream impact;</p>	<p>g. Routine external building washdown provided no soaps, solvents or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled, or</p>	<p>Revised for consistency with the Construction Stormwater general permit language (9VAC25-880-30) and in response to EPA comments. The previous proposed language required that routine external building washdown be</p>

			similarly treated prior to discharge;	<p>“managed in a manner to avoid an instream impact.” The revisions replace that language and clarify what it means.</p> <p>No significant impact is expected due to this revision.</p>
9VAC25-151-70. General Permit. Part I.B.1.h.			h. Pavement wash waters provided no soaps, solvents, detergents or hazardous cleaning products are used, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled or leaked material is removed prior to washing), and the wash water is filtered, settled, or similarly treated prior to discharge;	<p>Revised for consistency with the Construction Stormwater general permit language (9VAC25-880-30) and in response to EPA comments.</p> <p>The previous language required that pavement wash waters be “managed in a manner to avoid an instream impact.” The revisions replace that language and clarify what it means.</p> <p>No significant impact is expected due to this revision.</p>
9VAC25-151-80. Stormwater Pollution Prevention Plans. Part III.C (Maintenance)			If routine facility inspections required by Part III B 5 identify control measures that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm event. If maintenance before the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable, but not later than within 60 days of the	<p>Part III.B.5 (Routine facility inspections) requires that deficiencies in the implementation of the SWPPP that are found during routine inspections shall be corrected as soon as practicable, “but not later than within 60 days of the inspection, unless permission for a later date is granted in writing by the director.”</p> <p>This language has been added to Part III.C (Maintenance) in response to EPA comments to clarify that maintenance issues</p>

			inspection, unless permission for a later date is granted in writing by the director. ...	<p>identified during the routine inspections are also subject to these requirements.</p> <p>No significant impact is expected due to this revision.</p>
9VAC25-151-90 through 9VAC25-390. Sector-Specific Permit Requirements. Part IV				<p>As noted during the proposed stage, sector-specific benchmark monitoring parameters were updated in accordance with EPA's 2021 MSGP, the Virginia Water Quality Standards (WQS), and the recommendations of the TAC.</p> <p>Revisions to the benchmark for lead were included in the fact sheet and town hall documents but were inadvertently omitted from the proposed regulatory text during publication. As such, the lead benchmark has been updated in the final regulatory text.</p> <p>No significant impact is expected due to this revision.</p>
9VAC25-151-220. Sector O (Steam electric generating facilities). C. Numeric Effluent Limitations.			<p>C. Numeric effluent limitations. Permittees with point sources of coal pile runoff associated with steam electric power generation shall monitor these stormwater discharges for the presence of TSS and for pH in accordance with Part I A 1 c (2).</p>	<p>This section references the numeric effluent limitations for coal pile runoff listed in Table 70-3 under Part I.A.1.c(2), which includes a monitoring frequency of 1/6 months for both TSS and pH.</p> <p>As such, the phrase "at least annually" has been removed from the language under 9VAC25-151-220 C for consistency.</p>

				No significant impact is expected due to this revision.
9VAC25-151-370. Sector AD (Nonclassified facilities or stormwater discharges designated by the department as requiring permits). B.		B. Benchmark monitoring and reporting requirements. The department shall establish any additional monitoring requirements for your facility before authorizing coverage under this permit.	B. Effluent limitations, benchmark monitoring and reporting requirements. The department shall establish any additional monitoring requirements for your facility before authorizing coverage under this permit.	<p>The heading of this section was modified to clarify that the establishment of “additional monitoring requirements” by the department for facilities covered under this Sector may include effluent limitations (i.e. federal effluent guidelines).</p> <p>This change was made in response to EPA comments regarding coverage of primary airports.</p> <p>No significant impact is expected due to this revision.</p>
9VAC25-151-380. Sector AE (Facilities with no analytical benchmark monitoring requirements). A.			A. Discharges covered under this section. The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities with SIC Codes 2611, 2621, 2652-2657, 2833-2836, 2851, 2861-2869, 2891-2899, 3952, 3211, 3221, 3229, 3231, 3241, 3281, 3291-3299, 3331-3339, 3398, 3399, 3341, 1311, 1321, 1381-1389, 2911, 4512-4581 [(not subject to federal effluent guidelines)] ...	<p>A parenthetical note was added to SIC codes 4512-4281 (Air Transportation Facilities) to clarify that such facilities may only be covered under this Sector if they are not subject to federal effluent guidelines.</p> <p>This change was made in response to EPA comments regarding coverage of primary airports.</p> <p>No significant impact is expected due to this revision.</p>

<p>9VAC25-151-400. Chesapeake Bay TMDL Compliance. Part V.A.2.a</p>		<p>a. Owners of facilities that submitted a Chesapeake Bay TMDL action plan during the 2019 industrial stormwater general permit term that did not achieve reductions by the end of the 2019 permit term shall demonstrate that they have achieved their reductions by December 31, 2025. ...</p>	<p>a. Owners of facilities that submitted a Chesapeake Bay TMDL action plan during the 2019 industrial stormwater general permit term that did not achieve reductions by the end of the 2019 permit term shall update and resubmit their action plan to the department for approval no later than 60 days following coverage under this general permit. Permittees shall achieve ten percent of the remaining reductions by December 31, 2024, and all remaining reductions by December 31, 2025. An annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the interim and final reductions. A final report to demonstrate compliance shall be submitted to the department no later than January 10, 2026.</p>	<p>Additional language was added to this section to enact an enforcement mechanism with interim and final milestones for any remaining reductions in response to EPA comments.</p> <p>The revised language requires that ten percent of the remaining reductions be achieved by December 31, 2024, and all remaining reductions be achieved by December 31, 2025.</p> <p>These revisions will only impact permittees that have not achieved their required reductions.</p> <p>Additionally, annual reporting requirement language previously required under Part II.B.8 that had inadvertently been left out of the consolidated language under Part V of the permit has been added back in.</p> <p>No significant impact is expected due to this revision.</p>
<p>9VAC25-151-400. Chesapeake Bay TMDL Compliance. Part V.A.2.b and c.</p>		<p>... Reductions, if applicable, shall be achieved by December 31, 2025, and documentation that the reductions have been achieved shall be submitted</p>	<p>... Reductions, if applicable, shall be achieved by December 31, 2025, and an annual report shall be submitted to the department by June 30 of each year</p>	<p>Annual reporting requirement language previously required under Part II.B.8 that had inadvertently been left out of the consolidated language under Part V of the</p>

		to the department no later than January 10, 2026. ...	describing the progress in meeting the required reductions until such time that the demonstration is completed. The demonstration shall be submitted to the department no later than January 10, 2026. ...	permit has been added back in. No significant impact is expected due to this revision.
9VAC25-151-400. Chesapeake Bay TMDL Compliance. Part V.A.3.a		... Reductions, if applicable, shall be achieved by two years following the end of the fourth quarterly monitoring period and documentation that the reductions have been achieved shall be submitted to the department no later than the 10 th of the month directly following the two year period. ...	... Reductions, if applicable, shall be achieved by two years following the end of the fourth quarterly monitoring period and an annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the required reductions until such time that the demonstration is completed. The demonstration shall be submitted to the department no later than the 10 th of the month directly following the two year period. ...	Annual reporting requirement language previously required under Part II.B.8 that had inadvertently been left out of the consolidated language under Part V of the permit has been added back in. No significant impact is expected due to this revision.

Details of All Changes Proposed in this Regulatory Action

*List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. * Put an asterisk next to any substantive changes.*

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
All Sections			<p><i>Minor edits to the language in all sections of the regulation were updated in accordance with the Virginia Register of Regulations' "Form, Style and Procedure Manual for Publication of Virginia Regulations".</i></p> <p><i>These edits do not constitute substantive changes to the regulation.</i></p>
All Sections			<p><i>Where applicable, "board" is replaced with "department" in accordance with the updated definition of "Board".</i></p>
9VAC25-151-10. Definitions.		<p>"Measurable storm event" means a storm event that results in a discharge from an outfall.</p>	<p><i>Deleted definition. It is no longer referenced in the regulation.</i></p>
9VAC25-151-15. Applicability of incorporated references based on the dates that they became effective.		<p>Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in Title 40 of the Code of Federal Regulations is referenced or adopted in this chapter and incorporated by reference, that regulation shall be as it exists and has been published as of July 1, 2018.</p>	<p><i>Revised date to "July 1, 2022" based on the most recent federal update prior to this reissuance. This change is needed to maintain consistency with references to federal regulations.</i></p>
9VAC25-151-40. Effective date of the permit		<p>This general permit will become effective on July 1, 2019. This general permit will expire on June 30, 2024.</p>	<p>This general permit will become effective on July 1, 2024. This general permit will expire on June 30, 2029.</p> <p><i>Amended dates to reflect new 5-year term.</i></p>
9VAC25-151-50. Authorization to discharge. B.4.		<p>B.4. The discharge is not consistent with the assumptions and requirements of an approved TMDL. Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan (November 29, 2010) states that wasteloads for future growth for new facilities in the</p>	<p><i>Amended the date to June 30, 2024, to indicate that facilities that commence construction following this date are considered new facilities which cannot exceed the nutrient and sediment loadings that were discharged prior to the land being developed for the new industrial activity.</i></p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		Chesapeake Bay watershed with industrial stormwater discharges cannot exceed the nutrient and sediment loadings that were discharged prior to the land being developed for the new industrial activity. For purposes of this permit regulation, facilities that commence construction after June 30, 2019, must be consistent with this requirement to be eligible for coverage under this general permit.	
9VAC25-151-50. Authorization to discharge. C.		C.	<i>Revised header of this section to "C. Additional Conditions".</i>
9VAC25-151-50. Authorization to Discharge. C.4.a		a. Discharges from emergency firefighting activities	a. Discharges from emergency firefighting activities or firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia; <i>Added "firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia" to be consistent with statutory requirements implemented after the issuance of the 2019 general permit.</i>
9VAC25-151-50. Authorization to discharge. C.4.g.		g. Pavement wash waters where no detergents or hazardous cleaning products are used, and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed). Pavement wash waters shall be managed in a manner to avoid an instream impact;	g. Pavement wash waters provided no soaps, solvents, detergents or hazardous cleaning products are used, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled or leaked material is removed prior to washing), and the wash water is filtered, settled, or similarly treated prior to discharge; <i>Revised for consistency with the Construction Stormwater general permit language (9VAC25-880-30)</i>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p><i>and in response to EPA comments.</i></p> <p><i>The previous language required that pavement wash waters be “managed in a manner to avoid an instream impact.” The revisions replace that language and clarify what it means.</i></p>
<p>9VAC25-151-50. Authorization to Discharge. C.4.h</p>		<p>h. Routine external building washdown that does not use detergents or hazardous cleaning products.</p>	<p>h. Routine external building washdown provided no soaps, solvents, or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled, or similarly treated prior to discharge.</p> <p><i>Revised for consistency with the Construction Stormwater general permit language (9VAC25-880-30) and in response to EPA comments.</i></p> <p><i>The previous proposed language required that routine external building washdown be “managed in a manner to avoid an instream impact.” The revisions replace that language and clarify what it means.</i></p>
<p>9VAC25-151-50. Authorization to Discharge. C.6</p>		<p>Discharges subject to stormwater effluent limitation guidelines under 40 CFR Subchapter N (Effluent Guidelines and Standards). Only those stormwater discharges subject to stormwater effluent limitation guidelines under 40 CFR Subchapter N that are identified in Table 50-1 of this subsection are eligible for coverage under this permit.</p>	<p>Discharges subject to stormwater effluent limitation guidelines under 40 CFR Subchapter N (Effluent Guidelines and Standards) are only eligible for coverage under this permit if they are identified in Table 50-1 of this subsection.</p> <p><i>Clarified wording and removed repetition.</i></p>
<p>9VAC25-151-50. Authorization to Discharge. C.6 Table 50-1</p>		<p>Table 50-1 Stormwater-Specific Effluent Limitation Guidelines.</p> <p>... Facilities subject to effluent limitation guidelines in 40 CFR</p>	<p>... Facilities subject to the effluent limitation guidelines in 40 CFR Part 449 may be covered under Sector AD.</p> <p><i>Authorization for discharges from deicing operations at primary</i></p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		Part 449 are not authorized under this permit.	<p><i>airports was removed in the 2019 general permit. However, a handful of non-hub primary airports were subsequently covered under Sector AD (Nonclassified Facilities/Stormwater Discharges Designated by the Department as Requiring Permits) in order to avoid the unnecessary costs and administrative burden of coverage under an Individual VPDES Permit.</i></p> <p><i>As such, Tables 50-1 and 70-2 of the regulation have been updated to clarify that primary airports subject to the referenced federal effluent limitation guidelines may be covered under Sector AD. Further, a new condition has been added to Part III of the general permit to address deicing and anti-icing operations.</i></p>
9VAC25-151-60. Registration Statement and stormwater pollution prevention plan (SWPPP). A.		A. Any owner that was authorized to discharge under the industrial stormwater general permit that became effective on July 1, 2014, and that intends to continue coverage under this general permit shall review and update the stormwater pollution prevention plan (SWPPP) to meet all provisions of the general permit (9VAC25-151-70 et seq.) within 90 days of the board granting coverage under this permit ...	Revised date to July 1, 2019, to reflect the term of the previous general permit.
9VAC25-151-60. Registration Statement and stormwater pollution prevention plan (SWPPP). B.1.a		a. Any owner that was authorized to discharge under the industrial stormwater general permit that became effective on July 1, 2014, and that intends to continue coverage under this general permit shall submit a complete registration statement to the board on or before May 2, 2019.	Revised dates to July 1, 2019, and May 1, 2024, respectively, in order to reflect the previous permit term and indicate when registration statements are due.
9VAC25-151-60.		4. Late registration statements. Registration statements for	4. Late registration statements. Registration statements for existing

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Registration Statement and stormwater pollution prevention plan (SWPPP). B.4		existing facilities covered under subdivision 1 a of this subsection will be accepted after June 30, 2019, but authorization to discharge will not be retroactive. Owners described in subdivision 1 a of this subsection that submit registration statements after May 2, 2019 are authorized to discharge under the provisions of 9VAC25-151-50 F (Continuation of permit coverage) if a complete registration statement is submitted before July 1, 2019.	facilities covered under subdivision 1 a of this subsection will be accepted after June 30, 2024, but authorization to discharge will not be retroactive. <i>Revised date to June 30, 2024, to indicate the expiration date of the previous permit.</i> <i>Removed the final sentence of this section as it is duplicative of 9VAC25-151-50 F (Continuation of permit coverage).</i>
9VAC25-151-60. Registration Statement and stormwater pollution prevention plan (SWPPP). C.4		4. The nature of the business conducted at the facility to be covered under this general permit;	4. The nature of the business conducted at the facility to be covered under this general permit, including a description of the primary industrial activity and all other industrial activities that take place. <i>Added language to the registration statement in order to clarify a facility's primary industrial activity and any co-located industrial activities.</i>
9VAC25-151-60. Registration Statement and stormwater pollution prevention plan (SWPPP). C.6		6. A determination of whether the facility will discharge to an MS4. If the facility discharges to an MS4, the facility owner must notify the owner of the MS4 of the existence of the discharge information at the time of registration under this permit and include that notification with the registration statement ...	<i>Removed "at the time of registration under this permit" in order to clarify that a new MS4 notification does not need to be made with each re-registration under the general permit.</i>
9VAC25-151-60. Registration Statement and stormwater pollution prevention		9. Whether or not this facility will discharge stormwater runoff from coal storage piles;	<i>Deleted due to duplicative language. Section 11.c (now 10.c) of this section already asks about runoff from coal storage piles.</i> <i>Following sections renumbered.</i>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
plan (SWPPP). C.9			
9VAC25-151-60. Registration Statement and stormwater pollution prevention plan (SWPPP). C.10	C.9	10. Identification of up to four four-digit Standard Industrial Classification (SIC) Codes or 2-letter Industrial Activity Codes that best represent the principal products or services rendered by the facility and major colocated industrial activities ...	9. For each outfall, identification of up to four four-digit Standard Industrial Classification (SIC) Codes ... <i>Added "For each outfall". Different outfalls at a facility may have vastly different industrial activities in their drainage areas.</i>
9VAC25-151-60. Registration Statement and stormwater pollution prevention plan (SWPPP). C.11.b	C.10.b	b. If the facility is a timber products operation (sector A), indicate which outfalls (if any) receive discharges from wet decking areas;	b. If the facility is a timber products operation (sector A), state which outfalls (if any) receive discharges from wet decking areas, and which outfalls (if any) collect runoff from areas where mulch dyeing operations (including loading, transporting, and storage) occur; <i>Added requirement to identify outfalls that collect runoff from mulch dyeing operations. There are additional requirements for mulch dyeing operations under Sector A, so this helps clarify which outfalls at a facility need these additional requirements.</i>
9VAC25-151-60. Registration Statement and stormwater pollution prevention plan (SWPPP). C.11.g	C.10.g	g. For primary airports, list the average deicing season and indicate which outfalls (if any) receive discharges from deicing of non-propeller aircraft, and the annual average departures of non-propeller aircraft. It should be noted that airport facilities subject to the effluent limitation guidelines in 40 CFR Part 449 are not authorized under this permit.	g. For primary airports subject to 40 CFR 449 (1,000 or more annual departures of non-propeller aircraft), list the average deicing season and state which outfalls (if any) receive discharges from deicing or anti-icing operations. <i>Authorization for discharges from deicing operations at primary airports was removed in the 2019 general permit. However, a handful of non-hub primary airports were subsequently covered under Sector AD in order to avoid the unnecessary costs and administrative burden of coverage under an Individual VPDES Permit.</i>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p><i>The registration statement has been updated to identify which outfalls at primary airports receive discharges from deicing or anti-icing operations. It also clarifies that primary airports subject to 40 CFR 449 are those with 1,000 or more annual departures of non-propeller aircraft.</i></p>
<p>9VAC25-151-60. Registration Statement and stormwater pollution prevention plan (SWPPP). C.14</p>	<p>C.13</p>	<p>13. Virginia’s Phase I Chesapeake Bay TMDL Watershed Implementation Plan (November 29, 2010) states that wasteloads for future growth for new facilities in the Chesapeake Bay watershed with industrial stormwater discharges cannot exceed the nutrient and sediment loadings that were discharged prior to the land being developed for the industrial activity. For purposes of this permit regulation, facilities that commence construction after June 30, 2019, must be consistent with this requirement to be eligible for coverage under this general permit. If this is a new facility that commenced construction after June 30, 2019, in the Chesapeake Bay watershed, and applying for first time general permit coverage ...</p>	<p><i>Revised both dates to June 30, 2024, as part of updating and reissuing the general permit.</i></p>
<p>9VAC25-151-60. Registration Statement and stormwater pollution prevention plan (SWPPP). C.14.a</p>	<p>C.13.a</p>	<p>a. ... Design specifications and pollutant removal efficiencies for specific BMPs can be found on the Virginia Stormwater BMP Clearinghouse website at http://www.vwrrc.vt.edu/swc; or,</p>	<p><i>Removed “at http://www.vwrrc.vt.edu/swc” to avoid having to update the link every reissuance.</i></p>
<p>9VAC25-151-60. Registration</p>		<p>E. Where to submit.</p>	<p><i>Added the following contingent e-reporting language:</i></p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Statement and stormwater pollution prevention plan (SWPPP). E.			<p>Following notification from the department of the start date for the required electronic submission of Notices of Intent to discharge forms (i.e., registration statements) as provided for in 9VAC25-31-1020, such forms submitted after that date shall be electronically submitted to the department in compliance with this section and 9VAC25-31-1020. There shall be at least three months' notice provided between the notification from the department and the date after which such forms must be submitted electronically.</p> <p><i>E-reporting is required by federal regulation (see 80 FR 64064; 10/22/2015 and 85 FR 69189; 11/2/2020) and state regulation (9VAC25-31-1020).</i></p>
9VAC25-151-70. General permit.		General Permit No.: VAR05 Effective Date: July 1, 2019 Expiration Date: June 30, 2024	<i>Updated effective date to July 1, 2024, and the expiration date to June 30, 2029.</i>
9VAC25-151-70. General permit.		The authorized discharge shall be in accordance with this cover page, the registration statement, Part I-Effluent Limitations, Monitoring Requirements and Special Conditions, Part II-Conditions Applicable to All VPDES Permits, Part III-Stormwater Pollution Prevention Plan, and Part IV-Sector-Specific Permit Requirements as set forth in this general permit.	<p>The authorized discharge shall be in accordance with this cover page, the registration statement, Part I-Effluent Limitations, Monitoring Requirements and Special Conditions, Part II-Conditions Applicable to All VPDES Permits, Part III-Stormwater Pollution Prevention Plan, Part IV-Sector-Specific Permit Requirements, and Part V-Chesapeake Bay Total Maximum Daily Load Compliance as set forth in this general permit.</p> <p><i>Added reference to the new Part V of the general permit which consolidates all the Chesapeake Bay TMDL Compliance requirements into one section.</i></p>
9VAC25-151-70. General Permit. Part I.A.1.a.(1)		The permittee shall perform and document a quarterly visual examination of a stormwater discharge	<i>Deleted last sentence requiring that documentation be signed in accordance with Part II K. Visual monitoring documentation is not</i>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		<p>associated with industrial activity from each outfall, except discharges exempted in Part I A 3 or Part I A 4. The examinations shall be made at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December. The visual examination shall be made during normal working hours, where practicable, and when considerations for safety and feasibility allow. If no storm event resulted in runoff from the facility during a monitoring quarter, the permittee is excused from visual monitoring for that quarter provided that documentation is included with the monitoring records indicating that no runoff occurred. The documentation shall be signed and certified in accordance with Part II K of this permit.</p>	<p><i>submitted to the department and therefore does not require this form of signature.</i></p>
<p>9VAC25-151-70. General Permit. Part I.A.1.a.(3)</p>		<p>(3) The visual examination reports shall be maintained on-site with the SWPPP. The report shall include the outfall location, the examination date and time, examination personnel, the nature of the discharge (i.e., runoff or snow melt), visual quality of the stormwater discharge (including observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution), and probable sources of any observed stormwater contamination.</p>	<p><i>Revised “reports” and “report” to “documentation” to clarify that visual examinations are not reported to the department. Documentation of these examinations are to be maintained with the SWPPP.</i></p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-151-70. General Permit. Part I.A.1.b. Table 70-1		Table 70-1 Industrial Sectors Subject to Benchmark Monitoring	<p><i>Table 70-1 lists the benchmark monitoring parameters for each Industry Sector and their associated SIC or Activity codes. Benchmarks were updated in accordance with EPA's 2021 MSGP, the Virginia Water Quality Standards (WQS), and the recommendations of the TAC. As part of these updates, iron and magnesium were removed as benchmarks and have been deleted from Table 70-1 where present.</i></p> <p><i>Sector O (Steam Electric Generating Facilities) previously only had a benchmark for iron; thus, this sector is no longer subject to benchmark requirements.</i></p>
9VAC25-151-70. General Permit. Part I.A.1.b.(1)		(1) ... Depending on the results of four consecutive monitoring periods, benchmark monitoring may not be required to be conducted in subsequent monitoring periods (see Part I A 1 b (2)).	<i>This final sentence references the very next section. Deleted due to unnecessary duplication.</i>
9VAC25-151-70. General Permit. Part I.A.1.b.(1)(a)		(a) Samples were collected in four consecutive monitoring periods, and the average of the four samples for all parameters at the outfall is below the applicable benchmark concentration value in Part IV. Facilities that were covered under the 2014 industrial stormwater general permit may use sampling data from the last two monitoring periods of that permit and the first two monitoring periods of this permit to satisfy the four consecutive monitoring periods requirement;	<i>Revised date to 2019 to reference the previous permit term.</i>
9VAC25-151-70. General Permit. Part I.A.1.b.(1)(c)		(c) ... The waiver request shall be sent to the appropriate DEQ regional office, along with the supporting monitoring data for four consecutive monitoring	(c) ... and a certification that, based on current potential pollutant sources and control measures used, discharges from the facility are reasonably expected to be

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		<p>periods, and a certification that, based on current potential pollutant sources and control measures used, discharges from the facility are reasonably expected to be essentially the same (or cleaner) compared to when the benchmark monitoring for the four consecutive monitoring periods was done.</p>	<p>substantially similar or cleaner compared to when the benchmark monitoring for the four consecutive monitoring periods was done.</p> <p><i>Revised “essentially the same (or cleaner)” to “substantially similar or cleaner” to match the language used throughout the regulation.</i></p>
<p>9VAC25-151-70. General Permit. Part I.A.1.c.(1). Table 70-2</p>		<p>Table 70-2 Stormwater-Specific Effluent Limitation Guidelines.</p> <p>... Facilities subject to effluent limitation guidelines in 40 CFR Part 449 are not authorized under this permit.</p>	<p>... Facilities subject to the effluent limitation guidelines in 40 CFR Part 449 may be covered under Sector AD.</p> <p><i>Authorization for discharges from deicing operations at primary airports was removed in the 2019 general permit. However, a handful of non-hub primary airports were subsequently covered under Sector AD (Nonclassified Facilities/Stormwater Discharges Designated by the Department as Requiring Permits) in order to avoid the unnecessary costs and administrative burden of coverage under an Individual VPDES Permit.</i></p> <p><i>As such, Tables 50-1 and 70-2 of the regulation have been updated to clarify that primary airports subject to the referenced federal effluent limitation guidelines may be covered under Sector AD. Further, a new condition has been added to Part III of the general permit to address deicing and anti-icing operations.</i></p>
<p>9VAC25-151-70. General Permit. Part I.A.1.c.(3)</p>		<p>(3) ...Owners of facilities that are a source of the specified pollutant of concern to waters for which a TMDL wasteload allocation has been approved prior to the term of this permit will be notified as such by the department when they are</p>	<p>(3) ... Owners of facilities that are a source of the specified pollutant of concern to waters for which a TMDL wasteload allocation has been approved by the U.S. Environmental Protection Agency (EPA) before the term of this permit will be notified by the department when they are</p>

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		approved for coverage under the general permit.	approved for coverage under the general permit. <i>Clarified that TMDLs must be approved by EPA prior to the term of the permit.</i>
9VAC25-151-70. General Permit. Part I.A.1.c.(3)(a)		(a) Upon written notification from the department, facilities subject to TMDL wasteload allocations shall be required to monitor such the discharges to evaluate compliance with the TMDL requirements.	a) Upon written notification from the department, permittees shall monitor the discharges for the pollutant subject to TMDL wasteload allocation once every six months after coverage under the permit begins, unless another sampling frequency is determined by the department for polychlorinated biphenyls (PCBs). Monitoring begins with the first full monitoring period after the owner is granted coverage under the permit. Monitoring periods are specified in Part I A 2. <i>Sections (a) and (b) had duplicative language and have been combined. Subsequent sections of Part I.A.1.c.(3) renumbered.</i>
9VAC25-151-70. General Permit. Part I.A.1.c.(3)(d)	I.A.1.c(3)(c)	(d) If the pollutant subject to the TMDL wasteload allocation is below the quantitation level in all of the samples from the first four monitoring periods (i.e., the first two years of coverage under the permit) ...If the pollutant subject to the TMDL wasteload allocation is above the quantitation level in any of the samples from the first four monitoring periods, the permittee shall continue the scheduled TMDL monitoring throughout the term of the permit.	(c) If the pollutant subject to the TMDL wasteload allocation is below the quantitation level in all of the samples from the first four monitoring periods ...If the pollutant subject to the TMDL wasteload allocation is above the quantitation level in any of the samples from the first four monitoring periods, the permittee shall continue the scheduled TMDL monitoring. Applicable sampling data collected during the 2019 industrial stormwater general permit term may be used to satisfy all or part of the four monitoring periods requirement. <i>Deleted "(i.e., the first two years of coverage under the permit)" given that PCB monitoring likely has a different sampling frequency.</i>

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			<p><i>Added final sentence to allow previous sampling, if available, to be used to satisfy new TMDL monitoring requirements.</i></p>
<p>9VAC25-151-70. General Permit.</p>	<p>I.A.1.c(3)(d)</p>		<p>(d) Upon written notification from the department, facilities exceeding the TMDL wasteload allocation shall prepare and submit a pollutant minimization plan (PMP) designed to investigate the location and potential reduction of sources in the facility’s stormwater discharges. The PMP shall be developed and submitted to the department for approval within 180 days of the receipt of notification from the department. The PMP shall include the following items, as appropriate ...</p> <p><i>Added language requiring facilities exceeding a TMDL wasteload allocation to prepare and submit a pollutant minimization plan (PMP) upon notification from the department. The contents of a PMP are included in the new language.</i></p>
<p>9VAC25-151-70. General Permit. Part I.A.1.c.(4)</p>		<p>(4) Facilities discharging to an impaired water without an approved TMDL wasteload allocation. Owners of facilities that discharge to waters listed as impaired in the 2016 Final 305(b)/303(d) Water Quality Assessment Integrated Report ...</p>	<p><i>Updated date of the Water Quality Assessment Integrated Report to 2022 to reference the most recent version of the report.</i></p>
<p>9VAC25-151-70. General Permit. Part I.A.1.c.(4)(a)</p>		<p>(a) Upon written notification from the department, facilities discharging to an impaired water without an approved TMDL wasteload allocation shall be required to monitoring such discharges for the pollutants that caused the impairment.</p>	<p>(a) Upon written notification from the department, permittees shall monitor the discharges for all pollutants for which the waterbody is impaired, and for which a standard analytical method exists, at least once every six months after coverage under the permit begins, unless otherwise determined by the department for polychlorinated biphenyls (PCBs).</p>

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			<p>Monitoring begins with the first full monitoring period after the owner is granted coverage under the permit. Monitoring period are specified in Part I A 2.</p> <p><i>Sections (a) and (b) had duplicative language and have been combined. Following sections renumbered.</i></p> <p><i>Added that monitoring is to be done once every six months unless another frequency is determined by the department for PCBs.</i></p>
9VAC25-151-70. General Permit. Part I.A.2.b		b. When and how to sample. A minimum of one grab sample shall be taken from the discharge associated with industrial activity resulting from a storm event that results in a discharge from the site (defined as a “measurable storm event”), providing the interval from the preceding measurable storm event is at least 72 hours ...	<p>b. When and how to sample. A minimum of one grab sample shall be taken from the discharge associated with industrial activity resulting from a storm event that results in a discharge from the site, providing the interval from the preceding storm event discharge is at least 72 hours ...</p> <p><i>Deleted parenthetical “measurable storm event” definition and replaced associated references with “storm event discharge”. Samples are required when a storm event results in a discharge.</i></p>
9VAC25-151-70. General Permit. Part I.A.2.c		c. Storm event data. For each monitoring event (except snowmelt monitoring), along with the monitoring results, the permittee shall identify the date and duration (in hours) of the storm events sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the duration between the storm event sampled and the end of the previous measurable storm event. For snowmelt monitoring, the permittee shall identify the date of the sampling event.	<p>c. Storm event data. For each monitoring event (except snowmelt monitoring), along with the monitoring results, the permittee shall identify the date of the storm event sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the interval between the storm event sampled and the end of the previous storm event discharge. For snowmelt monitoring, the permittee shall identify the date of the sampling event.</p> <p><i>Removed requirement to report the duration (in hours) of the storm event. Replaced “measurable</i></p>

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			<i>storm event” with “storm event discharge”.</i>
9VAC25-151-70. General Permit. Part I.A.2.e		e. Documentation explaining a facility’s inability to obtain a sample (including dates and times the outfalls were viewed or sampling was attempted), of no rain event, or of deviation from the “measurable” storm event requirements shall be maintained with the SWPPP ...	e. Documentation explaining a facility’s inability to obtain a sample (including dates and times the outfalls were viewed or sampling was attempted), of no rain event, or of deviation from the 72-hour storm interval shall be submitted with the e-DMR and maintained with the SWPPP. <i>Replaced “measurable storm event requirements” with “72-hour storm interval”. Added that the documentation must be submitted with the e-DMR in addition to being maintained with the SWPPP.</i>
9VAC25-151-70. General Permit. Part I.A.6.a		a. Data exceeding benchmark concentration values ...	a. The permittee shall take corrective action whenever: ... <i>Part I.A.6 Corrective actions sections a. and b. were reorganized and duplicative language was removed for clarification purposes.</i> <i>There are no substantive changes to the regulatory requirements of this section.</i>
9VAC25-151-70. General Permit. Part I.A.6.c		c. Follow-up reporting ...Within 30 calendar days of implementing the relevant corrective action, an exceedance report shall be submitted to the department.	c. Follow-up reporting ...Within 30 calendar days of implementing the relevant corrective action, an exceedance report shall be submitted to the department and shall be signed in accordance with Part II K. <i>Added language requiring that exceedance reports submitted to the department must be signed in accordance with Part II K.</i>
9VAC25-151-70. General Permit. Part I.B.1.a		a. Discharges from emergency firefighting activities;	a. Discharges from emergency firefighting activities or firefighting training activities managed in a manner to avoid an instream

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			<p>impact in accordance with § 9.1-207.1 of the Code of Virginia;</p> <p><i>Added firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia.</i></p>
<p>9VAC25-151-70. General Permit. Part I.B.1.g</p>		<p>g. Routine external building washdown that does not use detergents or hazardous cleaning products;</p>	<p>g. Routine external building washdown provided no soaps, solvents or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled, or similarly treated prior to discharge.</p> <p><i>Revised for consistency with the Construction Stormwater general permit language (9VAC25-880-30) and in response to EPA comments.</i></p> <p><i>The previous proposed language required that routine external building washdown be “managed in a manner to avoid an instream impact.” The revisions replace that language and clarify what it means.</i></p>
<p>9VAC25-151-70. General Permit. Part I.B.1.h</p>		<p>h. Pavement wash waters where no detergents or hazardous cleaning products are used and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed). Pavement wash waters shall be managed in a manner to avoid an instream impact;</p>	<p>h. Pavement wash waters provided no soaps, solvents, detergents or hazardous cleaning products are used, and no spills or leaks of toxic or hazardous materials have occurred (unless all spilled or leaked material is removed prior to washing), and the wash water is filtered, settled, or similarly treated prior to discharge.</p> <p><i>Revised for consistency with the Construction Stormwater general permit language (9VAC25-880-30) and in response to EPA comments.</i></p> <p><i>The previous language required that pavement wash waters be “managed in a manner to avoid an</i></p>

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			<i>instream impact.” The revisions replace that language and clarify what it means</i>
9VAC25-151-70. General Permit. Part I.B.7		7. Discharges to waters subject to TMDL wasteload allocations. Owners of facilities that are a source of the specified pollutant of concern to waters for which a TMDL wasteload allocation has been approved prior to the term of this permit shall incorporate measures and controls into the SWPPP ...	7. Discharges to waters subject to TMDL wasteload allocations. Owners of facilities that are a source of the specified pollutant of concern to waters for which a TMDL wasteload allocation has been approved by EPA prior to the term of this permit shall incorporate measures and controls into the SWPPP ... <i>Clarified that TMDLs must be approved by EPA prior to the term of the permit.</i>
9VAC25-151-70. General Permit. Part I.B.8		8. Discharges to waters subject to the Chesapeake Bay TMDL.	<i>The entirety of the Chesapeake Bay TMDL conditions are moved to a new Part V (9VAC25-151-400) in order to simplify the general permit. Substantive changes to the requirements are described later in this document.</i> <i>Subsequent sections of Part I.B renumbered.</i>
9VAC25-151-70. General Permit. Part I.B.10.a	Part I.B.9.a	a. For any industrial activity area expansions (i.e., construction activities, including clearing, grading, and excavation activities) that commence on or after July 1, 2019, (the effective date of this permit), the permittee shall document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded land area prior to the land being developed, and the measures and controls that were employed to meet the no net increase of stormwater nutrient and sediment load as a result of the expansion of the industrial activity.	A. For any industrial activity area expansions (i.e., construction activities, including clearing, grading, and excavation activities) that begin on or after July 1, 2024, the permittee shall document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded land area before the land was developed, and the measures and controls that were employed to meet the no net increase of stormwater nutrient and sediment load as a result of the expansion of the industrial activity. <i>Updated date to July 1, 2024 and deleted parenthetical reference to the effective date of the permit.</i>

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9VAC25-151-70. General Permit. Part II.H		H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a bypass or upset should occur from a treatment works and the discharge enters or could be expected to enter state waters, the permittee shall promptly notify, in no case later than 24 hours, the department by telephone after the discovery of the discharge ...	<i>Deleted "by telephone". Part II.1.3 handles the various options for reports of noncompliance, which includes phone, and the online Pollution Response Preparedness (PreP) portal.</i>
9VAC25-151-70. General Permit. Part II.1.1.a		a. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances ...	<i>Deleted "oral". Part II.1.3 handles the various options for reports of noncompliance, which includes phone, and the online Pollution Response Preparedness (PreP) portal.</i>
9VAC25-151-70. General Permit. Part II.1.3		3. The immediate (with 24 hours) reports required in Part II G, H and I may be made to the department's regional office. Reports may be made by telephone, or online at [old weblink here]. For reports outside normal working hours, a message may be left and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Management maintains a 24-hour telephone service at 1-800-468-8892.	3. The immediate (with 24 hours) reports required in Part II G, H and I shall be made to the department's regional office. Reports may be made by telephone, or online at https://www.deq.virginia.gov/get-involved/pollution-response . For reports outside normal working hours, the online portal shall be used. For emergencies, call the Virginia Department of Emergency Management's Emergency Operations Center (24-hours) at 1-800-468-8892. <i>Clarified that the referenced immediate reports shall be made to the department's regional office. Updated link to the online Pollution Response Preparedness (PreP) portal. Clarified that the online portal shall be used for reports outside of normal working hours.</i>
9VAC25-151-80. Stormwater Pollution Prevention		1. Facilities that were covered under the 2014 Industrial Stormwater General Permit. Owners of facilities that were covered under the 2014 Industrial Stormwater General	<i>Updated dates to reference the 2019 general permit.</i>

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Plans. Part III.A.1		Permit who are continuing coverage under this general permit shall update and implement any revisions to the SWPPP within 90 days of the board granting coverage under this permit.	
9VAC25-151-80. Stormwater Pollution Prevention Plans. Part III.B	Part III.B.10		<p>(10) Airport deicing operations. The permittee shall minimize, and where practicable eliminate, the use of deicing or anti-icing chemicals in order to reduce the aggregate amount of deicing or anti-icing chemicals used and lessen the environmental impact.</p> <p>...</p> <p><i>“Airport deicing operations” are included in the list of “industrial activity” in the Definitions section (9VAC25-151-10). However, permittees typically only receive the “general permit” section of the regulation and may not be aware that it is a covered industrial activity.</i></p> <p><i>This condition has been added to the general SWPPP section in order to make it clear that deicing operations are covered by the general permit (non-primary airports are covered under Sector AE, primary airports may covered under Sector AD) and to provide some control measure options for consideration.</i></p> <p><i>This condition is based on language in the 2021 EPA MSGP and language used for “Sector S” in previous iterations of the general permit.</i></p>
9VAC25-151-80. Stormwater Pollution Prevention		... If routine facility inspections required by Part III B 5 identify control measures that are not operating effectively, repairs or maintenance shall be performed before the next	... If routine facility inspections required by Part III B 5 identify control measures that are not operating effectively, repairs or maintenance shall be performed before the next anticipated storm

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Plan. Part III.C (Maintenance)		anticipated storm event. If maintenance prior to the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable. ...	<p>event. If maintenance before the next anticipated storm event is not possible, maintenance shall be scheduled and accomplished as soon as practicable, but not later than within 60 days of the inspection, unless permission for a later date is granted in writing by the director. ...</p> <p><i>Part III.B.5 (Routine facility inspections) requires that deficiencies in the implementation of the SWPPP that are found during routine inspections shall be corrected as soon as practicable, "but not later than within 60 days of the inspection, unless permission for a later date is granted in writing by the director." This language has been added to Part III.C (Maintenance) in response to EPA comments to clarify that maintenance issues identified during the routine inspections are also subject to these requirements.</i></p>
9VAC25-151-80. Stormwater Pollution Prevention Plans. Part III.E.2		2. Availability. The permittee shall retain a copy of the current SWPPP required by this permit at the facility ...	<p>2. Availability. The permittee shall retain a copy of the current SWPPP (hard copy or electronic) required by this permit at the facility ...</p> <p><i>Clarified that copies of the SWPPP retained onsite may be either in hard copy or in electronic format.</i></p>
9VAC25-151-90 through 9VAC25-390. Sector-Specific Permit Requirements. Part IV			<p><i>Sector-specific benchmark monitoring parameters were updated in accordance with EPA's 2021 MSGP, the Virginia Water Quality Standards (WQS), and the recommendations of the TAC.</i></p> <p><i>Benchmark concentrations <u>are not effluent limitations</u> and should not be interpreted as such. These values are merely levels to determine if a stormwater discharge merits further monitoring</i></p>

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			<p><i>to ensure that the facility has been successful in implementing a SWPPP.</i></p> <p><i>The following benchmarks were changed, where applicable:</i></p> <p><i>Aluminum: Updated to match the 2021 MSGP benchmark (1.10 mg/L). There is no Virginia WQS for aluminum.</i></p> <p><i>Arsenic: Updated to match the 2021 MSGP benchmark, which matches the chronic criteria in the current Virginia WQS (0.150 mg/L).</i></p> <p><i>Cadmium: Updated to match the 2021 MSGP benchmark, which matches the acute criteria in the current Virginia WQS (0.0018 mg/L).</i></p> <p><i>Copper: EPA’s copper benchmark (0.00519 mg/L) in the 2021 MSGP is based on the biotic ligand model. This model was not adopted by Virginia for copper in the 2022 rulemaking (Triennial Review) of the WQS. Thus, the copper benchmark was updated to match the current acute criteria in the Virginia WQS (0.013 mg/L).</i></p> <p><i>Iron: Removed. EPA removed iron as a benchmark in the 2021 MSGP due to lack of acute toxicity. There is no acute criteria for iron in the Virginia WQS.</i></p> <p><i>Lead: Updated to match the 2021 MSGP benchmark (0.082 mg/L), which is slightly lower than the acute criteria in the current Virginia WQS (0.094 mg/L).</i></p> <p><i>Magnesium: Removed. EPA removed magnesium as a benchmark in the 2021 MSGP due to lack of acute toxicity. There is no Virginia WQS for magnesium.</i></p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p><i>Silver: Updated to match the 2021 MSGP benchmark (0.0032 mg/L), which is slightly lower than the acute criteria in the current Virginia WQS (0.0034 mg/L).</i></p>
<p>9VAC25-151-220. Sector O. Steam electric generating facilities.</p>		<p>C. Numeric effluent limitations. Permittees with point sources of coal pile runoff associated with steam electric power generation shall monitor these stormwater discharges for the presence of TSS and for pH at least annually in accordance with Part I A 1 c (2).</p>	<p>C. Numeric effluent limitations. Permittees with point sources of coal pile runoff associated with steam electric power generation shall monitor these stormwater discharges for the presence of TSS and for pH in accordance with Part I A 1 c (2).</p> <p><i>This section references the numeric effluent limitations for coal pile runoff listed in Table 70-3 under Part I.A.1.c(2), which includes a monitoring frequency of 1/6 months for both TSS and pH.</i></p> <p><i>As such, the phrase “at least annually” has been removed from the language under 9VAC25-151-220 C for consistency.</i></p>
<p>9VAC25-151-220. Sector O. Steam electric generating facilities.</p>		<p>D. Benchmark monitoring and reporting requirements.</p>	<p><i>Removed. Sector O previously only had a benchmark for iron; thus, this sector is no longer subject to benchmark requirements.</i></p>
<p>9VAC25-151-370. Sector AD (Nonclassified facilities or stormwater discharges designated by the department as requiring permits). B.</p>		<p>B. Benchmark monitoring and reporting requirements. The board shall establish any additional monitoring requirements for your facility prior to authorizing coverage under this permit.</p>	<p>B. Effluent limitations, benchmark monitoring and reporting requirements. The department shall establish any additional monitoring requirements for your facility before authorizing coverage under this permit.</p> <p><i>The heading of this section was modified to clarify that the establishment of “additional monitoring requirements” by the department for facilities covered under this Sector may include effluent limitations (i.e. federal effluent guidelines).</i></p> <p><i>This change was made in</i></p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<i>response to EPA comments regarding coverage of primary airports.</i>
9VAC25-151-380. Sector AE (Facilities with no analytical benchmark monitoring requirements). A.		A. Discharges covered under this section. The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities with SIC Codes 2611, 2621, 2652 2657, 2833 2836, 2851, 2861 2869, 2891 2899, 3952, 3211, 3221, 3229, 3231, 3241, 3281, 3291 3299, 3331 3339, 3398, 3399, 3341, 1311, 1321, 1381 1389, 2911, 4512 4581, ...	<p>A. Discharges covered under this section. The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities with SIC Codes 2611, 2621, 2652-2657, 2833-2836, 2851, 2861-2869, 2891-2899, 3952, 3211, 3221, 3229, 3231, 3241, 3281, 3291-3299, 3331-3339, 3398, 3399, 3341, 1311, 1321, 1381-1389, 2911, 4512-4581 (not subject to federal effluent guidelines) ...</p> <p><i>A parenthetical note was added to SIC codes 4512-4281 (Air Transportation Facilities) to clarify that such facilities may only be covered under this Sector if they are not subject to federal effluent guidelines.</i></p> <p><i>This change was made in response to EPA comments regarding coverage of primary airports.</i></p>
	9VAC25-151-400. Chesapeake Bay Total Maximum Daily Load Compliance. Part V.		<p><i>The entirety of the chesapeake Bay TMDL conditions are moved to this new Part V of the general permit. Changes to the conditions are as follows:</i></p> <p><i>The monitoring frequency has been changed to quarterly in order to meet the December 31, 2025 deadline of the Chesapeake Bay TMDL.</i></p> <p><i>TSS reduction requirements have been removed in accordance with Virginia's Final Phase III Watershed Implementation Plan (WIP) based on the recommendations of the 2019</i></p>

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			<p><i>Chesapeake Bay Program Principals' Staff Committee.</i></p> <p><i>Requirements are now separated into three distinct categories depending on the status of a facility's demonstration of compliance with the Chesapeake Bay TMDL nutrient loading rates:</i></p> <p><i>(1) Existing facilities under the 2019 permit that have already demonstrated compliance,</i></p> <p><i>(2) Existing facilities under the 2019 permit that have <u>not</u> demonstrated compliance, and</i></p> <p><i>(3) Existing facilities that obtain initial coverage under the 2024 permit.</i></p> <p><i>Existing facilities registered under the 2019 permit after June 30, 2022, are subject to the same requirements as facilities obtaining initial coverage under the 2024 permit.</i></p> <p><i>Facilities that have already demonstrated compliance with the nutrient loading rates are to maintain documentation of the demonstration with SWPPP and continue to implement any BMPs developed as part of the demonstration.</i></p> <p><i>Reductions for existing facilities under the 2019 permit, if applicable, are to be achieved by December 31, 2025. Additionally, facilities with TMDL Action Plans that did not meet the required reductions by the end of the 2019 permit term shall update and resubmit their action plan within 60 days of coverage. Permittees shall achieve ten percent of the remaining reductions by December 31, 2024, and all remaining reductions by December 31, 2025.</i></p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p><i>Reductions for existing facilities that obtain initial coverage under the 2024 permit, if applicable, are to be achieved two years following the fourth quarterly monitoring period.</i></p> <p><i>Facilities may use applicable sampling data collected during the 2019 permit term to satisfy all or part of their monitoring requirements.</i></p> <p><i>Alternative calculations may be proposed on a case-by-case basis to address facilities with outfalls that rarely discharge.</i></p>

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

This general permit does not predominantly apply to small businesses, rather, this general permit regulation governs point source discharges of stormwater associated with industrial activity to surface waters. Nevertheless, the reissuance of this VPDES general permit accomplishes the objectives of applicable law and minimizes the application burden and permit implementation costs to affected small business owners. Without the general permit, a small business owner would be required to obtain an individual permit, which would increase the complexity of a permit application, implementation, and compliance costs.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the

assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

This general permit applies to point source discharges of stormwater associated with industrial activity to surface waters and has been designed to minimize burden while achieving a level of water quality protection consistent with state and federal requirements. This regulatory action does not address and will have no direct impact on 1) the authority and rights of parents, 2) economic self-sufficiency, self-pride, or assumption of familial responsibilities, 3) marital commitments, or 4) disposable family income.

1 **Project 7009 - Exempt Final**

2 **State Water Control Board**

3 **2024 Amendment and Reissuance of the VPDES Industrial Stormwater General Permit**
4 **Regulation**

5 **9VAC25-151-10. Definitions.**

6 The words and terms used in this chapter shall have the meanings defined in the State
7 Water Control Law (§ 62.1-44.2 et seq. of the Code of Virginia) and the VPDES Permit
8 Regulation (9VAC25-31) unless the context clearly ~~indicates~~ shows otherwise, except that for
9 the purposes of this chapter:

10 "Best management practices" or "BMPs" means schedules of activities, practices,
11 prohibitions of practices, structures, vegetation, maintenance procedures, and other
12 management practices, including both structural and nonstructural practices, to prevent or
13 reduce the discharge of pollutants to surface waters.

14 "Board" means the Virginia State Water Control Board or State Water Control Board. When
15 used outside the context of the promulgation of regulations, including regulations to establish
16 general permits, "board" means the Department of Environmental Quality.

17 "Closed landfill" means a landfill that, on a permanent basis, will no longer receive waste
18 and has completed closure in accordance with applicable federal, state, or local requirements.

19 "Coal pile runoff" means the rainfall runoff from or through any coal storage pile.

20 "Colocated industrial activity" means any industrial activity, excluding the facility's primary
21 industrial activity, located on-site that meets the description of a category included in the
22 "industrial activity" definition. An activity at a facility is not considered colocated if the activity,
23 when considered separately, does not meet the description of a category included in the
24 "industrial activity" definition or identified by the Standard Industrial Classification (SIC) code list
25 in Table 50-2 in 9VAC25-151-50.

26 "Commercial treatment and disposal facilities" means facilities that receive, on a commercial
27 basis, any produced hazardous waste (not their own) and treat or dispose of those wastes as a
28 service to the generators. ~~Such~~ The facilities treating or disposing exclusively residential
29 hazardous wastes are not included in this definition.

30 "Control measure" means any best management practice or other method (including effluent
31 limitations) used to prevent or reduce the discharge of pollutants to surface waters.

32 "Corrective action" means any action to (i) repair, modify, or replace any stormwater control
33 used at the facility; (ii) clean up and properly dispose of spills, releases, or other deposits at the
34 facility; or (iii) return to compliance with permit requirements.

35 "Department" or "DEQ" means the Department of Environmental Quality.

36 "Director" means the Director of the Department of Environmental Quality or an authorized
37 representative.

38 "Existing discharger" means an operator applying for coverage under this permit for
39 discharges authorized previously under a VPDES general or individual permit.

40 "Impaired water" means, for purposes of this chapter, a water that has been identified by
41 Virginia pursuant to § 303(d) of the Clean Water Act as not meeting applicable water quality
42 standards (these waters are called "water quality limited segments" under 40 CFR 30.2(j)).
43 Impaired waters include both waters with approved or established TMDLs, and those for which
44 a TMDL has not yet been approved or established.

45 "Impervious surface" means a surface composed of any material that significantly impedes
46 or prevents natural infiltration of water into the soil.

47 "Industrial activity" - the following categories of facilities are considered to be engaging in
48 "industrial activity":

49 1. Facilities subject to stormwater effluent limitations guidelines, new source
50 performance standards, or toxic pollutant effluent standards under 40 CFR Subchapter
51 N (except facilities with toxic pollutant effluent standards ~~which~~ that are exempted under
52 category 10 of this definition);

53 2. Facilities classified as Standard Industrial Classification (SIC) 24 (except 2434), 26
54 (except 265 and 267), 28 (except 283 and 285), 29, 311, 32 (except 323), 33, 3441, and
55 373 (Office of Management and Budget (OMB) SIC Manual, 1987);

56 3. Facilities classified as SIC 10 through 14 (mineral industry) (OMB SIC Manual, 1987)
57 including active or inactive mining operations (except for areas of coal mining operations
58 no longer meeting the definition of a reclamation area under 40 CFR 434.11(l) because
59 the performance bond issued to the facility by the appropriate Surface Mining Control
60 and Reclamation Act of 1977 (SMCRA) (30 USC § 1201 et seq.) authority has been
61 released, or except for areas of noncoal mining operations ~~which~~ that have been
62 released from applicable state or federal reclamation requirements after December 17,
63 1990) and oil and gas exploration, production, processing, or treatment operations, or
64 transmission facilities that discharge stormwater contaminated by contact with or that
65 has come into contact with, any overburden, raw material, intermediate products,
66 finished products, byproducts, or waste products located on the site of ~~such~~ the
67 operations (inactive mining operations are mining sites that are not being actively mined,
68 but ~~which~~ have an identifiable owner or operator; inactive mining sites do not include
69 sites where mining claims are being maintained ~~prior to~~ before disturbances associated
70 with the extraction, beneficiation, or processing of mined materials, nor sites where
71 minimal activities are undertaken for the sole purpose of maintaining a mining claim);

72 4. Hazardous waste treatment, storage, or disposal facilities, including those that are
73 operating under interim status or a permit under Subtitle C of the Resource Conservation
74 and Recovery Act (RCRA) (42 USC § 6901 et seq.);

75 5. Landfills, land application sites, and open dumps that receive or have received any
76 industrial wastes (waste that is received from any of the facilities described under this
77 definition, and debris or wastes from VPDES regulated construction activities or sites),
78 including those that are subject to regulation under Subtitle D of RCRA;

79 6. Facilities involved in the recycling of materials, including metal scrapyards, battery
80 reclaimers, salvage yards, and automobile junkyards, including ~~but limited to~~ those
81 classified as Standard Industrial Classification Codes 5015 and 5093 (OMB SIC Manual,
82 1987);

83 7. Steam electric power generating facilities, including coal handling sites;

84 8. Transportation facilities classified as SIC Codes 40, 41, 42 (except 4221-4225), 43,
85 44, 45, and 5171 (OMB SIC Manual, 1987) ~~which~~ that have vehicle maintenance shops,
86 equipment cleaning operations, or airport deicing operations. Only those portions of the
87 facility that are either involved in vehicle maintenance (including vehicle rehabilitation,
88 mechanical repairs, painting, fueling, and lubrication), equipment cleaning operation,
89 airport deicing operation, or ~~which~~ that are otherwise identified under categories 1
90 through 7 or 9 and 10 of this definition are associated with industrial activity;

91 9. Treatment works treating domestic sewage or any other sewage sludge or wastewater
92 treatment device or system used in the storage treatment, recycling, and reclamation of

93 municipal or domestic sewage, including land dedicated to the disposal of sewage
94 sludge that is located within the confines of the facility, with a design flow of 1.0 MGD or
95 more, or required to have an approved publicly owned treatment works (POTW)
96 pretreatment program under 9VAC25-31. Not included are farm lands, domestic gardens
97 or lands used for sludge management where sludge is beneficially reused and ~~which~~
98 that are not physically located in the confines of the facility, or areas that are in
99 compliance with 9VAC25-31-420 through ~~9VAC25-31-720~~ 9VAC25-31-720; and

100 10. Facilities under SIC Codes 20, 21, 22, 23, 2434, 25, 265, 267, 27, 283, 285, 30, 31
101 (except 311), 323, 34 (except 3441), 35, 36, 37 (except 373), 38, 39, 4221-4225 (OMB
102 SIC Manual, 1987).

103 "Industrial stormwater" means stormwater runoff from industrial activity.

104 "Land application unit" means an area where wastes are applied onto or incorporated into
105 the soil surface (excluding manure spreading operations) for treatment or disposal.

106 "Landfill" means an area of land or an excavation in which wastes are placed for permanent
107 disposal, and that is not a land application unit, surface impoundment, injection well, or waste
108 pile.

109 ~~"Measurable storm event" means a storm event that results in a discharge from an outfall.~~

110 "Minimize" means reduce or eliminate to the extent achievable using control measures
111 (including best management practices) that are technologically available and economically
112 practicable and achievable in light of best industry practice.

113 "Municipal separate storm sewer system" or "MS4" means a conveyance or system of
114 conveyances (including roads with drainage systems, municipal streets, catch basins, curbs,
115 gutters, ditches, man-made channels, or storm drains): (i) owned or operated by a state, city,
116 town, borough, county, parish, district, association, or other public body (created by or pursuant
117 to state law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other
118 wastes, including special districts under state law ~~such as~~ (e.g., a sewer district, flood control
119 district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal
120 organization, or a designated and approved management agency under § 208 of the Clean
121 Water Act that discharges to surface waters of the state); (ii) designed or used for collecting or
122 conveying stormwater; (iii) ~~which~~ that is not a combined sewer; and (iv) ~~which~~ that is not part of
123 a POTW.

124 "No exposure" means all industrial materials or activities are protected by a storm-resistant
125 shelter to prevent exposure to rain, snow, snowmelt, or runoff.

126 "Primary industrial activity" includes any activities performed on-site that are:

127 1. Identified by the facility's primary SIC code; or

128 2. Included in the narrative descriptions of the definition of "industrial activity."

129 Narrative descriptions in the "industrial activity" definition include: category 1 activities
130 subject to stormwater effluent limitations guidelines, new source performance standards,
131 or toxic pollutant effluent standards; category 4 hazardous waste treatment storage or
132 disposal facilities, including those that are operating under interim status or a permit
133 under subtitle C of the Resource Conservation and Recovery Act (RCRA); category 5
134 landfills, land application sites, and open dumps that receive or have received industrial
135 wastes; category 7 steam electric power generating facilities; and category 9 sewage
136 treatment works with a design flow of 1.0 mgd or more.

137 For colocated activities covered by multiple SIC codes, the primary industrial determination
138 should be based on the value of receipts or revenues, or, if ~~such~~ the information is not available
139 for a particular facility, the number of employees or production rate for each process may be
140 compared. The operation that generates the most revenue or employs the most ~~personnel~~ staff

141 is the operation in which the facility is primarily engaged. In situations where the vast majority of
142 on-site activity falls within one SIC code, that activity may be the primary industrial activity.

143 "Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as
144 runoff.

145 "Significant materials" includes raw materials; fuels; materials ~~such as~~ (e.g., solvents,
146 detergents, and plastic pellets); finished materials ~~such as~~ (e.g., metallic products); raw
147 materials used in food processing or production; hazardous substances designated under §
148 101(14) of the Comprehensive Environmental Response, Compensation and Liability Act
149 (CERCLA) (42 USC § 9601 et seq.); any chemical the facility is required to report pursuant to
150 the Emergency Planning and Community Right-to-Know Act (EPCRA) § 313; fertilizers;
151 pesticides; and waste products ~~such as~~ (e.g., ashes, slag and sludge) that have the potential to
152 be released with stormwater discharges.

153 "Significant spills" includes releases of oil or hazardous substances in excess of reportable
154 quantities under § 311 of the Clean Water Act (see 40 CFR 110.10 and 40 CFR 117.21) or §
155 102 of CERCLA (see 40 CFR 302.4).

156 "Site" means the land or water area where any facility or activity is physically located or
157 conducted, including adjacent land used in connection with the facility or activity.

158 "Stormwater" means stormwater runoff, snow melt runoff, and surface runoff and drainage.

159 "Stormwater discharge associated with industrial activity" means the discharge from any
160 conveyance that is used for collecting and conveying stormwater and that is directly related to
161 manufacturing, processing, or raw materials storage areas at an industrial plant. The term does
162 not include discharges from facilities or activities excluded from the VPDES program under
163 9VAC25-31. For the categories of industries identified in the "industrial activity" definition, the
164 term includes stormwater discharges from industrial plant yards; immediate access roads and
165 rail lines used or traveled by carriers of raw materials, manufactured products, waste material,
166 or ~~by products~~ byproducts used or created by the facility; material handling sites; refuse sites;
167 sites used for the application or disposal of process wastewaters; sites used for the storage and
168 maintenance of material handling equipment; sites used for residual treatment, storage, or
169 disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank
170 farms) for raw materials, and intermediate and final products; and areas where industrial activity
171 has taken place in the past and significant materials remain and are exposed to stormwater. For
172 the purposes of this definition, material handling activities include the storage, loading and
173 unloading, transportation, or conveyance of any raw material, intermediate product, final
174 product, ~~by-product~~ byproduct, or waste product. The term excludes areas located on plant
175 lands separate from the plant's industrial activities, ~~such as~~ (e.g., office buildings and
176 accompanying parking lots,) as long as the drainage from the excluded areas is not mixed with
177 stormwater drained from ~~the above these~~ described areas. Industrial facilities include those that
178 are federally, state, or municipally owned or operated that meet the description of the facilities
179 listed in the "industrial activity" definition. The term also includes those facilities designated
180 under the provisions of 9VAC25-31-120 A 1 c, or under 9VAC25-31-120 A 7 a (1) or (2) of the
181 VPDES Permit Regulation.

182 "SWPPP" means stormwater pollution prevention plan.

183 "Total maximum daily load" or "TMDL" means a calculation of the maximum amount of a
184 pollutant that a waterbody can receive and still meet water quality standards, and an allocation
185 of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for
186 point source discharges, and load allocations (LAs) for nonpoint sources or natural background,
187 and must include a margin of safety (MOS) and account for seasonal variations.

188 "Virginia Environmental Excellence Program" or "VEEP" means a voluntary program
189 established by the department to provide public recognition and regulatory incentives to

190 encourage higher levels of environmental performance for program participants that develop
191 and implement environmental management systems (EMSs). The program is based on the use
192 of EMSs that improve compliance, prevent pollution, and utilize other measures to improve
193 environmental performance.

194 "Waste pile" means any noncontainerized accumulation of solid, nonflowing waste that is
195 used for treatment or storage.

196 **9VAC25-151-15. Applicability of incorporated references based on the dates that they**
197 **became effective.**

198 Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in
199 Title 40 CFR is referenced and incorporated ~~herein~~ into this chapter, that regulation shall be as
200 it exists and has been published as of July 1, 2018 [2022 2023] .

201 **9VAC25-151-40. Effective date of the permit.**

202 This general permit will become effective on July 1, 2019 2024. This general permit will
203 expire on June 30, 2024 2029.

204 **9VAC25-151-50. Authorization to discharge.**

205 A. To be eligible to discharge under this permit, an owner must (i) have a stormwater
206 discharge associated with industrial activity from the facility's primary industrial activity, as
207 defined in 9VAC25-151-10 (Definitions), provided the primary industrial activity is included in
208 Table 50-2 of this section; or (ii) be notified that discharges from the facility have been
209 designated by the ~~board~~ department for permitting under the provisions of 9VAC25-31-120 A 1
210 c; or under 9VAC25-31-120 A 7 a (1) or (2) of the VPDES Permit Regulation; and are eligible for
211 coverage under Sector AD of this permit.

212 Any owner governed by this general permit is hereby authorized to discharge stormwater
213 associated with industrial activity, as defined in this chapter, to surface waters of the
214 Commonwealth of Virginia provided that:

- 215 1. The owner submits a registration statement in accordance with 9VAC25-151-60, and
216 that registration statement is accepted by the ~~board~~ department;
- 217 2. The owner submits the required permit fee;
- 218 3. The owner complies with the applicable requirements of 9VAC25-151-70 et seq.; and
- 219 4. The ~~board~~ department has not notified the owner that the discharge is ineligible for
220 coverage in accordance with subsection B of this section.

221 B. The ~~board~~ department will notify an owner that the discharge is not eligible for coverage
222 under this general permit in the event of any of the following:

- 223 1. The owner is required to obtain an individual permit in accordance with 9VAC25-31-
224 170 B 3 of the VPDES Permit Regulation;
- 225 2. The owner is proposing to discharge to state waters specifically named in other board
226 regulations that prohibit such discharges;
- 227 3. The discharge violates or would violate the antidegradation policy in the Water Quality
228 Standards at 9VAC25-260-30; or
- 229 4. The discharge is not consistent with the assumptions and requirements of an
230 approved TMDL. Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation
231 Plan (November 29, 2010) states that wasteloads for future growth for new facilities in
232 the Chesapeake Bay watershed with industrial stormwater discharges cannot exceed
233 the nutrient and sediment loadings that were discharged ~~prior to~~ before the land being
234 developed for the new industrial activity. For purposes of this permit regulation, facilities
235 that ~~commence~~ begin construction after June 30, 2019 2024, must be consistent with
236 this requirement to be eligible for coverage under this general permit.

237 C. Additional conditions.

- 238 1. Facilities with colocated industrial activities on-site shall comply with all applicable
239 effluent limitations, monitoring, and SWPPP requirements of each section of 9VAC25-
240 151-70 et seq. in which a colocated industrial activity is described.
- 241 2. Stormwater discharges associated with industrial activity that are mixed with other
242 discharges (~~both i.e.,~~ stormwater and nonstormwater) requiring a VPDES permit are
243 authorized by this permit, provided that the owner obtains coverage under this VPDES
244 general permit for the industrial activity discharges, and a VPDES general or individual
245 permit for the other discharges. The owner shall comply with the terms and requirements
246 of each permit ~~obtained~~ that authorizes any component of the discharge.
- 247 3. The stormwater discharges authorized by this permit may be combined with other
248 sources of stormwater ~~which that~~ are not required to be covered under a VPDES permit,
249 so long as the combined discharge is in compliance with this permit.
- 250 4. Authorized nonstormwater discharges. The following "nonstormwater" discharges are
251 authorized by this permit:
- 252 a. Discharges from emergency firefighting activities or firefighting training activities
253 managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of
254 the Code of Virginia;
 - 255 b. Fire hydrant flushing, managed in a manner to avoid an instream impact;
 - 256 c. Potable water, including water line flushing, managed in a manner to avoid an
257 instream impact;
 - 258 d. Uncontaminated condensate from air conditioners, coolers, and other
259 compressors and from the outside storage of refrigerated gases or liquids;
 - 260 e. Irrigation drainage;
 - 261 f. Landscape watering provided all pesticides, herbicides, and fertilizers have been
262 applied in accordance with the approved labeling;
 - 263 g. Pavement wash waters [~~where provided~~] no [soaps, solvents,] detergents or
264 hazardous cleaning products are used [~~and~~] no spills or leaks of toxic or
265 hazardous materials have occurred (unless all spilled [or leaked] material [~~has~~ is]
266 removed [prior to washing]) [~~Pavement wash waters shall be managed~~
267 ~~in a manner to avoid an instream impact~~ , and the wash water is filtered, settled, or
268 similarly treated prior to discharge.];
 - 269 h. Routine external building washdown [~~that does not use provided no soaps,~~
270 solvents or] detergents [~~or hazardous cleaning products and is managed in a~~
271 ~~manner to avoid an instream impact~~ are used, external building surfaces do not
272 contain hazardous substances, and the wash water is filtered, settled, or similarly
273 treated prior to discharge];
 - 274 i. Uncontaminated groundwater or spring water;
 - 275 j. Foundation or footing drains where flows are not contaminated with process
276 materials; and
 - 277 k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent
278 portions of the facility, but not intentional discharges from the cooling tower (e.g.,
279 "piped" cooling tower blowdown or drains).
- 280 5. Stormwater discharges associated with construction activity that are regulated under a
281 VPDES permit are not authorized by this permit.
- 282 6. Discharges subject to stormwater effluent limitation guidelines under 40 CFR
283 Subchapter N (Effluent Guidelines and Standards). ~~Only these stormwater discharges~~

284 ~~subject to stormwater effluent limitation guidelines under 40 CFR Subchapter N that are~~
 285 ~~only eligible for coverage under this permit if they are identified in Table 50-1 of this~~
 286 ~~subsection are eligible for coverage under this permit.~~

TABLE 50 - 1 STORMWATER-SPECIFIC EFFLUENT LIMITATION GUIDELINES.	
Effluent Limitation Guideline	Sectors with Affected Facilities
Runoff from material storage piles at cement manufacturing facilities (40 CFR Part 411 Subpart C (established February 20, 1974))	E
Contaminated runoff from phosphate fertilizer manufacturing facilities (40 CFR Part 418 Subpart A (established April 8, 1974))	C
Coal pile runoff at steam electric generating facilities (40 CFR Part 423 (established November 19, 1982))	O
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas (40 CFR Part 429 Subpart I (established January 26, 1981))	A
Runoff from asphalt emulsion facilities (40 CFR Part 443 Subpart A (established July 24, 1975))	D
Runoff from landfills (40 CFR Part 445 Subparts A and B (established January 19, 2000))	K and L
Discharges from airport deicing operations (40 CFR Part 449 (established May 16, 2012))	Facilities subject to the effluent limitation guidelines in 40 CFR Part 449 are not authorized under this permit <u>may be covered under Sector AD.</u>

287 7. Permit eligibility is limited to discharges from facilities in the "sectors" of industrial
 288 activity summarized in Table 50-2 of this subsection. These sector descriptions are
 289 based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes.
 290 References to "sectors" in this permit refer to these groupings.

TABLE 50 - 2 SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT	
SIC Code or Activity Code	Activity Represented
Sector A: Timber Products	
2411	Log Storage and Handling (wet deck storage areas are only authorized if no chemical additives are used in the spray water or applied to the logs).
2421	General Sawmills and Planing Mills.

2426	Hardwood Dimension and Flooring Mills.
2429	Special Product Sawmills, Not Elsewhere Classified.
2431-2439 (except 2434 - see Sector W)	Millwork, Veneer, Plywood, and Structural Wood.
2441, 2448, 2449	Wood Containers.
2451, 2452	Wood Buildings and Mobile Homes.
2491	Wood Preserving.
2493	Reconstituted Wood Products.
2499	Wood Products, Not Elsewhere Classified (includes SIC Code 24991303 - Wood, Mulch and Bark facilities).
Sector B: Paper and Allied Products	
2631	Paperboard Mills.
Sector C: Chemical and Allied Products	
2812-2819	Industrial Inorganic Chemicals.
2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Synthetic Fibers, except Glass.
2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations.
2873-2879	Agricultural Chemicals (includes SIC Code 2875 - Composting Facilities).
Sector D: Asphalt Paving and Roofing Materials and Lubricants	
2951, 2952	Asphalt Paving and Roofing Materials.
2992, 2999	Miscellaneous Products of Petroleum and Coal.
Sector E: Glass Clay, Cement, Concrete, and Gypsum Products	
3251-3259	Structural Clay Products.
3261-3269	Pottery and Related Products.
3274, 3275	Concrete, Gypsum and Plaster Products, Except: Concrete Block and Brick; Concrete Products, except Block and Brick; and Ready-Mixed Concrete Facilities (SIC Codes 3271-3273).
Sector F: Primary Metals	
3312-3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills.
3321-3325	Iron and Steel Foundries.

3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals.
3363-3369	Nonferrous Foundries (Castings).
Sector G: Metal Mining (Ore Mining and Dressing)	
1011	Iron Ores.
1021	Copper Ores.
1031	Lead and Zinc Ores.
1041, 1044	Gold and Silver Ores.
1061	Ferroalloy Ores, except Vanadium.
1081	Metal Mining Services.
1094, 1099	Miscellaneous Metal Ores.
Sector H: Coal Mines and Coal Mining Related Facilities	
1221-1241	Coal Mines and Coal Mining-Related Facilities.
Sector J: Mineral Mining and Dressing Facilities (SIC Codes 1411-1499 are not authorized under this permit)	
Sector K: Hazardous Waste Treatment, Storage, or Disposal Facilities	
HZ	Hazardous Waste Treatment Storage or Disposal.
Sector L: Landfills and Land Application Sites	
LF	Landfills, Land Application Sites, and Open Dumps.
Sector M: Automobile Salvage Yards	
5015	Automobile Salvage Yards.
Sector N: Scrap Recycling Facilities	
5093	Scrap Recycling Facilities.
4499 (limited to list)	Dismantling Ships, Marine Salvaging, and Marine Wrecking - Ships for Scrap.
Sector O: Steam Electric Generating Facilities	
SE	Steam Electric Generating Facilities.
Sector Q: Water Transportation and Ship and Boat Building or Repairing Yards.	
4412-4499 (except 4499 facilities as specified in Sector N)	Water Transportation.
3731, 3732	Ship and Boat Building or Repairing Yards.
Sector U: Food and Kindred Products	

2021-2026	Dairy Products.
2041-2048	Grain Mill Products.
2074-2079	Fats and Oils.
Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries	
3011	Tires and Inner Tubes.
3021	Rubber and Plastics Footwear.
3052, 3053	Gaskets, Packing, and Sealing Devices and Rubber and Plastics Hose and Belting.
3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified.
Sector AA: Fabricated Metal Products	
3411-3471, 3482-3499	Fabricated Metal Products, except Machinery and Transportation Equipment.
3479	Fabricated Metal Coating and Engraving.
3911-3915	Jewelry, Silverware, and Plated Ware.
Sector AB: Industrial or Commercial Machinery	
3511-3599 (except 3571-3579)	Industrial and Commercial Machinery (except Computer and Office Equipment).
Sector AD: Nonclassified Facilities/Stormwater Discharges Designated by the <u>Board Department</u> as Requiring Permits	
N/A	Stormwater Discharges Designated by the <u>Board Department</u> for Permitting under the Provisions of 9VAC25-31-120 A 1, or under 9VAC25-31-120 A 7 a (1) or (2) of the VPDES Permit Regulation. Facilities may not elect to be covered under Sector AD. Only the <u>board department</u> may assign a facility to Sector AD.
Sector AE: Facilities with No Analytical Benchmark Monitoring Requirements	
2611	Pulp Mills.
2621	Paper Mills.
2652-2657	Paperboard Containers and Boxes.
2671-2679	Converted Paper and Paperboard Products, except Containers and Boxes.
2833-2836	Medicinal Chemicals and Botanical Products; Pharmaceutical

	Preparations; In Vitro and In Vivo Diagnostic Substances; Biological Products, except Diagnostic Substances.
2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products.
2861-2869	Industrial Organic Chemicals.
2891-2899	Miscellaneous Chemical Products.
3952 (limited to list)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's paints, and Artist's Watercolors.
3211	Flat Glass.
3221, 3229	Glass and Glassware, Pressed or Blown.
3231	Glass Products Made of Purchased Glass.
3241	Hydraulic Cement.
3281	Cut Stone and Stone Products.
3291-3299	Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products.
3331-3339	Primary Smelting and Refining of Nonferrous Metals.
3398, 3399	Miscellaneous Primary Metal Products.
3341	Secondary Smelting and refining of Nonferrous Metals.
1311	Crude Petroleum and Natural Gas.
1321	Natural Gas Liquids.
1381-1389	Oil and Gas Field Services.
2911	Petroleum Refineries.
4512-4581	Air Transportation Facilities.
TW	Treatment Works.
2011-2015	Meat Products.
2032-2038	Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties.
2051-2053	Bakery Products.
2061-2068	Sugar and Confectionary Products.
2082-2087	Beverages.
2091-2099	Miscellaneous Food Preparations Kindred Products.
2111-2141	Tobacco Products.

2211-2299	Textile Mill Products.
2311-2399	Apparel and Other Finished Products Made from Fabrics and Similar Materials.
3131-3199	Leather and Leather Products, except Leather Tanning and Finishing.
2434	Wood Kitchen Cabinets.
2511-2599	Furniture and Fixtures.
2711-2796	Printing, Publishing, and Allied Products.
3081-3089	Miscellaneous Plastics Products.
3931	Musical Instruments.
3942-3949	Dolls, Toys, Games, and Sporting and Athletic Goods.
3951-3955 (except 3952)	Pens, Pencils, and Other Artist's Materials.
3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, except Precious Metal.
3991-3999	Miscellaneous Manufacturing Industries.
3111	Leather Tanning, Currying, and Finishing.
3711-3799 (except 3731, 3732 – see Sector Q)	Transportation Equipment, except Ship and Boat Building and Repairing.
3571-3579	Computer and Office Equipment.
3612-3699	Electronic and Other Electrical Equipment and Components, except Computer Equipment.
3812-3873	Measuring, Analyzing, and Controlling Instruments; Photographic, Medical, and Optical Goods; Watches and Clocks.
Sector AF: Facilities Limited to Total Suspended Solids Benchmark Monitoring Requirements	
4011, 4013	Railroad Transportation.
4111-4173	Local and Highway Passenger Transportation.
4212-4231	Motor Freight Transportation and Warehousing.
4311	United State Postal Service.
5171	Petroleum Bulk Stations and Terminals.

291 D. Conditional exclusion for no exposure. Any owner covered by this permit who becomes
292 eligible for a no exposure exclusion from permitting under 9VAC25-31-120 E may file a no
293 exposure certification. ~~Upon~~ On submission and acceptance by the ~~board~~ department of a
294 complete and accurate no exposure certification, the permit requirements no longer apply, and

295 the owner is not required to submit a notice of termination. A no exposure certification must be
296 submitted to the ~~board~~ department once every five years.

297 E. Compliance with this general permit constitutes compliance with the federal Clean Water
298 Act and the State Water Control Law, with the exceptions stated in 9VAC25-31-60 of the
299 VPDES Permit Regulation. Approval for coverage under this general permit does not relieve any
300 owner of the responsibility to comply with any other applicable federal, state, or local statute,
301 ordinance, or regulation.

302 F. Continuation of permit coverage.

303 1. Permit coverage shall expire at the end of its term. However, expiring permit
304 coverages are automatically continued if the owner has submitted a complete
305 registration statement at least 60 days ~~prior to~~ before the expiration date of the permit or
306 a later submittal date established by the ~~board~~ department, which cannot extend beyond
307 the expiration date of the original permit. The permittee is authorized to continue to
308 discharge until ~~such time as the board~~ department either:

309 a. Issues coverage to the owner under this general permit; or
310 b. Notifies the owner that the discharge is not eligible for coverage under this general
311 permit.

312 2. When the owner that was covered under the expiring or expired general permit has
313 violated or is violating the conditions of that permit, the ~~board~~ department may choose to
314 do any or all of the following:

315 a. Initiate enforcement action based ~~upon~~ on the general permit coverage that has
316 been continued;

317 b. Issue a notice of intent to deny coverage under the amended general permit. If the
318 general permit coverage is denied, the owner would then be required to cease the
319 discharges authorized by the continued general permit coverage or be subject to
320 enforcement action for discharging without a permit;

321 c. Issue an individual permit with appropriate conditions; or

322 d. Take other actions authorized by the VPDES Permit Regulation (9VAC25-31).

323 **9VAC25-151-60. Registration statement and stormwater pollution prevention plan**
324 **(SWPPP).**

325 A. An owner seeking coverage under this general permit shall submit a complete VPDES
326 general permit registration statement in accordance with this section, which shall serve as a
327 notice of intent for coverage under the VPDES general permit regulation for discharges of
328 stormwater associated with industrial activity.

329 Any owner that was authorized to discharge under the industrial stormwater general permit
330 that became effective on July 1, ~~2014~~ 2019, and that intends to continue coverage under this
331 general permit shall review and update the stormwater pollution prevention plan (SWPPP) to
332 meet all provisions of the general permit (9VAC25-151-70 et seq.) within 90 days of the ~~board~~
333 department granting coverage under this permit. Owners of new facilities, facilities previously
334 covered by an expiring individual permit, and existing facilities not currently covered by a
335 VPDES permit ~~who~~ that wish to obtain coverage under this general permit shall prepare and
336 implement a written SWPPP for the facility in accordance with the general permit (9VAC25-151-
337 70 et seq.) ~~prior to~~ before submitting the registration statement.

338 B. Deadlines for submitting registration statements.

339 1. Existing facilities.

340 a. Any owner that was authorized to discharge under the industrial stormwater
341 general permit that became effective on July 1, ~~2014~~ 2019, and that intends to

342 continue coverage under this general permit shall submit a complete registration
343 statement to the ~~board~~ department on or before May 2, 2019 1, 2024.

344 b. Any owner covered by a VPDES individual permit for stormwater discharges
345 associated with industrial activity that is proposing to be covered under this general
346 permit shall submit a complete registration statement at least 240 days ~~prior to~~
347 before the expiration date of the VPDES individual permit.

348 c. Any owner of an existing facility with stormwater discharges associated with
349 industrial activity, not currently covered by a VPDES permit, that is proposing to be
350 covered under this general permit shall submit a complete registration statement to
351 the ~~board~~ department.

352 2. New facilities. Any owner proposing a new discharge of stormwater associated with
353 industrial activity shall submit a complete registration statement at least 60 days ~~prior to~~
354 before the date planned for the ~~commencement~~ beginning of the industrial activity at the
355 facility.

356 3. New owners of existing facilities. Where the owner of an existing facility that is
357 covered by this permit changes, the new owner of the facility shall submit a complete
358 registration statement within 30 days of the ownership change.

359 4. Late registration statements. Registration statements for existing facilities covered
360 under subdivision 1 a of this subsection will be accepted after June 30, 2019 2024, but
361 authorization to discharge will not be retroactive. [~~Owners described in subdivision 1 a~~
362 ~~of this subsection that submit registration statements after May 2, 2019 1, 2024, are~~
363 ~~authorized to discharge under the provisions of 9VAC25-151-50 F (Continuation of~~
364 ~~permit coverage) if a complete registration statement is submitted before July 1, 2019~~
365 2024.]

366 C. The required registration statement shall contain the following information:

367 1. Facility name and mailing address, owner name and mailing address, telephone
368 number, and email address;

369 2. Facility street address (if different from mailing address) or location (if the facility
370 location does not have a mailing address);

371 3. Facility operator (local contact) name, address, telephone number, and email address
372 (if available) if different than owner;

373 4. The nature of the business conducted at the facility to be covered under this general
374 permit, including a description of the primary industrial activity and all other industrial
375 activities that take place;

376 5. The receiving waters of the industrial activity discharges;

377 6. A determination of whether the facility will discharge to an MS4. If the facility
378 discharges to an MS4, the facility owner must notify the owner of the MS4 of the
379 existence of the discharge information ~~at the time of registration under this permit~~ and
380 include that notification with the registration statement. The notice shall include the
381 following information: the name of the facility, a contact person and telephone number,
382 the location of the discharge, the nature of the discharge, and the facility's VPDES
383 general permit number (if assigned by DEQ);

384 7. The permit number for any existing VPDES permit assigned to the facility;

385 8. Indicate An indication that a an SWPPP has been prepared ~~prior to~~ before submitting
386 this registration statement by the owner of a new facility, a facility previously covered by
387 an expiring individual permit, or an existing facility not currently covered by a VPDES
388 permit;

- 389 ~~9. Whether or not this facility will discharge stormwater runoff from coal storage piles;~~
390 ~~10. Identification~~ 9. For each outfall, identification of up to four four-digit Standard
391 Industrial Classification (SIC) Codes or ~~2-letter~~ two-letter Industrial Activity Codes that
392 best represent the principal products or services rendered by the facility and major
393 colocated industrial activities (~~2-letter~~ two-letter Industrial Activity Codes are: HZ –
394 hazardous waste treatment, storage, or disposal facilities; LF – landfills and disposal
395 facilities that receive or have received any industrial wastes; SE – steam electric power
396 generating facilities; or TW – treatment works treating domestic sewage);
- 397 ~~11. Identification of all applicable industrial sectors in this permit (as designated in~~
398 ~~Table 50-2) that cover the industrial activities at the facility, and major colocated~~
399 ~~industrial activities to be covered under this permit, and the stormwater outfalls~~
400 ~~associated with each industrial sector.~~
- 401 a. If the facility is a landfill (sector L), indicate state the type of landfill (i.e., MSWLF
402 (municipal solid waste landfill), CDD (construction debris and demolition), or other),
403 and which outfalls (if any) receive contaminated stormwater runoff;
- 404 b. If the facility is a timber products operation (sector A), indicate state which outfalls
405 (if any) receive discharges from wet decking areas, and which outfalls (if any) collect
406 runoff from areas where mulch dyeing operations (including loading, transporting,
407 and storage) occur;
- 408 c. For all facilities, indicate state any outfalls receiving discharges from coal storage
409 piles;
- 410 d. If the facility manufactures asphalt paving and roofing materials (sector D),
411 indicate state which outfalls (if any) receive discharges from areas where production
412 of asphalt paving emulsions or roofing emulsions occurs;
- 413 e. If the facility manufactures cement (sector E), indicate state which outfalls (if any)
414 receive discharges from material storage piles;
- 415 f. If a scrap recycling and waste recycling facility (sector N - SIC 5093) only receives
416 source-separated recyclable materials, indicate state which outfalls (if any) receive
417 discharges from this activity. List the metals (if any) that are received; or
- 418 g. For primary airports [subject to 40 CFR 449 (1,000 or more annual departures of
419 non-propeller aircraft)] , list the average deicing season and indicate state which
420 outfalls (if any) receive discharges from deicing ~~of non-propeller aircraft, and the~~
421 ~~annual average departures of non-propeller aircraft. It should be noted that airport~~
422 ~~facilities subject to the effluent limitation guidelines in 40 CFR Part 449 are not~~
423 ~~authorized under this permit or anti-icing operations;~~
- 424 ~~12. List the following facility area information:~~
- 425 a. The total area of the facility in acres;
- 426 b. The total area of industrial activity of the facility in acres;
- 427 c. The total impervious surface area of the industrial activity of the facility in acres;
- 428 d. The impervious and total areas in acres draining to each industrial activity outfall
429 at the facility. Outfalls shall be numbered using a unique numerical identification
430 code for each outfall. For example: Outfall Number 001, or Outfall Number 002, ~~etc.~~;
- 431 and
- 432 e. The latitude and longitude of each outfall location;
- 433 ~~13. A site map depicting the following shall be included with the registration~~
434 ~~statement:~~
- 435 a. The property boundaries;

436 b. All industrial activity outfalls labeled with unique numerical identification for each
437 outfall. Outfall numbering shall be the same as that used for the facility area
438 information in subdivision ~~42~~ 11 of this subsection; and

439 c. All water bodies or MS4 conveyances, labeled with names if applicable, receiving
440 stormwater discharges from the site;

441 14. ~~13.~~ Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan
442 (November 29, 2010) states that wasteloads for future growth for new facilities in the
443 Chesapeake Bay watershed with industrial stormwater discharges cannot exceed the
444 nutrient and sediment loadings that were discharged ~~prior to~~ before the land ~~being~~ was
445 developed for the industrial activity. For purposes of this permit regulation, facilities that
446 ~~commence~~ begin construction after June 30, ~~2019~~ 2024, must be consistent with this
447 requirement to be eligible for coverage under this general permit.

448 If this is a new facility that ~~commenced~~ began construction after June 30, ~~2019~~ 2024, in
449 the Chesapeake Bay watershed, and is applying for first time general permit coverage,
450 attach documentation to the registration statement to demonstrate:

451 a. That the total phosphorus load does not exceed the greater of (i) the total
452 phosphorus load that was discharged from the industrial area of the property ~~prior to~~
453 before the land ~~being~~ was developed for the new industrial activity, or (ii) 0.41
454 pounds per acre per year (VSMP water quality design criteria). The documentation
455 must include the measures and controls that were employed to meet this
456 requirement, along with the supporting calculations. The owner may include
457 additional nonindustrial land on the site as part of any plan to comply with the no net
458 increase requirement. Consistent with the definition of "site," this includes adjacent
459 land used in connection with the facility. Compliance with the water quality design
460 criteria may be determined utilizing the Virginia Runoff Reduction Method or another
461 equivalent methodology approved by the ~~board~~ department. Design specifications
462 and pollutant removal efficiencies for specific BMPs can be found on the Virginia
463 Stormwater BMP Clearinghouse website at <http://www.vwrrc.vt.edu/swc>; or

464 b. The owner may consider utilization of any pollutant trading or offset program in
465 accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia,
466 governing trading and offsetting, to meet the no net increase requirement;

467 15. ~~14.~~ State Corporation Commission entity identification number if the facility is
468 required to obtain an entity identification number by law; and

469 16. ~~15.~~ The following certification: "I certify under penalty of law that this document and
470 all attachments were prepared under my direction or supervision in accordance with a
471 system designed to assure that qualified personnel properly gather and evaluate the
472 information submitted. Based on my inquiry of the person or persons who manage the
473 system, or those persons directly responsible for gathering the information, the
474 information submitted is, to the best of my knowledge and belief, true, accurate, and
475 complete. I am aware that there are significant penalties for submitting false information,
476 including the possibility of fine and imprisonment for knowing violations."

477 D. The registration statement shall be signed in accordance with 9VAC25-31-110 A.

478 E. Where to submit. The registration statement may be delivered to the department by either
479 postal or electronic mail and shall be submitted to the DEQ regional office serving the area
480 where the industrial facility is located. Following notification from the department of the start
481 date for the required electronic submission of Notices of Intent to Discharge forms (i.e.,
482 registration statements) as provided for in 9VAC25-31-1020, such forms submitted after that
483 date shall be electronically submitted to the department in compliance with this section and

484 9VAC25-31-1020. There shall be at least a three-month notice provided between the notification
485 from the department and the date after which such forms must be submitted electronically.

486 **9VAC25-151-70. General permit.**

487 Any owner whose registration statement is accepted by the director will receive the following
488 general permit and shall comply with the requirements therein and be subject to the VPDES
489 Permit Regulation, 9VAC25-31. Facilities with colocated industrial activities shall comply with all
490 applicable monitoring and SWPPP requirements of each industrial activity sector of this chapter
491 in which a colocated industrial activity is described. All pages of 9VAC25-151-70 and 9VAC25-
492 151-80 apply to all stormwater discharges associated with industrial activity covered under this
493 general permit. Not all pages of 9VAC25-151-90 et seq. will apply to every permittee. The
494 determination of which pages apply will be based on an evaluation of the regulated activities
495 located at the facility.

496 General Permit No.: VAR05

497 Effective Date: July 1, ~~2019~~ 2024

498 Expiration Date: June 30, ~~2024~~ 2029

499 **VPDES GENERAL PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH**
500 **INDUSTRIAL ACTIVITY**

501 **AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE**
502 **ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW**

503 In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the
504 State Water Control Law and regulations adopted pursuant thereto, owners of facilities with
505 stormwater discharges associated with industrial activity are authorized to discharge to surface
506 waters within the boundaries of the Commonwealth of Virginia, except those waters specifically
507 named in board regulation that prohibit such discharges.

508 The authorized discharge shall be in accordance with this cover page, the registration
509 statement, Part I-Effluent Limitations, Monitoring Requirements and Special Conditions, Part II-
510 Conditions Applicable to All VPDES Permits, Part III-Stormwater Pollution Prevention Plan, and
511 Part IV-Sector-Specific Permit Requirements, and Part V-Chesapeake Bay Total Maximum
512 Daily Load Compliance as set forth in this general permit.

513 Part I

514 Effluent Limitations, Monitoring Requirements and Special Conditions

515 A. Effluent limitations and monitoring requirements.

516 There are four individual and separate categories of monitoring requirements that a facility
517 may be subject to under this permit: (i) quarterly visual monitoring; (ii) benchmark monitoring of
518 discharges associated with specific industrial activities; (iii) compliance monitoring for
519 discharges subject to numerical effluent limitations; and (iv) monitoring of discharges to
520 impaired waters, both those with an approved TMDL and those without an approved TMDL. The
521 monitoring requirements and numeric effluent limitations applicable to a facility depend on the
522 types of industrial activities generating stormwater runoff from the facility, and for TMDL

523 monitoring, the location of the facility's discharge or discharges. Part IV of the permit (~~9VAC25-~~
524 ~~151-90 et seq.~~) identifies monitoring requirements applicable to specific sectors of industrial
525 activity. The permittee shall review Part I A 1 and Part IV of the permit to determine which
526 monitoring requirements and numeric limitations apply to his the permittee's facility. Unless
527 otherwise specified, limitations and monitoring requirements under Part I A 1 and Part IV are
528 additive.

529 Sector-specific monitoring requirements and limitations are applied discharge by discharge
530 at facilities with colocated activities. Where stormwater from the colocated activities are
531 commingled, the monitoring requirements and limitations are additive. Where more than one
532 numeric limitation for a specific parameter applies to a discharge, compliance with the more
533 restrictive limitation is required. Where benchmark, numerical effluent limitations, or TMDL
534 monitoring requirements for a monitoring period overlap, the permittee may use a single sample
535 to satisfy monitoring requirements.

536 1. Types of monitoring requirements and limitations.

537 a. Quarterly visual monitoring. The requirements and procedures for quarterly visual
538 monitoring are applicable to all facilities covered under this permit, regardless of the
539 facility's sector of industrial activity.

540 (1) The permittee shall perform and document a quarterly visual examination of a
541 stormwater discharge associated with industrial activity from each outfall, except
542 discharges exempted in Part I A 3 or ~~Part I A 4~~. The visual examinations shall be
543 made at least once in each of the following three-month periods: January through
544 March, April through June, July through September, and October through December.
545 The visual examination shall be made during normal working hours, where
546 practicable, and when considerations for safety and feasibility allow. If no storm
547 event resulted in runoff from the facility during a monitoring quarter, the permittee is
548 excused from visual monitoring for that quarter provided that documentation is
549 included with the monitoring records indicating that no runoff occurred. ~~The~~
550 ~~documentation shall be signed and certified in accordance with Part II K of this~~
551 ~~permit.~~

552 (2) Samples shall be collected in accordance with Part I A 2. Sample examination
553 shall document observations of color, odor, clarity, floating solids, settled solids,
554 suspended solids, foam, oil sheen, and other obvious indicators of stormwater
555 pollution. The visual examination of the sample shall be conducted in a well-lit area.
556 No analytical tests are required to be performed on the samples.

557 (3) The visual examination ~~reports~~ documentation shall be maintained on-site with
558 the SWPPP. The ~~report~~ documentation shall include the outfall location, the
559 examination date and time, examination ~~personnel~~ staff, the nature of the discharge
560 (i.e., runoff or snow melt), visual quality of the stormwater discharge (including
561 observations of color, odor, clarity, floating solids, settled solids, suspended solids,
562 foam, oil sheen, and other obvious indicators of stormwater pollution), and probable
563 sources of any observed stormwater contamination.

564 b. Benchmark monitoring of discharges associated with specific industrial activities.

565 Table 70-1 identifies the specific industrial sectors subject to the benchmark
566 monitoring requirements of this permit and the industry-specific pollutants of concern.
567 The permittee shall refer to the tables found in the individual sectors in Part IV
568 (~~9VAC25-151-90 et seq.~~) for benchmark monitoring concentration values. Colocated
569 industrial activities at the facility that are described in more than one sector in Part IV
570 shall comply with all applicable benchmark monitoring requirements from each
571 sector.

572 The results of benchmark monitoring are primarily for the permittee to use to
 573 determine the overall effectiveness of the SWPPP in controlling the discharge of
 574 pollutants to receiving waters. Benchmark concentration values, included in Part IV
 575 of this permit, are not effluent limitations. Exceedance of a benchmark concentration
 576 does not constitute a violation of this permit and does not ~~indicate~~ show that violation
 577 of a water quality standard has occurred; however, it does signal that modifications
 578 to the SWPPP are necessary, unless justification is provided in a routine facility
 579 inspection. In addition, exceedance of benchmark concentrations may identify
 580 facilities that would be more appropriately covered under an individual, or alternative
 581 general permit where more specific pollution prevention controls could be required.

Industry Sector ¹	SIC Code or Activity Code	Benchmark Monitoring Parameters
A	2421	TSS.
	2491	Arsenic, Chromium, Copper.
	2411	TSS.
	2426	TSS.
	2499 (24991303)	COD, TSS.
	2499 (Mulch Dyeing)	BOD, TSS, COD, Aluminum, Arsenic, Cadmium, Chromium, Copper, Iron , Selenium, Silver, Zinc, Total N, Total P.
B	2631	BOD.
C	2812-2819	Aluminum, Iron, Total N.
	2821-2824	Zinc.
	2841-2844	Total N, Zinc.
	2873-2879	Total N, Iron , Zinc, Total P.
	2875 (Composting Facilities)	TSS, BOD, COD, Ammonia, Total N, Total P.
D	2951, 2952	TSS.
E	3251-3259, 3261-3269	Aluminum.
	3274, 3275	TSS, pH, Iron .
F	3312-3317	Aluminum, Zinc.

	3321-3325	Aluminum, TSS, Copper, Iron , Zinc.
	3351-3357	Copper, Zinc.
	3363-3369	Copper, Zinc.
G ²	1021	TSS.
H	1221-1241	TSS, Aluminum, Iron .
K	HZ (Hazardous Waste Treatment, Storage, or Disposal)	TKN, TSS, TOC, Arsenic, Cadmium, Cyanide, Lead, Magnesium , Mercury, Selenium, Silver.
L	LF (Landfills, Land Application Sites, and Open Dumps)	TSS.
M	5015	TSS, Aluminum, Iron , Lead.
N	5093	Copper, Aluminum, Iron , Lead, Zinc, TSS, Cadmium, Chromium.
	4499	Aluminum, Cadmium, Chromium, Copper, Iron , Lead, Zinc, TSS.
O	SE (Steam Electric Generating Facilities)	Iron <u>Facilities in Sector O are not subject to benchmark requirements.</u>
Q	4412-4499 (except 4499 facilities as specified in Sector N)	TSS, Copper, Zinc.
	3731, 3732	TSS, Copper, Zinc.
U	2021-2026	BOD, TSS.
	2041-2048	TSS, TKN.
	2074-2079	BOD, Total N, TSS.
Y	3011-3069	Zinc.
AA	3411-3471, 3482-3499, 3911-3915	Iron , Aluminum, Copper, Zinc.
	3479	Zinc.
AB	3511-3599 (except 3571-3579)	TSS, TPH, Copper, Zinc.

AD	Nonclassified Facilities/Stormwater Discharges Designated by the Board <u>department</u> as Requiring Permits	As determined by the director.
AE	2611, 2621, 2652-2657, 2671-2679, 2833-2836, 2851, 2861-2869, 2891-2899, 3952, 3211, 3221, 3229, 3231, 3241, 3281, 3291-3299, 3331-3339, 3398, 3399, 3341, 1311, 1321, 1381-1389, 2911, 4512-4581, (TW) Treatment Works, 2011-2015, 2032-2038, 2051-2053, 2061-2068, 2082-2087, 2091-2099, 2111-2141, 2211-2299, 2311-2399, 3131-3199, 2434, 2511-2599, 2711-2796, 3081-3089, 3931, 3942-3949, 3951-3955 (except 3952), 3961, 3965, 3991-3999, 3111, 3711-3799 (except 3731, 3732 see Sector Q), 3571-3579, 3612-3699, 3812-3873	Facilities in Sector AE are not subject to benchmark monitoring requirements.
AF	4011, 4013, 4111-4173, 4212-4231, 4311, 5171	TSS.
<p>¹Table does not include parameters for compliance monitoring under effluent limitations guidelines.</p> <p>²See Sector G (Part IV G) for additional monitoring discharges from waste rock and overburden piles from active ore mining or dressing facilities, inactive ore mining or dressing facilities, and sites undergoing reclamation.</p>		

582 (1) Benchmark monitoring shall be performed for all benchmark parameters specified
583 for the industrial sector ~~or sectors~~ applicable to a facility's discharge. Monitoring shall
584 be performed at least once during each of the first four, and potentially all, monitoring
585 periods after coverage under the permit begins. Monitoring ~~commences~~ begins
586 with the first full monitoring period after the owner is granted coverage under the permit.
587 Monitoring periods are specified in Part I A 2.

588 ~~Depending on the results of four consecutive monitoring periods, benchmark~~
589 ~~monitoring may not be required to be conducted in subsequent monitoring periods~~
590 ~~(see Part I A 1 b (2)).~~

591 (2) Benchmark monitoring waivers for facilities testing below benchmark
592 concentration values. Waivers from benchmark monitoring are available to facilities
593 whose discharges are below benchmark concentration values on an outfall by outfall
594 basis. Sector-specific benchmark monitoring is not required to be conducted in
595 subsequent monitoring periods during the term of this permit provided:

596 (a) Samples were collected in four consecutive monitoring periods, and the average
597 of the four samples for all parameters at the outfall is below the applicable
598 benchmark concentration value in Part IV. Facilities that were covered under the
599 ~~2014~~ 2019 industrial stormwater general permit may use sampling data from the last
600 two monitoring periods of that permit and the first two monitoring periods of this
601 permit to satisfy the four consecutive monitoring periods requirement;

602 (b) The facility is not subject to a numeric effluent limitation established in Part I A 1 c
603 (1) (stormwater effluent limitations), Part I A 1 c (2) (coal pile runoff), or Part IV
604 (Sector Specific Permit Requirements) for any of the parameters at that outfall; and

605 (c) A waiver request is submitted to and approved by the ~~board~~ department. The
606 waiver request shall be sent to the appropriate DEQ regional office, along with the

607 supporting monitoring data for four consecutive monitoring periods, and a
 608 certification that, based on current potential pollutant sources and control measures
 609 used, discharges from the facility are reasonably expected to be ~~essentially the same~~
 610 ~~(or cleaner)~~ substantially similar or cleaner compared to when the benchmark
 611 monitoring for the four consecutive monitoring periods was done.

612 Waiver requests will be evaluated by the ~~board~~ department based ~~upon~~ on (i)
 613 benchmark monitoring results below the benchmark concentration values; (ii) a
 614 favorable compliance history (including inspection results); and (iii) no outstanding
 615 enforcement actions.

616 The monitoring waiver may be revoked by the ~~board~~ department for cause. The
 617 permittee will be notified in writing that the monitoring waiver is revoked, and that the
 618 benchmark monitoring requirements are again in force and will remain in effect until
 619 the permit's expiration date.

620 (3) Samples shall be collected and analyzed in accordance with Part I A 2.
 621 Monitoring results shall be reported in accordance with Part I A 5 and Part II C and
 622 retained in accordance with Part II B.

623 c. Compliance monitoring for discharges subject to numerical effluent limitations or
 624 discharges to impaired waters.

625 (1) Facilities subject to stormwater effluent limitation guidelines.

626 (a) Facilities subject to stormwater effluent limitation guidelines (see Table 70-2) are
 627 required to monitor ~~such~~ the discharges to evaluate compliance with numerical
 628 effluent limitations. Industry-specific numerical limitations and compliance monitoring
 629 requirements are described in Part IV of the permit ~~(9VAC25-151-90 et seq.)~~.
 630 Permittees with colocated industrial activities at the facility that are described in more
 631 than one sector in Part IV shall comply on a discharge-by-discharge basis with all
 632 applicable effluent limitations from each sector.

633 (b) Permittees shall monitor the discharges for the presence of the pollutant subject
 634 to the effluent limitation at least once during each of the monitoring periods after
 635 coverage under the permit begins. Monitoring ~~commences~~ begins with the first full
 636 monitoring period after the owner is granted coverage under the permit. Monitoring
 637 periods are specified in Part I A 2. The substantially identical outfall monitoring
 638 provisions (Part I A 2 f) are not available for numeric effluent limits monitoring.

639 (c) Samples shall be collected and analyzed in accordance with Part I A 2.
 640 Monitoring results shall be reported in accordance with Part I A 5 and Part II C, and
 641 retained in accordance with Part II B.

TABLE 70-2 STORMWATER-SPECIFIC EFFLUENT LIMITATION GUIDELINES	
Effluent Limitation Guideline	Sectors with Affected Facilities
Runoff from material storage piles at cement manufacturing facilities (40 CFR Part 411 Subpart C (established February 20, 1974))	E
Contaminated runoff from phosphate fertilizer manufacturing facilities (40 CFR Part 418 Subpart A (established April 8, 1974))	C

Coal pile runoff at steam electric generating facilities (40 CFR Part 423 (established November 19, 1982))	O
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas (40 CFR Part 429, Subpart I (established January 26, 1981))	A
Runoff from asphalt emulsion facilities (40 CFR Part 443 Subpart A (established July 24, 1975))	D
Runoff from landfills (40 CFR Part 445, Subpart A and B (established January 19, 2000))	K and L
Discharges from airport deicing operations (40 CFR Part 449 (established May 16, 2012))	Facilities subject to the effluent limitation guidelines in 40 CFR Part 449 are not authorized under this permit <u>may be covered under Sector AD.</u>

- 642 (2) Facilities subject to coal pile runoff monitoring.
- 643 (a) Facilities with discharges of stormwater from coal storage piles shall comply with
- 644 the limitations and monitoring requirements of Table 70-3 for all discharges
- 645 containing the coal pile runoff, regardless of the facility's sector of industrial activity.
- 646 (b) Permittees shall monitor ~~such~~ the stormwater discharges at least once during
- 647 each of the monitoring periods after coverage under the permit begins. Monitoring
- 648 ~~commences~~ begins with the first full monitoring period after the owner is granted
- 649 coverage under the permit. Monitoring periods are specified in Part I A 2. The
- 650 substantially identical outfall monitoring provisions (Part I A 2 f) are not available for
- 651 coal pile numeric effluent limits monitoring.
- 652 (c) The coal pile runoff shall not be diluted with other stormwater or other flows ~~in~~
- 653 ~~order~~ to meet this limitation.
- 654 (d) If a facility is designed, constructed, and operated to treat the volume of coal pile
- 655 runoff that is associated with a 10-year, 24-hour rainfall event, any untreated
- 656 overflow of coal pile runoff from the treatment unit is not subject to the 50 mg/L
- 657 limitation for total suspended solids.
- 658 (e) Samples shall be collected and analyzed in accordance with Part I A 2.
- 659 Monitoring results shall be reported in accordance with Part I A 5 and Part II C, and
- 660 retained in accordance with Part II B.

TABLE 70-3 NUMERIC LIMITATIONS FOR COAL PILE RUNOFF			
Parameter	Limit	Monitoring Frequency	Sample Type
Total Suspended Solids (TSS)	50 mg/l, max.	1/6 months	Grab

pH	6.0 min. - 9.0 max.	1/6 months	Grab
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661 (3) Facilities discharging to an impaired water with an approved TMDL wasteload
662 allocation. Owners of facilities that are a source of the specified pollutant of concern
663 to waters for which a TMDL wasteload allocation has been approved ~~prior to~~ by the
664 U.S. Environmental Protection Agency (EPA) before the term of this permit will be
665 notified ~~as such~~ by the department when they are approved for coverage under the
666 general permit.

667 (a) Upon written notification from the department, ~~facilities permittees shall monitor~~
668 the discharges for the pollutant subject to TMDL wasteload allocations shall be
669 required to monitor such discharges to evaluate compliance with the TMDL
670 requirements. (b) ~~Permittees shall monitor the discharges for the pollutant subject to~~
671 ~~the TMDL wasteload allocation once every six months after coverage under the~~
672 ~~permit begins, unless otherwise~~ another sampling frequency is determined by the
673 department for polychlorinated biphenyls (PCBs). Monitoring ~~commences~~ begins
674 with the first full monitoring period after the owner is granted coverage under the
675 permit. Monitoring periods are specified in Part I A 2.

676 (c) ~~(b)~~ Samples shall be collected and analyzed in accordance with Part I A 2.
677 Monitoring results shall be reported in accordance with Part I A 5 and Part II C, and
678 retained in accordance with Part II B.

679 (d) ~~(c)~~ If the pollutant subject to the TMDL wasteload allocation is below the
680 quantitation level in all of the samples from the first four monitoring periods ~~(i.e., the~~
681 ~~first two years of coverage under the permit)~~, the permittee may request to the ~~board~~
682 department in writing that further sampling be discontinued, unless the TMDL has
683 specific instructions to the contrary (in which case those instructions shall be
684 followed). The laboratory certificate of analysis shall be submitted with the request. If
685 approved, documentation of this shall be kept with the SWPPP.

686 If the pollutant subject to the TMDL wasteload allocation is above the quantitation
687 level in any of the samples from the first four monitoring periods, the permittee shall
688 continue the scheduled TMDL monitoring throughout the term of the permit.
689 Applicable sampling data collected during the 2019 industrial stormwater general
690 permit term may be used to satisfy all or part of the four monitoring periods
691 requirement.

692 (d) Upon written notification from the department, facilities exceeding the TMDL
693 wasteload allocation shall prepare and submit a pollutant minimization plan (PMP)
694 designed to investigate the location and potential reduction of sources in the facility's
695 stormwater discharges. The PMP shall be developed and submitted to the
696 department for approval within 180 days of the receipt of notification from the
697 department. The PMP shall include the following items, as appropriate:

698 (i) Facility contact for the contents of the PMP and any activities associated with the
699 PMP;

700 (ii) A proposed implementation schedule for minimization activities and prospective
701 milestones;

702 (iii) Proposed actions for known or probable sources;

703 (iv) Proposed action to find and control unknown sources;

704 (v) A summary of any previous minimization activities; and

705 (vi) Information on continuing assessment of progress, which may include
706 establishment of criteria to evaluate whether the location and potential reduction of
707 sources have been addressed.

708 (4) Facilities discharging to an impaired water without an approved TMDL wasteload
709 allocation. Owners of facilities that discharge to waters listed as impaired in the ~~2016~~
710 2022 Final 305(b)/303(d) Water Quality Assessment Integrated Report, and for which
711 a TMDL wasteload allocation has not been approved ~~prior to~~ before the term of this
712 permit, will be notified ~~as such~~ by the department when they are approved for
713 coverage under the general permit.

714 (a) Upon written notification from the department, ~~facilities discharging to an impaired~~
715 ~~water without an approved TMDL wasteload allocation shall be required to monitor~~
716 ~~such discharges for the pollutants that caused the impairment.~~

717 ~~(b) Permittees~~ permittees shall monitor the discharges for all pollutants for which the
718 waterbody is impaired, and for which a standard analytical method exists, at least
719 once ~~during each of the monitoring periods~~ every six months after coverage under
720 the permit begins, unless otherwise determined by the department for
721 polychlorinated biphenyls (PCBs). Monitoring ~~commences~~ begins with the first full
722 monitoring period after the owner is granted coverage under the permit. Monitoring
723 periods are specified in Part I A 2.

724 ~~(c)~~ (b) If the pollutant for which the waterbody is impaired is suspended solids,
725 turbidity, or sediment, or sedimentation, monitor for total suspended solids (TSS). If
726 the pollutant for which the waterbody is impaired is expressed in the form of an
727 indicator or surrogate pollutant, monitor for that indicator or surrogate pollutant. No
728 monitoring is required when a waterbody's biological communities are impaired but
729 no pollutant, including indicator or surrogate pollutants, is specified as causing the
730 impairment, or when a waterbody's impairment is related to hydrologic modifications,
731 impaired hydrology, or temperature. Samples shall be collected and analyzed in
732 accordance with Part I A 2. Monitoring results shall be reported in accordance with
733 Part I A 5 and Part II C, and retained in accordance with Part II B.

734 ~~(d)~~ (c) If the pollutant for which the water is impaired is below the quantitation level in
735 the discharges from the facility, or it is above the quantitation level but its presence is
736 caused solely by natural background sources, the permittee may request to the
737 ~~board~~ department in writing that further impaired water monitoring be discontinued.
738 The laboratory certificate of analysis shall be submitted with the request. If approved,
739 documentation of this shall be kept with the SWPPP.

740 To support a determination that the pollutant's presence is caused solely by natural
741 background sources, the following documentation shall be submitted with the request
742 and kept with the SWPPP: (i) an explanation of why it is believed that the presence
743 of the impairment pollutant in the facility's discharge is not related to the activities at
744 the facility; and (ii) data or studies that tie the presence of the impairment pollutant in
745 the facility's discharge to natural background sources in the watershed. Natural
746 background pollutants include those substances that are naturally occurring in soils
747 or groundwater. Natural background pollutants do not include legacy pollutants from
748 earlier activity at the facility's site, or pollutants in run-on from neighboring sources
749 that are not naturally occurring.

750 2. Monitoring instructions.

751 a. Collection and analysis of samples. Sampling requirements shall be assessed on
752 an outfall by outfall basis. Samples shall be collected and analyzed in accordance
753 with the requirements of Part II A.

754 b. When and how to sample. A minimum of one grab sample shall be taken from the
755 discharge associated with industrial activity resulting from a storm event that results
756 in a discharge from the site (~~defined as a "measurable storm event"~~), providing the
757 interval from the preceding ~~measurable~~ storm event discharge is at least 72 hours.
758 The 72-hour storm interval is waived if the permittee is able to document that less
759 than a 72-hour interval is representative for local storm events during the sampling
760 period. In the case of snowmelt, the monitoring shall be performed at a time when a
761 measurable discharge occurs at the site. For discharges from a stormwater
762 management structure, the monitoring shall be performed at a time when a
763 measurable discharge occurs from the structure.

764 The grab sample shall be taken during the first 30 minutes of the discharge. If it is
765 not practicable to take the sample during the first 30 minutes, the sample may be
766 taken during the first three hours of the discharge, provided that the permittee
767 explains why a grab sample during the first 30 minutes was impracticable. This
768 information shall be submitted in the department's electronic discharge monitoring
769 report (e-DMR) system, and maintained with the SWPPP. If the sampled discharge
770 commingles with process or nonprocess water, the permittee shall attempt to sample
771 the stormwater discharge before it mixes with the nonstormwater.

772 c. Storm event data. For each monitoring event (except snowmelt monitoring), along
773 with the monitoring results, the permittee shall identify the date ~~and duration (in~~
774 ~~hours)~~ of the storm ~~events~~ event sampled; rainfall total (in inches) of the storm event
775 that generated the sampled runoff; and the ~~duration~~ interval between the storm event
776 sampled and the end of the previous ~~measurable~~ storm event discharge. For
777 snowmelt monitoring, the permittee shall identify the date of the sampling event.

778 d. Monitoring periods.

779 (1) Quarterly visual monitoring. The quarterly visual examinations shall be made at
780 least once in each of the following three-month periods each year of permit
781 coverage: January through March, April through June, July through September, and
782 October through December.

783 (2) Benchmark monitoring, effluent limitation monitoring, and impaired waters
784 monitoring (for waters both with and without an approved TMDL). Monitoring shall be
785 conducted at least once in each of the following semiannual periods each year of
786 permit coverage: January through June, and July through December.

787 e. Documentation explaining a facility's inability to obtain a sample (including dates
788 and times the outfalls were viewed or sampling was attempted), of no rain event, or
789 of deviation from the ~~"measurable" storm event requirements shall be~~ 72-hour storm
790 interval shall be submitted with the e-DMR and maintained with the SWPPP.
791 Acceptable documentation includes National Climatic Data Center (NCDC) weather
792 station data, local weather station data, facility rainfall logs, and other appropriate
793 supporting data.

794 f. Representative outfalls - substantially identical discharges. If the facility has two or
795 more outfalls that discharge substantially identical effluents, based on similarities of
796 the industrial activities, significant materials, size of drainage areas, and stormwater
797 management practices occurring within the drainage areas of the outfalls, frequency
798 of discharges, and stormwater management practices occurring within the drainage
799 areas of the outfalls, the permittee may conduct monitoring on the effluent of just one
800 of the outfalls and report that the observations also apply to the substantially identical
801 outfall ~~or outfalls~~. The substantially identical outfall monitoring provisions apply to
802 quarterly visual monitoring, benchmark monitoring, and impaired waters monitoring

803 (both those with and without an approved TMDL). The substantially identical outfall
804 monitoring provisions are not available for numeric effluent limits monitoring. The
805 permittee shall include the following information in the SWPPP:

806 (1) The locations of the outfalls;

807 (2) An evaluation, including available monitoring data, indicating the outfalls are
808 expected to discharge substantially identical effluents, including evaluation of
809 monitoring data where available; and

810 (3) An estimate of the size of each outfall's drainage area in acres.

811 3. Adverse climatic conditions waiver. When adverse weather conditions prevent the
812 collection of samples, a substitute sample may be taken during a qualifying storm event
813 in the next monitoring period. Adverse weather conditions are those that are dangerous
814 or create inaccessibility for ~~personnel~~, staff and may include ~~such things as~~ local
815 flooding, high winds, electrical storms, or situations that otherwise make sampling
816 impracticable, ~~such as~~ (e.g., drought or extended frozen conditions). Unless specifically
817 stated otherwise, this waiver may be applied to any monitoring required under this
818 permit. Narrative documentation of conditions necessitating the use of the waiver shall
819 be kept with the SWPPP.

820 4. Inactive and unstaffed sites (including temporarily inactive sites).

821 a. A waiver of the quarterly visual monitoring, routine facility inspections, and
822 monitoring requirements (including benchmark, effluent limitation, and impaired
823 waters monitoring) may be granted by the ~~board~~ department at a facility that is both
824 inactive and unstaffed, as long as the facility remains inactive and unstaffed and
825 there are no industrial materials or activities exposed to stormwater. The owner of
826 ~~such a~~ the facility is only required to conduct an annual routine site inspection in
827 accordance with the requirements in Part III B 5.

828 b. An inactive and unstaffed sites waiver request shall be submitted to the ~~board~~
829 department for approval and shall include the name of the facility; the facility's
830 VPDES general permit registration number; a contact person, ~~phone~~ telephone
831 number, and email address; the reason for the request; and the date the facility
832 became or will become inactive and unstaffed. The waiver request shall be signed
833 and certified in accordance with Part II K. If this waiver is granted, a copy of the
834 request and the ~~board's~~ department's written approval of the waiver shall be
835 maintained with the SWPPP.

836 c. If circumstances change and industrial materials or activities become exposed to
837 stormwater, or the facility becomes either active or staffed, the permittee shall notify
838 the department within 30 days, and all quarterly visual monitoring, routine facility
839 inspections, and monitoring requirements shall be resumed immediately.

840 d. The ~~board~~ department retains the right to revoke this waiver when it is determined
841 that the discharge is causing, has a reasonable potential to cause, or contributes to a
842 water quality standards violation.

843 e. Inactive and unstaffed facilities covered under Sector G (Metal Mining) and Sector
844 H (Coal Mines and Coal Mining-Related Facilities) are not required to meet the "no
845 industrial materials or activities exposed to stormwater" standard to be eligible for
846 this waiver, consistent with the conditional exemption requirements established in
847 Part IV Sector G and Part IV Sector H.

848 5. Reporting monitoring results.

849 a. Reporting to the department. The permittee shall follow the reporting requirements
 850 and deadlines below in Table 70-4 for the types of monitoring that apply to the
 851 facility:

TABLE 70-4 MONITORING REPORTING REQUIREMENTS	
Semiannual Monitoring	Submit the results by January 10 and by July 10.
Quarterly Visual Monitoring	Retain results with SWPPP - do not submit unless requested to do so by the department.

852 Permittees shall submit results for each outfall associated with industrial activity
 853 according to the requirements of Part II C.

854 b. Significant digits. The permittee shall report at least the same number of
 855 significant digits as a numeric effluent limitation or TMDL wasteload allocation for a
 856 given parameter; otherwise, at least two significant digits shall be reported for a
 857 given parameter. Regardless of the rounding convention used by the permittee (i.e.,
 858 five always rounding up or to the nearest even number), the permittee shall use the
 859 convention consistently and shall ensure that consulting laboratories employed by
 860 the permittee use the same convention.

861 6. Corrective actions.

862 a. ~~Data exceeding benchmark concentration values.~~

863 ~~(1) If the benchmark monitoring result exceeds the benchmark concentration value~~
 864 ~~for that parameter, the permittee shall review the SWPPP and modify it as necessary~~
 865 ~~to address any deficiencies that caused the exceedance. Revisions to the SWPPP~~
 866 ~~shall be completed within 60 days after an exceedance is discovered. When control~~
 867 ~~measures need to be modified or added (distinct from regular preventive~~
 868 ~~maintenance of existing control measures described in Part III C), implementation~~
 869 ~~shall be completed before the next anticipated storm event if possible, but no later~~
 870 ~~than 60 days after the exceedance is discovered, or as otherwise provided or~~
 871 ~~approved by the department. In cases where construction is necessary to implement~~
 872 ~~control measures, the permittee shall include a schedule in the SWPPP that provides~~
 873 ~~for the completion of the control measures as expeditiously as practicable, but no~~
 874 ~~later than three years after the exceedance is discovered. Where a construction~~
 875 ~~compliance schedule is included in the SWPPP, the SWPPP shall include~~
 876 ~~appropriate nonstructural and temporary controls to be implemented in the affected~~
 877 ~~portions of the facility prior to completion of the permanent control measure. Any~~
 878 ~~control measure modifications shall be documented and dated, and retained with the~~
 879 ~~SWPPP, along with the amount of time taken to modify the applicable control~~
 880 ~~measures or implement additional control measures.~~

881 ~~(2) Natural background pollutant levels. If the concentration of a pollutant exceeds a~~
 882 ~~benchmark concentration value, and the permittee determines that exceedance of~~
 883 ~~the benchmark is attributable solely to the presence of that pollutant in the natural~~
 884 ~~background, corrective action is not required provided that:~~

885 ~~(a) The concentration of the benchmark monitoring result is less than or equal to the~~
 886 ~~concentration of that pollutant in the natural background;~~

887 ~~(b) The permittee documents and maintains with the SWPPP the supporting~~
 888 ~~rationale for concluding that benchmark exceedances are in fact attributable solely to~~
 889 ~~natural background pollutant levels. The supporting rationale shall include any data~~

890 previously collected by the facility or others (including literature studies) that describe
891 the levels of natural background pollutants in the facility's stormwater discharges;
892 and

893 ~~(c) The permittee notifies the department on the benchmark monitoring DMR that the~~
894 ~~benchmark exceedances are attributable solely to natural background pollutant~~
895 ~~levels.~~

896 Natural background pollutants include those substances that are naturally occurring
897 in soils or groundwater. Natural background pollutants do not include legacy
898 pollutants from earlier activity on the facility's site, or pollutants in run-on from
899 neighboring sources that are not naturally occurring.

900 b. Corrective actions. a. The permittee shall take corrective action whenever:

901 (1) Routine facility inspections, inspections by local, state or federal officials, or any
902 other process, observation or event result in a determination that modifications to the
903 stormwater control measures are necessary to meet the permit requirements;

904 (2) There is any exceedance of an effluent limitation (including coal pile runoff),
905 TMDL wasteload allocation, or a reduction required by a local ordinance established
906 by a municipality to meet Chesapeake Bay TMDL requirements; or

907 (3) The department determines, or the permittee becomes aware, that the
908 stormwater control measures are not stringent enough for the discharge to meet
909 applicable water quality standards; or

910 (4) Benchmark monitoring results exceed the benchmark concentration value for a
911 parameter.

912 The permittee shall review the SWPPP and modify it as necessary to address any
913 deficiencies. Revisions to the SWPPP shall be completed within 60 days following
914 the discovery of the deficiency. When control measures need to be modified or
915 added (distinct from regular preventive maintenance of existing control measures
916 described in Part III C), implementation shall be completed before the next
917 anticipated storm event if possible, but no later than 60 days after the deficiency is
918 discovered, or as otherwise provided or approved by the department. In cases where
919 construction is necessary to implement control measures, the permittee shall include
920 a schedule in the SWPPP that provides for the completion of the control measures
921 as expeditiously as practicable, but no later than three years after the deficiency is
922 discovered. Where a construction compliance schedule is included in the SWPPP,
923 the SWPPP shall include appropriate nonstructural and temporary controls to be
924 implemented in the affected portion of the facility ~~prior to~~ before completion of the
925 permanent control measure. ~~The amount of time taken to modify a control measure~~
926 ~~or implement additional control measures shall be documented in the SWPPP.~~ Any
927 corrective actions taken shall be documented and retained with the SWPPP. ~~Reports~~
928 ~~of corrective actions shall be signed in accordance with Part II K.~~ Any control
929 measure modifications shall be dated and document the amount of time taken to
930 modify the applicable control measures or implement additional control measures.

931 b. Natural background pollutant levels. If the concentration of a pollutant exceeds a
932 benchmark concentration value and the permittee determines that exceedance of the
933 benchmark is attributable solely to the presence of that pollutant in the natural
934 background, corrective action is not required provided that:

935 (1) The concentration of the benchmark monitoring result is less than or equal to the
936 concentration of that pollutant in the natural background;

937 (2) The permittee documents and maintains with the SWPPP the supporting
938 rationale for concluding that benchmark exceedances are in fact attributable solely to
939 natural background pollutant levels. The supporting rationale shall include any data
940 previously collected by the facility or others (including literature studies) that describe
941 the levels of natural background pollutants in the facility's stormwater discharges;
942 and

943 (3) The permittee notifies the department on the benchmark monitoring DMR that the
944 benchmark exceedances are attributable solely to natural background pollutant
945 levels. Natural background pollutants include those substances that are naturally
946 occurring in soils or groundwater. Natural background pollutants do not include
947 legacy pollutants from earlier activity on the facility's site, or pollutants in run-on from
948 neighboring sources that are not naturally occurring.

949 c. Follow-up reporting. If at any time monitoring results ~~indicate~~ show that discharges
950 from the facility exceed an effluent limitation or a TMDL wasteload allocation, or the
951 department determines that discharges from the facility are causing or contributing to
952 an exceedance of a water quality standard, immediate steps shall be taken to
953 eliminate the exceedances in accordance with ~~the above Part I A 6 b (Corrective~~
954 ~~actions)~~. Within 30 calendar days of implementing the relevant corrective action, an
955 exceedance report shall be submitted to the department and shall be signed in
956 accordance with Part II K. The following information shall be included in the report:

- 957 (1) General permit registration number;
958 (2) Facility name and address;
959 (3) Receiving water for each outfall exceeding an effluent limitation of TMDL
960 wasteload allocation;
961 (4) Monitoring data from the event being reported;
962 (5) A narrative description of the situation;
963 (6) A description of actions taken since the event was discovered and steps taken to
964 minimize to the extent feasible pollutants in the discharge; and
965 (7) A local facility contact name, email address, and phone number.

966 B. Special conditions.

967 1. Authorized nonstormwater discharges. Except as provided in this section or in Part IV
968 ~~(9VAC25-151-90 et seq.)~~, all discharges covered by this permit shall be composed
969 entirely of stormwater. The following nonstormwater discharges are authorized by this
970 permit:

971 a. Discharges from emergency firefighting activities or firefighting training activities
972 managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of
973 the Code of Virginia;

974 b. Fire hydrant flushings, managed in a manner to avoid an instream impact;

975 c. Potable water, including water line flushings, managed in a manner to avoid an
976 instream impact;

977 d. Uncontaminated condensate from air conditioners, coolers, and other
978 compressors and from the outside storage of refrigerated gases or liquids;

979 e. Irrigation drainage;

980 f. Landscape watering provided all pesticides, herbicides, and fertilizer have been
981 applied in accordance with the approved labeling;

982 g. Routine external building washdown [~~that does not use provided no soaps,~~
983 ~~solvents or~~] detergents [~~or are used, external building surfaces do not contain~~]
984 hazardous [~~cleaning products and is managed in a manner to avoid an instream~~
985 ~~impact~~ substances, and the wash water is filtered, settled, or similarly treated prior to
986 discharge] ;

987 h. Pavement wash waters [~~where provided~~] no [~~soaps, solvents,~~] detergents or
988 hazardous cleaning products are used [~~]] and no spills or leaks of toxic or
989 hazardous materials have occurred (unless all spilled [~~or leaked~~] material [~~has~~
990 ~~been is~~] removed [~~prior to washing~~]) [~~Pavement wash waters shall be managed~~
991 ~~in a manner to avoid an instream impact~~ , and the wash water is filtered, settled, or
992 ~~similarly treated prior to discharge~~] ;~~

993 i. Uncontaminated groundwater or spring water;

994 j. Foundation or footing drains where flows are not contaminated with process
995 materials; and

996 k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent
997 portions of the facility, but not intentional discharges from the cooling tower (e.g.,
998 "piped" cooling tower blowdown or drains).

999 All other nonstormwater discharges are not authorized and shall either be eliminated or
1000 covered under a separate VPDES permit.

1001 2. Releases of hazardous substances or oil in excess of reportable quantities. The
1002 discharge of hazardous substances or oil in the stormwater discharges from the facility
1003 shall be prevented or minimized in accordance with the SWPPP for the facility. This
1004 permit does not authorize the discharge of hazardous substances or oil resulting from an
1005 on-site spill. This permit does not relieve the permittee of the reporting requirements of
1006 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 or § 62.1-44.34:19 of the
1007 Code of Virginia.

1008 Where a release containing a hazardous substance or oil in an amount equal to or in
1009 excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part
1010 117, or 40 CFR Part 302 occurs during a 24-hour period:

1011 a. The permittee is required to notify the department in accordance with the
1012 requirements of Part II G as soon as he has knowledge of the discharge;

1013 b. Where a release enters an MS4, the permittee shall also notify the owner of the
1014 MS4; and

1015 c. The SWPPP required under Part III shall be reviewed to identify measures to
1016 prevent the reoccurrence of ~~such~~ the releases and to respond to ~~such~~ the releases,
1017 and the SWPPP shall be modified where appropriate.

1018 3. Colocated industrial activity. If the facility has industrial activities occurring on-site
1019 which are described by any of the activities in Part IV of the permit (~~9VAC25-151-90 et~~
1020 ~~seq.~~), those industrial activities are considered to be colocated industrial activities.
1021 Stormwater discharges from colocated industrial activities are authorized by this permit,
1022 provided that the permittee complies with any and all additional SWPPP and monitoring
1023 requirements from Part IV applicable to that particular colocated industrial activity. The
1024 permittee shall be responsible for additional SWPPP and monitoring requirements
1025 applicable to the colocated industrial activity by examining the narrative descriptions of
1026 all discharges covered under this section.

1027 4. The stormwater discharges authorized by this permit may be combined with other
1028 sources of stormwater ~~which that~~ are not required to be covered under a VPDES permit,
1029 so long as the combined discharge is in compliance with this permit.

- 1030 5. There shall be no discharge of waste, garbage, or floating debris in other than trace
1031 amounts.
- 1032 6. Approval for coverage under this general permit does not relieve the permittee of the
1033 responsibility to comply with any other applicable federal, state, or local statute,
1034 ordinance, or regulation.
- 1035 7. Discharges to waters subject to TMDL wasteload allocations. Owners of facilities that
1036 are a source of the specified pollutant of concern to waters for which a TMDL wasteload
1037 allocation has been approved ~~prior to~~ by EPA before the term of this permit shall
1038 incorporate measures and controls into the SWPPP required by Part III that are
1039 consistent with the assumptions and requirements of the TMDL. The department will
1040 provide written notification to the owner that a facility is subject to the TMDL
1041 requirements. The facility's SWPPP shall specifically address any conditions or
1042 requirements included in the TMDL that are applicable to discharges from the facility. If
1043 the TMDL establishes a specific numeric wasteload allocation that applies to discharges
1044 from the facility, the owner shall perform any required monitoring in accordance with Part
1045 I A 1 c (3), and implement control measures designed to meet that allocation.
- 1046 ~~8. Discharges to waters subject to the Chesapeake Bay TMDL.~~
- 1047 ~~a. Owners of facilities in the Chesapeake Bay watershed shall monitor their~~
1048 ~~discharges for total suspended solids (TSS), total nitrogen (TN), and total~~
1049 ~~phosphorus (TP) to characterize the contributions from their facility's specific~~
1050 ~~industrial sector for these parameters. Total nitrogen is the sum of total Kjeldahl~~
1051 ~~nitrogen (TKN) and nitrite + nitrate and shall be derived from the results of those~~
1052 ~~tests. After the facility is granted coverage under the permit, samples shall be~~
1053 ~~collected during each of the first four monitoring periods (i.e., the first two years of~~
1054 ~~permit coverage). Monitoring periods are specified in Part I A 2. Samples shall be~~
1055 ~~collected and analyzed in accordance with Part I A 2. Monitoring results shall be~~
1056 ~~reported in accordance with Part I A 5 and Part II C, and retained in accordance with~~
1057 ~~Part II B.~~
- 1058 ~~b. Facilities that were covered under the 2014 industrial stormwater general permit~~
1059 ~~shall comply with the following:~~
- 1060 ~~(1) Facilities that submitted a Chesapeake Bay TMDL action plan that was approved~~
1061 ~~by the board during the 2014 industrial stormwater general permit term shall continue~~
1062 ~~to implement the approved Chesapeake Bay TMDL action plan during this permit~~
1063 ~~term. An annual report shall be submitted to the department by June 30 of each year~~
1064 ~~describing the progress in meeting the required reductions unless this reporting~~
1065 ~~requirement is waived by the department in accordance with Part I B 8 g. Monitoring~~
1066 ~~in accordance with Part I B 8 a is not required for these facilities during this permit~~
1067 ~~term.~~
- 1068 ~~(2) Facilities that completed four samples for TSS, TN, and TP during the 2014~~
1069 ~~industrial stormwater general permit term shall utilize the procedures in Part I B 8 c~~
1070 ~~(2) to calculate their facility stormwater loads. The permittee shall submit a copy of~~
1071 ~~the calculations and Chesapeake Bay TMDL action plan if required under Part I B 8 f~~
1072 ~~to the department within 60 days of coverage under this general permit.~~
- 1073 ~~(3) Facilities that did not complete four samples for TSS, TN, and TP during the 2014~~
1074 ~~industrial stormwater general permit term shall be subject to completing the~~
1075 ~~monitoring requirements in Part I B 8 a beginning with the first full monitoring period~~
1076 ~~after receiving permit coverage. Calculations and a Chesapeake Bay TMDL action~~
1077 ~~plan if required under Part I B 8 f shall be submitted no later than 90 days following~~
1078 ~~the completion of the fourth monitoring period to the DEQ regional office serving the~~

1079 area where the industrial facility is located on a form provided by the department and
1080 maintained with the facility's SWPPP.

1081 (4) Facilities that monitored for TSS, TN, or TP may use the applicable sampling data
1082 collected during the 2014 industrial stormwater general permit term to satisfy all or
1083 part of the four monitoring periods requirement in accordance with Part I B 8 a.

1084 c. Chesapeake Bay TMDL wasteload allocations and Chesapeake Bay TMDL action
1085 plans.

1086 (1) EPA's Chesapeake Bay TMDL (December 29, 2010) includes wasteload
1087 allocations for VPDES permitted industrial stormwater facilities as part of the
1088 regulated stormwater aggregate load. EPA used data submitted by Virginia with the
1089 Phase I Chesapeake Bay TMDL Watershed Implementation Plan, including the
1090 number of industrial stormwater permits per county and the number of urban acres
1091 regulated by industrial stormwater permits, as part of their development of the
1092 aggregate load. Aggregate loads for industrial stormwater facilities were appropriate
1093 because actual facility loading data were not available to develop individual facility
1094 wasteload allocations.

1095 Virginia estimated the loadings from industrial stormwater facilities using actual and
1096 estimated facility acreage information and TP, TN, and TSS loading rates from the
1097 Northern Virginia Planning District Commission (NVPDC) Guidebook for Screening
1098 Urban Nonpoint Pollution Management Strategies (Annandale, VA November 1979),
1099 prepared for the Metropolitan Washington Council of Governments. The loading
1100 rates used were as follows:

1101 TP - High (80%) imperviousness industrial; 1.5 lb/ac/yr
1102 TN - High (80%) imperviousness industrial; 12.3 lb/ac/yr
1103 TSS - High (80%) imperviousness industrial; 440 lb/ac/yr

1104 The actual facility area information and the TP, TN, and TSS data collected for this
1105 permit will be used by the board to quantify the nutrient and sediment loads from
1106 VPDES permitted industrial stormwater facilities.

1107 (2) Calculation of facility loads. The permittee shall analyze the nutrient and sediment
1108 data collected in accordance with Part I B 8 a and 8 b to determine if pollution
1109 reductions are required for this permit term. The permittee shall average the data
1110 collected at the facility for each of the pollutants of concern (POC) (e.g., TP, TN, and
1111 TSS) and compare the results to the loading rates for TP, TN, and TSS presented in
1112 Part I B 8 c (1).

1113 The following formula may be used to determine the loading rate:

1114
$$L = 0.226 \times P \times P_j \times (0.05 + (0.9 \times I_a)) \times C$$

1115 where:

1116 L = the POC loading rate (lb/acre/year)

1117 P = the annual rainfall (inches/year) - The permittee may use either actual annual
1118 average rainfall data for the facility location (in inches/year), the Virginia annual
1119 average rainfall of 44.3 inches/year, or another method approved by the board.

1120 P_j = the fraction of annual events that produce runoff - The permittee shall use 0.9
1121 unless the board approves another rate.

1122 I_a = the impervious fraction of the facility impervious area of industrial activity to the
1123 facility industrial activity area

1124 ~~C = the POC average concentration of all facility samples (mg/L) – Facilities with~~
1125 ~~multiple outfalls shall calculate a weighted average concentration for each outfall~~
1126 ~~using the drainage area of each outfall.~~

1127 ~~For total phosphorus and total suspended solids, all daily concentration data below~~
1128 ~~the quantitation level (QL) for the analytical method used shall be treated as half the~~
1129 ~~QL. All daily concentration data equal to or above the QL for the analytical method~~
1130 ~~used shall be treated as it is reported.~~

1131 ~~For total nitrogen, if none of the daily concentration data for the respective species~~
1132 ~~(i.e., TKN, nitrate, or nitrite) are equal to or above the QL for the respective analytical~~
1133 ~~methods used, the daily TN concentration value reported shall equal one half of the~~
1134 ~~largest QL used for the respective species. If one of the data is equal to or above the~~
1135 ~~QL, the daily TN concentration value shall be treated as that data point is reported. If~~
1136 ~~more than one of the data is above the QL, the daily TN concentration value shall~~
1137 ~~equal the sum of the data points as reported.~~

1138 ~~d. The permittee shall submit a copy of the calculations to the department within 90~~
1139 ~~days from the end of the last monitoring period that satisfies the monitoring~~
1140 ~~requirement in Part I B 8 a. Calculations shall be submitted to the DEQ regional~~
1141 ~~office serving the area where the industrial facility is located, on a form provided by~~
1142 ~~the department, and maintained with the facility's SWPPP.~~

1143 ~~e. Any modification to the facility's industrial acreage or impervious industrial acreage~~
1144 ~~shall require the facility to recalculate facility loading rates. This may require the~~
1145 ~~facility to modify the facility's Chesapeake Bay TMDL action plan or submit a~~
1146 ~~Chesapeake Bay TMDL action plan as appropriate. Any recalculation of facility~~
1147 ~~loading rates or modifications to a Chesapeake Bay TMDL action plan shall be~~
1148 ~~submitted to the department within 90 days of the date on which the permittee~~
1149 ~~completes a site modification. If previous monitoring is no longer representative of~~
1150 ~~the modified facility, monitoring in accordance with Part I B 8 a shall commence~~
1151 ~~within 90 days of the modification and the revised calculations and Chesapeake Bay~~
1152 ~~TMDL action plan if required under Part I B 8 f shall be submitted no later than 90~~
1153 ~~days following completion of the fourth monitoring period.~~

1154 ~~f. Chesapeake Bay TMDL action plan requirements. If the calculated facility loading~~
1155 ~~rate for TP, TN, or TSS is above the loading rates for TP, TN, or TSS presented in~~
1156 ~~Part I B 8 c (1), then the permittee shall develop and submit a Chesapeake Bay~~
1157 ~~TMDL action plan to the department.~~

1158 ~~The Chesapeake Bay TMDL action plan shall be submitted on a form provided by~~
1159 ~~the department to the regional office serving the area where the industrial facility is~~
1160 ~~located within 90 days following the completion of the fourth monitoring period. A~~
1161 ~~copy of the current Chesapeake Bay TMDL action plan and all facility loading rate~~
1162 ~~calculations shall be maintained with the facility's SWPPP. The Chesapeake Bay~~
1163 ~~TMDL action plan shall include:~~

1164 ~~(1) A determination of the total pollutant load reductions for TP, TN, and TSS (as~~
1165 ~~appropriate) necessary to reduce the annual loads from industrial activities. This~~
1166 ~~shall be determined by multiplying the industrial acreage times the difference~~
1167 ~~between the TMDL loading rates listed in Part I B 8 c (1) and the actual facility~~
1168 ~~loading rates calculated in accordance with Part I B 8 c (2). The reduction applies to~~
1169 ~~the total difference calculated for each pollutant of concern;~~

1170 ~~(2) The means and methods, such as management practices and retrofit programs,~~
1171 ~~that will be utilized to meet the required reductions determined in Part I B 8 f (1) and~~
1172 ~~a schedule to achieve those reductions by June 30, 2024. The schedule should~~

1173 include annual milestones to demonstrate the ongoing progress in meeting those
1174 reductions; and

1175 (3) The permittee may consider utilization of any pollutant trading or offset program
1176 in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia,
1177 governing trading and offsetting, to meet the required reductions.

1178 g. A permittee required to develop and implement a Chesapeake Bay TMDL Action
1179 Plan shall submit an annual report to the department by June 30 of each year
1180 describing the progress in meeting the required reductions.

1181 h. Chesapeake Bay TMDL action plan annual reporting waiver. Upon implementation
1182 of the facility's Chesapeake Bay TMDL action plan, permittees may submit a waiver
1183 for the annual reporting requirements. The waiver request shall be submitted for
1184 board approval to the DEQ regional office serving the area where the industrial
1185 facility is located on a form provided by the department. Annual reporting
1186 requirements will be in effect until the permittee receives notice from the department
1187 that the waiver has been approved. A copy of the waiver approval shall be
1188 maintained with the SWPPP. The waiver may be revoked for cause by the board. A
1189 waiver request may be approved by the board once the permittee demonstrates that
1190 they have achieved all of the required pollutant reductions calculated under Part I B 8
1191 f (1). Pollutant reductions may be achieved using a combination of the following
1192 alternatives:

1193 (1) Reductions provided by one or more of the BMPs from the Virginia Stormwater
1194 BMP Clearinghouse listed in 9VAC25-870-65, approved BMPs found on the Virginia
1195 Stormwater Clearinghouse website, or BMPs approved by the Chesapeake Bay
1196 Program. Any BMPs implemented to provide the required pollutant reductions shall
1197 be incorporated in the SWPPP and be permanently maintained by the permittee;

1198 (2) Implementation of site-specific BMPs followed by a minimum of four stormwater
1199 samples collected in accordance with sampling requirements in Part I B 8 a that
1200 demonstrate pollutant loadings have been reduced below those calculated under
1201 Part I B 8 c. Any BMPs implemented to provide the required pollutant reductions
1202 shall be incorporated in the SWPPP and be permanently maintained by the
1203 permittee; or

1204 (3) Acquisition of nonpoint source credits certified by the board as perpetual in
1205 accordance with § 62.1-44.19:20 of the Code of Virginia.

1206 ~~9.~~ 8. Discharges through a regulated MS4 to waters subject to the Chesapeake Bay
1207 TMDL. In addition to the requirements of this permit, any facility with industrial activity
1208 stormwater discharges through a regulated MS4 that is notified by the MS4 operator that
1209 the locality has adopted ordinances to meet the Chesapeake Bay TMDL shall
1210 incorporate measures and controls into its SWPPP to comply with applicable local TMDL
1211 ordinance requirements.

1212 ~~10.~~ 9. Expansion of facilities that discharge to waters subject to the Chesapeake Bay
1213 TMDL. Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan
1214 (November 29, 2010), states that the wasteloads from any expansion of an existing
1215 permitted facility discharging stormwater in the Chesapeake Bay watershed cannot
1216 exceed the nutrient and sediment loadings that were discharged from the expanded
1217 portion of the land prior to the land being developed for the expanded industrial activity.

1218 a. For any industrial activity area expansions (i.e., construction activities, including
1219 clearing, grading, and excavation activities) that commence begin on or after July 1,
1220 2019 2024, (the effective date of this permit), the permittee shall document in the
1221 SWPPP the information and calculations used to determine the nutrient and

1222 sediment loadings discharged from the expanded land area ~~prior to~~ before the land
1223 ~~being~~ was developed, and the measures and controls that were employed to meet
1224 the no net increase of stormwater nutrient and sediment load as a result of the
1225 expansion of the industrial activity. Any land disturbance that is exempt from
1226 permitting under the VPDES construction stormwater general permit regulation
1227 (9VAC25-880) is exempt from this requirement.

1228 b. The permittee may use the VSMP water quality design criteria to meet the
1229 requirements of Part I B 10 a. Under this criteria, the total phosphorus load shall not
1230 exceed the greater of (i) the total phosphorus load that was discharged from the
1231 expanded portion of the land ~~prior to~~ before the land being developed for the
1232 industrial activity or (ii) 0.41 pounds per acre per year. Compliance with the water
1233 quality design criteria may be determined utilizing the Virginia Runoff Reduction
1234 Method or another equivalent methodology approved by the ~~board~~ department.
1235 Design specifications and pollutant removal efficiencies for specific BMPs can be
1236 found on the Virginia Stormwater BMP Clearinghouse website.

1237 c. The permittee may consider utilization of any pollutant trading or offset program in
1238 accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia,
1239 governing trading and offsetting, to meet the no net increase requirement.

1240 44. ~~10.~~ 10. Water quality protection. The discharges authorized by this permit shall be
1241 controlled as necessary to meet applicable water quality standards. The ~~board~~
1242 department expects that compliance with the conditions in this permit will control
1243 discharges as necessary to meet applicable water quality standards.

1244 ~~42.~~ 11. Adding or deleting stormwater outfalls. The permittee may add new or delete
1245 existing stormwater outfalls at the facility as necessary and appropriate. The permittee
1246 shall update the SWPPP and notify the department of all outfall changes within 30 days
1247 of the change. The permittee shall submit a copy of the updated SWPPP site map with
1248 this notification.

1249 ~~43.~~ 12. Antidegradation requirements for new or increased discharges to high quality
1250 waters. Facilities that add new outfalls, or increase their discharges from existing outfalls
1251 that discharge directly to high quality waters designated under Virginia's water quality
1252 standards antidegradation policy under 9VAC25-260-30 A 2 may be notified by the
1253 department that additional control measures, or other permit conditions are necessary to
1254 comply with the applicable antidegradation requirements, or may be notified that an
1255 individual permit is required in accordance with 9VAC25-31-170 B 3.

1256 44. 13. Termination of permit coverage.

1257 a. The owner may terminate coverage under this general permit by filing a ~~complete~~
1258 notice of termination with the department. The notice of termination may be filed after
1259 one or more of the following conditions have been met:

1260 (1) Operations have ceased at the facility and there are no longer discharges of
1261 stormwater associated with industrial activity from the facility;

1262 (2) A new owner has assumed responsibility for the facility. A notice of termination
1263 does not have to be submitted if a VPDES Change of Ownership Agreement Form
1264 has been submitted;

1265 (3) All stormwater discharges associated with industrial activity have been covered
1266 by an individual VPDES permit; or

1267 (4) Termination of coverage is being requested for another reason, provided the
1268 ~~board~~ department agrees that coverage under this general permit is no longer
1269 needed.

- 1270 b. The notice of termination shall contain the following information:
1271 (1) Owner's name, mailing address, telephone number, and email address (if
1272 available);
1273 (2) Facility name and location;
1274 (3) VPDES industrial stormwater general permit registration number;
1275 (4) The basis for submitting the notice of termination, including:
1276 (a) A statement indicating that a new owner has assumed responsibility for the
1277 facility;
1278 (b) A statement indicating that operations have ceased at the facility, and there are
1279 no longer discharges of stormwater associated with industrial activity from the facility;
1280 (c) A statement indicating that all stormwater discharges associated with industrial
1281 activity have been covered by an individual VPDES permit; or
1282 (d) A statement indicating that termination of coverage is being requested for another
1283 reason and a description of the reason; and
1284 (5) The following certification: "I certify under penalty of law that all stormwater
1285 discharges associated with industrial activity from the identified facility that are
1286 authorized by this VPDES general permit have been eliminated, or covered under a
1287 VPDES individual permit, or that I am no longer the owner of the industrial activity, or
1288 permit coverage should be terminated for another reason listed above. I understand
1289 that by submitting this notice of termination, that I am no longer authorized to
1290 discharge stormwater associated with industrial activity in accordance with the
1291 general permit, and that discharging pollutants in stormwater associated with
1292 industrial activity to surface waters is unlawful where the discharge is not authorized
1293 by a VPDES permit. I also understand that the submittal of this notice of termination
1294 does not release an owner from liability for any violations of this permit or the Clean
1295 Water Act."
1296 c. The notice of termination shall be signed in accordance with Part II K.
1297 d. The notice of termination shall be submitted to the DEQ regional office serving the
1298 area where the industrial facility is located.

Part II

Conditions Applicable to All VPDES Permits

1301 A. Monitoring.

- 1302 1. Samples and measurements taken as required by this permit shall be representative
1303 of the monitored activity.
1304 2. Monitoring shall be conducted according to procedures approved under 40 CFR Part
1305 136 or alternative methods approved by the U.S. Environmental Protection Agency,
1306 unless other procedures have been specified in this permit.
1307 3. The permittee shall periodically calibrate and perform maintenance procedures on all
1308 monitoring and analytical instrumentation at intervals that will ensure accuracy of
1309 measurements.
1310 4. Samples taken as required by this permit shall be analyzed in accordance with
1311 1VAC30-45 (Certification for Noncommercial Environmental Laboratories) or 1VAC30-46
1312 (Accreditation for Commercial Environmental Laboratories).

1313 B. Records.

- 1314 1. Records of monitoring information shall include:
1315 a. The date, exact place, and time of sampling or measurements;

- 1316 b. The individuals who performed the sampling or measurements;
- 1317 c. The dates and times analyses were performed;
- 1318 d. The individuals who performed the analyses;
- 1319 e. The analytical techniques or methods used; and
- 1320 f. The results of ~~such~~ the analyses.
- 1321 2. The permittee shall retain copies of the SWPPP, including any modifications made
- 1322 during the term of this permit, records of all monitoring information, including all
- 1323 calibration and maintenance records and all original strip chart recordings for continuous
- 1324 monitoring instrumentation, copies of all reports required by this permit, and records of
- 1325 all data used to complete the registration statement for this permit, for a period of at least
- 1326 three years from the date that coverage under this permit expires or is terminated. This
- 1327 period of retention shall be extended automatically during the course of any unresolved
- 1328 litigation regarding the regulated activity or regarding control standards applicable to the
- 1329 permittee, or as requested by the ~~board~~ department.
- 1330 C. Reporting monitoring results.
- 1331 1. The permittee shall submit the results of the monitoring required by this permit not
- 1332 later than the 10th day of the month after monitoring takes place, unless another
- 1333 reporting schedule is specified elsewhere in this permit. Monitoring results shall be
- 1334 submitted to the department's regional office.
- 1335 2. Monitoring results shall be reported in the department's electronic discharge
- 1336 monitoring report (e-DMR) system. All reports and forms submitted in compliance with
- 1337 this permit shall be submitted electronically by the permittee in accordance with
- 1338 9VAC25-31-1020.
- 1339 3. If the permittee monitors any pollutant specifically addressed by this permit more
- 1340 frequently than required by this permit using test procedures approved under 40 CFR
- 1341 Part 136 or using other test procedures approved by the U.S. Environmental Protection
- 1342 Agency or using procedures specified in this permit, the results of this monitoring shall
- 1343 be included in the calculation and reporting of the data submitted in e-DMR or reporting
- 1344 form specified by the department.
- 1345 4. Calculations for all limitations which require averaging of measurements shall utilize
- 1346 an arithmetic mean unless otherwise specified in this permit.
- 1347 D. Duty to provide information. The permittee shall furnish to the department, within a
- 1348 reasonable time, any information ~~which~~ that the ~~board~~ department may request to determine
- 1349 whether cause exists for modifying, revoking and reissuing, or terminating coverage under this
- 1350 permit or to determine compliance with this permit. The ~~board~~ department may require the
- 1351 permittee to furnish, ~~upon~~ on request, ~~such~~ plans, specifications, and other pertinent information
- 1352 as may be necessary to determine the effect of the wastes from the discharge on the quality of
- 1353 state waters, or ~~such~~ other information as may be necessary to accomplish the purposes of the
- 1354 State Water Control Law. The permittee shall also furnish to the department ~~upon~~ on request,
- 1355 copies of records required to be kept by this permit.
- 1356 E. Compliance schedule reports. Reports of compliance or noncompliance with, or any
- 1357 progress reports on, interim and final requirements contained in any compliance schedule of this
- 1358 permit shall be submitted no later than 14 days following each schedule date.
- 1359 F. Unauthorized discharges. Except in compliance with this permit, or another permit issued
- 1360 by the ~~board~~ department, it shall be unlawful for any person to:
- 1361 1. Discharge into state waters sewage, industrial wastes, other wastes, or any noxious
- 1362 or deleterious substances; or

1363 2. Otherwise alter the physical, chemical, or biological properties of ~~such~~ state waters
1364 and make them detrimental to the public health, or to animal or aquatic life, or to the use
1365 of ~~such~~ state waters for domestic or industrial consumption, ~~or~~ for recreation, or for other
1366 uses.

1367 G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a
1368 discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance
1369 into or upon state waters in violation of Part II F; or who discharges or causes or allows a
1370 discharge that may reasonably be expected to enter state waters in violation of Part II F, shall
1371 notify the department of the discharge immediately upon discovery of the discharge, but in no
1372 case later than 24 hours after ~~said~~ the discovery. A written report of the unauthorized discharge
1373 shall be submitted to the department within five days of discovery of the discharge. The written
1374 report shall contain:

- 1375 1. A description of the nature and location of the discharge;
- 1376 2. The cause of the discharge;
- 1377 3. The date on which the discharge occurred;
- 1378 4. The length of time that the discharge continued;
- 1379 5. The volume of the discharge;
- 1380 6. If the discharge is continuing, how long it is expected to continue;
- 1381 7. If the discharge is continuing, what the expected total volume of the discharge will be;
- 1382 and
- 1383 8. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the
1384 present discharge or any future discharges not authorized by this permit.

1385 Discharges reportable to the department under the immediate reporting requirements of
1386 other regulations are exempted from this requirement.

1387 H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge
1388 including a bypass or upset should occur from a treatment works and the discharge enters or
1389 could be expected to enter state waters, the permittee shall promptly notify, in no case later than
1390 24 hours, the department ~~by telephone~~ after the discovery of the discharge. This notification
1391 shall provide all available details of the incident, including any adverse effects on aquatic life
1392 and the known number of fish killed. The permittee shall reduce the report to writing and shall
1393 submit it to the department within five days of discovery of the discharge in accordance with
1394 Part II I 1 b. Unusual and extraordinary discharges include any discharge resulting from:

- 1395 1. Unusual spillage of materials resulting directly or indirectly from processing
1396 operations;
- 1397 2. Breakdown of processing or accessory equipment;
- 1398 3. Failure or taking out of service some or all of the treatment works; and
- 1399 4. Flooding or other acts of nature.

1400 I. Reports of noncompliance.

1401 1. The permittee shall report any noncompliance that may adversely affect state waters
1402 or may endanger public health.

1403 a. An ~~oral~~ A report shall be provided within 24 hours from the time the permittee
1404 becomes aware of the circumstances. The following shall be included as information
1405 that shall be reported within 24 hours under Part II I:

- 1406 (1) Any unanticipated bypass; and
- 1407 (2) Any upset ~~which~~ that causes a discharge to surface waters.

1408 b. A written report shall be submitted within five days and shall contain:

- 1409 (1) A description of the noncompliance and its cause;
1410 (2) The period of noncompliance, including exact dates and times, and if the
1411 noncompliance has not been corrected, the anticipated time it is expected to
1412 continue; and
1413 (3) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the
1414 noncompliance.

1415 The ~~board~~ department may waive the written report on a case-by-case basis for reports
1416 of noncompliance under Part II I if the oral report has been received within 24 hours and
1417 no adverse impact on state waters has been reported.

1418 2. The permittee shall report all instances of noncompliance not reported under Part II I 1
1419 in writing at the time the next monitoring reports are submitted. The reports shall contain
1420 the information listed in Part II I 1.

1421 3. The immediate (within 24 hours) reports required in Part II G, H and I ~~may~~ shall be
1422 made to the department's regional office. Reports may be made by telephone or online
1423 at

1424 ~~http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.~~
1425 ~~aspx~~ [<https://www.deq.virginia.gov/get-involved/pollution-response>

1426 <https://www.deq.virginia.gov/our-programs/pollution-response>]. For reports outside
1427 normal working hours, ~~a message may be left and this shall fulfill the immediate~~
1428 ~~reporting requirement~~ the online portal shall be used. For emergencies, call the Virginia
1429 Department of Emergency Management maintains a 24-hour telephone service
1430 Management's Emergency Operations Center (24-hours) at 1-800-468-8892.

1431 J. Notice of planned changes.

1432 1. The permittee shall give notice to the department as soon as possible of any planned
1433 physical alterations or additions to the permitted facility. Notice is required only when:

1434 a. The permittee plans alteration or addition to any building, structure, facility, or
1435 installation from which there is or may be a discharge of pollutants, the construction
1436 of which ~~commenced~~ began:

1437 (1) After promulgation of standards of performance under § 306 of the Clean Water
1438 Act which are applicable to ~~such~~ the source; or

1439 (2) After proposal of standards of performance in accordance with § 306 of the Clean
1440 Water Act ~~which~~ that are applicable to ~~such~~ the source, but only if the standards are
1441 promulgated in accordance with § 306 within 120 days of their proposal;

1442 b. The alteration or addition could significantly change the nature or increase the
1443 quantity of pollutants discharged. This notification applies to pollutants ~~which~~ that are
1444 subject neither to effluent limitations nor to notification requirements specified
1445 elsewhere in this permit; or

1446 c. The alteration or addition results in a significant change in the permittee's sludge
1447 use or disposal practices, and ~~such~~ the alteration, addition, or change may justify the
1448 application of permit conditions that are different from or absent in the existing
1449 permit, including notification of additional use or disposal sites not reported during
1450 the permit application process or not reported pursuant to an approved land
1451 application plan.

1452 2. The permittee shall give advance notice to the department of any planned changes in
1453 the permitted facility or activity ~~which~~ that may result in noncompliance with permit
1454 requirements.

1455 K. Signatory requirements.

- 1456 1. Registration statement. All registration statements shall be signed as follows:
- 1457 a. For a corporation: by a responsible corporate officer. For the purpose of this
- 1458 section, a responsible corporate officer means (i) a president, secretary, treasurer, or
- 1459 vice-president of the corporation in charge of a principal business function, or any
- 1460 other person who performs similar policy-making or decision-making functions for the
- 1461 corporation; or (ii) the manager of one or more manufacturing, production, or
- 1462 operating facilities, provided the manager is authorized to make management
- 1463 decisions that govern the operation of the regulated facility including having the
- 1464 explicit or implicit duty of making major capital investment recommendations, and
- 1465 initiating and directing other comprehensive measures to ~~assure~~ ensure long-term
- 1466 environmental compliance with environmental laws and regulations; the manager
- 1467 can ensure that the necessary systems are established or actions taken to gather
- 1468 complete and accurate information for permit registration requirements; and where
- 1469 authority to sign documents has been assigned or delegated to the manager in
- 1470 accordance with corporate procedures;
- 1471 b. For a partnership or sole proprietorship: by a general partner or the proprietor,
- 1472 respectively; or
- 1473 c. For a municipality, state, federal, or other public agency: by either a principal
- 1474 executive officer or ranking elected official. For purposes of this section, a principal
- 1475 executive officer of a public agency includes (i) the chief executive officer of the
- 1476 agency, or (ii) a senior executive officer having responsibility for the overall
- 1477 operations of a principal geographic unit of the agency.
- 1478 2. Reports, ~~etc.~~ All reports required by permits, and other information requested by the
- 1479 ~~board~~ department shall be signed by a person described in Part II K 1 or by a duly
- 1480 authorized representative of that person. A person is a duly authorized representative
- 1481 only if:
- 1482 a. The authorization is made in writing by a person described in Part II K 1;
- 1483 b. The authorization specifies either an individual or a position having responsibility
- 1484 for the overall operation of the regulated facility or activity ~~such as~~ (e.g., the position
- 1485 of plant manager, operator of a well or a well field, superintendent, position of
- 1486 equivalent responsibility, or an individual or position having overall responsibility for
- 1487 environmental matters for the company). A duly authorized representative may ~~thus~~
- 1488 ~~be either~~ a named individual or any individual occupying a named position; and
- 1489 c. The written authorization is submitted to the department.
- 1490 3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate
- 1491 because a different individual or position has responsibility for the overall operation of
- 1492 the facility, a new authorization satisfying the requirements of Part II K 2 shall be
- 1493 submitted to the department ~~prior to~~ before or together with any reports, or information to
- 1494 be signed by an authorized representative.
- 1495 4. Certification. Any person signing a document under Part II K 1 or 2 shall make the
- 1496 following certification:
- 1497 "I certify under penalty of law that this document and all attachments were prepared
- 1498 under my direction or supervision in accordance with a system designed to assure
- 1499 that qualified personnel properly gather and evaluate the information submitted.
- 1500 Based on my inquiry of the person or persons who manage the system, or those
- 1501 persons directly responsible for gathering the information, the information submitted
- 1502 is, to the best of my knowledge and belief, true, accurate, and complete. I am aware

1503 that there are significant penalties for submitting false information, including the
1504 possibility of fine and imprisonment for knowing violations."

1505 L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit
1506 noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act,
1507 except that noncompliance with certain provisions of this permit may constitute a violation of the
1508 State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for
1509 enforcement action; for permit coverage termination or denial of a permit coverage renewal.

1510 The permittee shall comply with effluent standards or prohibitions established under §
1511 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that
1512 establish these standards even if this permit has not yet been modified to incorporate the
1513 requirement.

1514 M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit
1515 after the expiration date of this permit, the permittee shall submit a new registration statement at
1516 least 60 days before the expiration date of the existing permit, unless permission for a later date
1517 has been granted by the ~~board~~ department. The ~~board~~ department shall not grant permission for
1518 registration statements to be submitted later than the expiration date of the existing permit.

1519 N. Effect of a permit. This permit ~~does not convey~~ neither conveys any property rights in
1520 either real or personal property or any exclusive privileges, nor ~~does it authorize~~ authorizes any
1521 injury to private property or invasion of personal rights, or any infringement of federal, state, or
1522 local law or regulations.

1523 O. State law. Nothing in this permit shall be construed to preclude the institution of any legal
1524 action under, or relieve the permittee from any responsibilities, liabilities, or penalties
1525 established pursuant to any other state law or regulation or under authority preserved by § 510
1526 of the Clean Water Act. Except as provided in permit conditions on "bypassing" ~~(as described in~~
1527 Part II U), and "upset" ~~(as described in~~ Part II V), nothing in this permit shall be construed to
1528 relieve the permittee from civil and criminal penalties for noncompliance.

1529 P. Oil and hazardous substance liability. Nothing in this permit shall be construed to
1530 preclude the institution of any legal action or relieve the permittee from any responsibilities,
1531 liabilities, or penalties to which the permittee is or may be subject under §§ 62.1-44.34:14
1532 through 62.1-44.34:23 of the State Water Control Law.

1533 Q. Proper operation and maintenance. The permittee shall at all times properly operate and
1534 maintain all facilities and systems of treatment and control (and related appurtenances) ~~which~~
1535 that are installed or used by the permittee to achieve compliance with the conditions of this
1536 permit. Proper operation and maintenance also includes effective plant performance, adequate
1537 funding, adequate staffing, and adequate laboratory and process controls, including appropriate
1538 quality assurance procedures. This provision requires the operation of back-up or auxiliary
1539 facilities or similar systems ~~which that~~ that are installed by the permittee only when the operation is
1540 necessary to achieve compliance with the conditions of this permit.

1541 R. Disposal of solids or sludges. Solids, sludges, or other pollutants removed in the course
1542 of treatment or management of pollutants shall be disposed of in a manner so as to prevent any
1543 pollutant from ~~such the~~ the materials from entering state waters.

1544 S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any
1545 discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood
1546 of adversely affecting human health or the environment.

1547 T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in
1548 an enforcement action that it would have been necessary to halt or reduce the permitted activity
1549 in order to maintain compliance with the conditions of this permit.

1550 U. Bypass.

1551 1. "Bypass" means the intentional diversion of waste streams from any portion of a
1552 treatment facility. The permittee may allow any bypass to occur ~~which~~ that does not
1553 cause effluent limitations to be exceeded, but only if it also is for essential maintenance
1554 to assure efficient operation. These bypasses are not subject to the provisions of Part II
1555 U 2 and 3.

1556 2. Notice.

1557 a. Anticipated bypass. If the permittee knows in advance of the need for a bypass,
1558 prior notice shall be submitted, if possible at least 10 days before the date of the
1559 bypass.

1560 b. Unanticipated bypass. The permittee shall submit notice of an unanticipated
1561 bypass as required in Part II I.

1562 3. Prohibition of bypass.

1563 a. Bypass is prohibited, and the ~~board~~ department may take enforcement action
1564 against a permittee for bypass, unless:

1565 (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe
1566 property damage;

1567 (2) There were no feasible alternatives to the bypass, ~~such as~~ (e.g., the use of
1568 auxiliary treatment facilities, retention of untreated wastes, or maintenance during
1569 normal periods of equipment downtime). This condition is not satisfied if adequate
1570 back-up equipment should have been installed in the exercise of reasonable
1571 engineering judgment to prevent a bypass which occurred during normal periods of
1572 equipment downtime or preventive maintenance; and

1573 (3) The permittee submitted notices as required under Part II U 2.

1574 b. The ~~board~~ department may approve an anticipated bypass, after considering its
1575 adverse effects, if the ~~board~~ department determines that it will meet the three
1576 conditions listed ~~above~~ in Part II U 3 a.

1577 V. Upset.

1578 1. An upset constitutes an affirmative defense to an action brought for noncompliance
1579 with technology based permit effluent limitations if the requirements of Part II V 2 are
1580 met. A determination made during administrative review of claims that noncompliance
1581 was caused by upset, and before an action for noncompliance, is not a final
1582 administrative action subject to judicial review.

1583 2. A permittee who wishes to establish the affirmative defense of upset shall
1584 demonstrate, through properly signed, contemporaneous operating logs, or other
1585 relevant evidence that:

1586 a. An upset occurred and that the permittee can identify the causes of the upset;

1587 b. The permitted facility was at the time being properly operated;

1588 c. The permittee submitted notice of the upset as required in Part II I; and

1589 d. The permittee complied with any remedial measures required under Part II S.

1590 3. In any enforcement proceeding the permittee seeking to establish the occurrence of
1591 an upset has the burden of proof.

1592 W. Inspection and entry. The permittee shall allow the director, or an authorized
1593 representative, including an authorized contractor acting as a representative of the
1594 administrator, upon presentation of credentials and other documents as may be required by law,
1595 to:

- 1596 1. Enter upon on the permittee's premises where a regulated facility or activity is located
 1597 or conducted, or where records must be kept under the conditions of this permit;
 1598 2. Have access to and copy, at reasonable times, any records that must be kept under
 1599 the conditions of this permit;
 1600 3. Inspect at reasonable times any facilities, equipment (including monitoring and control
 1601 equipment), practices, or operations regulated or required under this permit; and
 1602 4. Sample or monitor at reasonable times, for the purposes of assuring permit
 1603 compliance or as otherwise authorized by the Clean Water Act and the State Water
 1604 Control Law, any substances or parameters at any location.

1605 For purposes of this section, the time for inspection shall be deemed reasonable during
 1606 regular business hours, and whenever the facility is discharging. Nothing contained ~~herein~~ in
 1607 this general permit shall make an inspection unreasonable during an emergency.

1608 X. Permit actions. Permit coverages may be terminated for cause. The filing of a request by
 1609 the permittee for a permit termination or a notification of planned changes or anticipated
 1610 noncompliance does not stay any permit condition.

1611 Y. Transfer of permits.

- 1612 1. Permits are not transferable to any person except after notice to the department.
 1613 2. Coverage under this permit may be automatically transferred to a new permittee if:
 1614 a. The current permittee notifies the department within 30 days of the transfer of the
 1615 title to the facility or property, unless permission for a later date has been granted by
 1616 the ~~board~~ department;
 1617 b. The notice includes a written agreement between the existing and new permittees
 1618 containing a specific date for transfer of permit responsibility, coverage, and liability
 1619 between them; and
 1620 c. The ~~board~~ department does not notify the existing permittee and the proposed
 1621 new permittee of its intent to deny the new permittee coverage under the permit. If
 1622 this notice is not received, the transfer is effective on the date specified in the
 1623 agreement mentioned in Part II Y 2 b.

1624 Z. Severability. The provisions of this permit are severable, and if any provision of this permit
 1625 or the application of any provision of this permit to any circumstance, is held invalid, the
 1626 application of such provision to other circumstances, and the remainder of this permit, shall not
 1627 be affected thereby.

1628 **9VAC25-151-80. Stormwater pollution prevention plans.**

1629 A stormwater pollution prevention plan (SWPPP) shall be developed and implemented for
 1630 the facility covered by this permit. The SWPPP is intended to document the selection, design,
 1631 and installation of control measures, including BMPs, to minimize the pollutants in all
 1632 stormwater discharges from the facility, and to meet applicable effluent limitations and water
 1633 quality standards.

1634 The SWPPP requirements of this general permit may be fulfilled, in part, by incorporating by
 1635 reference other plans or documents ~~such as~~ (i.e., a spill prevention control and countermeasure
 1636 (SPCC) plan developed for the facility under § 311 of the Clean Water Act, or best management
 1637 practices (BMP) programs otherwise required for the facility, provided that the incorporated plan
 1638 meets or exceeds the plan requirements of Part III B ~~(Contents of the SWPPP)~~. All plans
 1639 incorporated by reference into the SWPPP become enforceable under this permit. If a plan
 1640 incorporated by reference does not contain all of the required elements of the SWPPP of Part III
 1641 B, the permittee shall develop the missing SWPPP elements and include them in the required
 1642 plan.

- 1643 A. Deadlines for SWPPP preparation and compliance.
- 1644 1. Facilities that were covered under the ~~2014~~ 2019 Industrial Stormwater General
- 1645 Permit. Owners of facilities that were covered under the ~~2014~~ 2019 Industrial
- 1646 Stormwater General Permit who are continuing coverage under this general permit shall
- 1647 update and implement any revisions to the SWPPP within 90 days of the ~~board~~
- 1648 department granting coverage under this permit.
- 1649 2. New facilities, facilities previously covered by an expiring individual permit, and
- 1650 existing facilities not currently covered by a VPDES permit. Owners of new facilities,
- 1651 facilities previously covered by an expiring individual permit, and existing facilities not
- 1652 currently covered by a VPDES permit who elect to be covered under this general permit
- 1653 shall prepare and implement the SWPPP ~~prior to~~ before submitting the registration
- 1654 statement.
- 1655 3. New owners of existing facilities. Where the owner of an existing facility that is
- 1656 covered by this permit changes, the new owner of the facility shall update and implement
- 1657 any revisions to the SWPPP within 60 days of the ownership change.
- 1658 4. Extensions. Upon a showing of good cause, the director may establish a later date in
- 1659 writing for the preparation and compliance with the SWPPP.
- 1660 B. Contents of the SWPPP. The contents of the SWPPP shall comply with the requirements
- 1661 listed below and those in the appropriate sectors of Part IV (~~9VAC25-151-90 et seq.~~). These
- 1662 requirements are cumulative. If a facility has colocated industrial activities that are covered in
- 1663 more than one sector of Part IV, that facility's SWPPP shall comply with the requirements listed
- 1664 in all applicable sectors. The following requirements are applicable to all SWPPPs developed
- 1665 under this general permit. The SWPPP shall include, at a minimum, the following items:
- 1666 1. Pollution prevention team. The SWPPP shall identify the staff individuals by name or
- 1667 title who comprise the facility's stormwater pollution prevention team. The pollution
- 1668 prevention team is responsible for assisting the facility or plant manager in developing,
- 1669 implementing, maintaining, revising, and ensuring compliance with the facility's SWPPP.
- 1670 Specific responsibilities of each staff individual on the team shall be identified and listed.
- 1671 2. Site description. The SWPPP shall include the following:
- 1672 a. A description of the industrial activities at the facility.
- 1673 b. A site map identifying the following:
- 1674 (1) The boundaries of the property and the size of the property in acres;
- 1675 (2) The location and extent of significant structures and impervious surfaces;
- 1676 (3) Locations of all stormwater conveyances, including ditches, pipes, swales, and
- 1677 inlets, and the directions of stormwater flow using arrows to ~~indicate~~ show which
- 1678 direction stormwater will flow;
- 1679 (4) Locations of all stormwater control measures, including BMPs;
- 1680 (5) Locations of all surface water bodies, including wetlands;
- 1681 (6) Locations of potential pollutant sources identified under Part III B 3;
- 1682 (7) Locations where significant spills or leaks identified under Part III B 3 c have
- 1683 occurred;
- 1684 (8) Locations of stormwater outfalls.
- 1685 (a) An approximate outline of the area draining to each outfall;
- 1686 (b) The drainage area of each outfall in acres;
- 1687 (c) The longitude and latitude of each outfall;
- 1688 (d) The location of any MS4 conveyance receiving discharge from the facility; and

1689 (e) Each outfall shall be identified with a unique numerical identification code. For
1690 example: Outfall Number 001, Outfall Number 002, etc.;

1691 (9) Location and description of all nonstormwater discharges;

1692 (10) Location of any storage piles containing salt;

1693 (11) Locations and sources of suspected run-on to the site from an adjacent property
1694 if the run-on is suspected of containing significant quantities of pollutants; and

1695 (12) Locations of all stormwater monitoring points.

1696 c. Receiving waters and wetlands. The name of all surface waters receiving
1697 discharges from the site, including intermittent streams, dry sloughs, and arroyos.
1698 Provide a description of wetland sites that may receive discharges from the facility. If
1699 the facility discharges through an MS4, identify the MS4 operator, and the receiving
1700 water to which the MS4 discharges.

1701 3. Summary of potential pollutant sources. The SWPPP shall identify each separate area
1702 at the facility where industrial materials or activities are exposed to stormwater. Industrial
1703 materials or activities include material handling equipment or activities, industrial
1704 machinery, raw materials, industrial production and processes, intermediate products,
1705 byproducts, final products, and waste products. Material handling activities include the
1706 storage, loading and unloading, transportation, disposal, or conveyance of any raw
1707 material, intermediate product, final product, or waste product. For each separate area
1708 identified, the description shall include:

1709 a. Activities in the area. A list of the industrial activities exposed to stormwater.

1710 b. Pollutants. A list of the pollutants, pollutant constituents, or industrial chemicals
1711 associated with each industrial activity that could potentially be exposed to
1712 stormwater. The pollutant list shall include all significant materials handled, treated,
1713 stored or disposed that have been exposed to stormwater in the three years ~~prior to~~
1714 before the date this SWPPP was prepared or amended. The list shall include any
1715 hazardous substances or oil at the facility.

1716 c. Spills and leaks. The SWPPP shall clearly identify areas where potential spills and
1717 leaks that can contribute pollutants to stormwater discharges can occur and their
1718 corresponding outfalls. The SWPPP shall include a list of significant spills and leaks
1719 of toxic or hazardous pollutants that actually occurred at exposed areas, or that
1720 drained to a stormwater conveyance during the three-year period ~~prior to~~ before the
1721 date this SWPPP was prepared or amended. The list shall be updated within 60 days
1722 of the incident if significant spills or leaks occur in exposed areas of the facility during
1723 the term of the permit.

1724 d. Sampling data. The SWPPP shall include stormwater discharge sampling data
1725 collected during the previous three years.

1726 4. Stormwater controls.

1727 a. Control measures shall be implemented for all the areas identified in Part III B 3 to
1728 prevent or control pollutants in stormwater discharges from the facility. Regulated
1729 stormwater discharges from the facility include stormwater run-on that commingles
1730 with stormwater discharges associated with industrial activity at the facility. The
1731 SWPPP shall describe the type, location, and implementation of all control measures
1732 for each area where industrial materials or activities are exposed to stormwater.
1733 Selection of control measures shall take into consideration:

1734 (1) That preventing stormwater from coming into contact with polluting materials is
1735 generally more effective, and less costly, than trying to remove pollutants from
1736 stormwater;

1737 (2) Control measures generally shall be used in combination with each other for most
1738 effective water quality protection;

1739 (3) Assessing the type and quantity of pollutants, including their potential to impact
1740 receiving water quality, is critical to designing effective control measures;

1741 (4) That minimizing impervious areas at the facility can reduce runoff and improve
1742 groundwater recharge and stream base flows in local streams (however, care must
1743 be taken to avoid groundwater contamination);

1744 (5) Flow attenuation by use of open vegetated swales and natural depressions can
1745 reduce instream impacts of erosive flows;

1746 (6) Conservation or restoration of riparian buffers will help protect streams from
1747 stormwater runoff and improve water quality; and

1748 (7) Treatment interceptors (e.g., swirl separators and sand filters) may be
1749 appropriate in some instances to minimize the discharge of pollutants.

1750 b. Nonnumeric technology-based effluent limits. The permittee shall implement the
1751 following types of control measures to prevent and control pollutants in the
1752 stormwater discharges from the facility, unless it can be demonstrated and
1753 documented that ~~such~~ the controls are not relevant to the discharges.

1754 (1) Good housekeeping. The permittee shall keep clean all exposed areas of the
1755 facility that are potential sources of pollutants to stormwater discharges. The
1756 permittee shall perform the following good housekeeping measures to minimize
1757 pollutant discharges:

1758 (a) The SWPPP shall include a schedule for regular pickup and disposal of waste
1759 materials, along with routine inspections for leaks and conditions of drums, tanks,
1760 and containers;

1761 (b) As feasible, the facility shall sweep or vacuum;

1762 (c) Store materials in containers constructed of appropriate materials;

1763 (d) Manage all waste containers to prevent a discharge of pollutants;

1764 (e) Minimize the potential for waste, garbage, and floatable debris to be discharged
1765 by keeping areas exposed to stormwater free of such materials or by intercepting
1766 ~~such~~ the materials ~~prior to~~ before the discharge; and

1767 (f) Facilities that handle pre-production plastic or plastic waste shall implement BMPs
1768 to eliminate stormwater discharges of plastics.

1769 (2) Eliminating and minimizing exposure. To the extent practicable, manufacturing,
1770 processing, and material storage areas (including loading and unloading, storage,
1771 disposal, cleaning, maintenance, and fueling operations) shall be located inside, or
1772 protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt,
1773 and runoff. Eliminating exposure at all industrial areas may make the facility eligible
1774 for the "Conditional Exclusion for No Exposure" provision of 9VAC25-31-120 E,
1775 ~~thereby~~ eliminating the need to have a permit. Unless infeasible, facilities shall
1776 implement the following:

1777 (a) Use grading, berming, or curbing to prevent runoff of contaminated flows and
1778 divert run-on away from potential sources of pollutants;

1779 (b) Locate materials, equipment, and activities so that potential leaks and spills are
1780 contained, or able to be contained, or diverted before discharge;

1781 (c) Clean up spills and leaks immediately, ~~upon~~ on discovery of the spills or leaks,
1782 using dry methods (e.g., absorbents) to prevent the discharge of pollutants;

1783 (d) Store leaking vehicles and equipment indoors or, if stored outdoors, use drip
1784 pans and adsorbents;

1785 (e) Utilize appropriate spill or overflow protections equipment;

1786 (f) Perform all vehicle maintenance or equipment cleaning operations indoors, under
1787 cover, or in bermed areas that prevent runoff and run-on and also capture any
1788 overspray; and

1789 (g) Drain fluids from equipment and vehicles that will be decommissioned, and for
1790 any equipment and vehicles that remain unused for extended periods of time, inspect
1791 at least monthly for leaks.

1792 (3) Preventive maintenance. The permittee shall have a preventive maintenance
1793 program that includes regular inspection, testing, maintenance, and repairing of all
1794 industrial equipment and systems to avoid situations that could result in leaks, spills,
1795 and other releases of pollutants in stormwater discharged from the facility. This
1796 program is in addition to the specific control measure maintenance required under
1797 Part III C (Maintenance).

1798 (4) Spill prevention and response procedures. The SWPPP shall describe the
1799 procedures that will be followed for preventing and responding to spills and leaks,
1800 including:

1801 (a) Preventive measures, ~~such as~~ (e.g., barriers between material storage and traffic
1802 areas, secondary containment provisions, and procedures for material storage and
1803 handling);

1804 (b) Response procedures, including notification of appropriate facility ~~personnel~~ staff,
1805 emergency agencies, and regulatory agencies, and procedures for stopping,
1806 containing, and cleaning up spills. Measures for cleaning up hazardous material
1807 spills or leaks shall be consistent with applicable Resource Conservation and
1808 Recovery Act regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who
1809 may cause, detect, or respond to a spill or leak shall be trained in these procedures
1810 and have necessary spill response equipment available. If possible, one of these
1811 individuals shall be a member of the Pollution Prevention Team;

1812 (c) Procedures for plainly labeling containers (e.g., "used oil," "spent solvents,"
1813 "fertilizers and pesticides," etc.) that could be susceptible to spillage or leakage to
1814 encourage proper handling and facilitate rapid response if spills or leaks occur; and

1815 (d) Contact information for individuals and agencies that must be notified ~~in the event~~
1816 of a spill shall be included in the SWPPP, and in other locations where it will be
1817 readily available.

1818 (5) Salt storage piles or piles containing salt. Storage piles of salt or piles containing
1819 salt used for deicing or other commercial or industrial purposes shall be enclosed or
1820 covered to prevent exposure to precipitation. The permittee shall implement
1821 appropriate measures (e.g., good housekeeping, diversions, containment) to
1822 minimize exposure resulting from adding to or removing materials from the pile. All
1823 salt storage piles shall be located on an impervious surface. All runoff from the pile,
1824 and runoff that comes in contact with salt, including under drain systems, shall be
1825 collected and contained within a bermed basin lined with concrete or other
1826 impermeable materials, or within an underground storage tank or tanks, or within an
1827 ~~above ground~~ aboveground storage tank ~~or tanks~~, or disposed of through a sanitary
1828 sewer (with the permission of the owner of the treatment facility). A combination of

1829 any or all of these methods may be used. In no case shall salt contaminated
1830 stormwater be allowed to discharge directly to the ground or to surface waters.

1831 (6) Employee training. The permittee shall implement a stormwater employee
1832 training program for the facility. The SWPPP shall include a schedule for all types of
1833 necessary training, and shall document all training sessions and the employees who
1834 received the training. Training shall be provided at least annually for all employees
1835 who work in areas where industrial materials or activities are exposed to stormwater,
1836 and for employees who are responsible for implementing activities identified in the
1837 SWPPP (e.g., inspectors, maintenance ~~personnel~~ staff, etc.). The training shall cover
1838 the components and goals of the SWPPP, and include such topics as spill response,
1839 good housekeeping, material management practices, control measure operation and
1840 maintenance, etc. The SWPPP shall include a summary of any training performed.

1841 (7) Sediment and erosion control. The SWPPP shall identify areas at the facility that,
1842 due to topography, land disturbance (e.g., construction, landscaping, site grading), or
1843 other factors, have a potential for soil erosion. The permittee shall identify and
1844 implement structural, vegetative, and stabilization control measures to prevent or
1845 control on-site and off-site erosion and sedimentation. Flow velocity dissipation
1846 devices shall be placed at discharge locations and along the length of any outfall
1847 channel if the flows would otherwise create erosive conditions.

1848 (8) Management of runoff. The SWPPP shall describe the stormwater runoff
1849 management practices (i.e., permanent structural control measures) for the facility.
1850 These types of control measures shall be used to divert, infiltrate, reuse, or otherwise
1851 reduce pollutants in stormwater discharges from the site.

1852 Structural control measures may require a separate permit under § 404 of the Clean
1853 Water Act and the Virginia Water Protection Permit Program Regulation (9VAC25-
1854 210) before installation begins.

1855 (9) Dust suppression and vehicle tracking of industrial materials. The permittee shall
1856 implement control measures to minimize the generation of dust and off-site tracking
1857 of raw, final, or waste materials. Stormwater collected on-site may be used for the
1858 purposes of dust suppression or for spraying stockpiles. Potable water, well water,
1859 and uncontaminated reuse water may also be used for this purpose. There shall be
1860 no direct discharge to surface waters from dust suppression activities or as a result
1861 of spraying stockpiles.

1862 (10) Airport deicing operations. The permittee shall minimize, and where practicable
1863 eliminate, the use of deicing or anti-icing chemicals in order to reduce the aggregate
1864 amount of deicing or anti-icing chemicals used and lessen the environmental impact.
1865 The permittee shall minimize contamination of stormwater runoff from aircraft deicing
1866 and anti-icing operations and runway deicing operations, if applicable. Where deicing
1867 and anti-icing operations occur, the SWPPP shall describe procedures and control
1868 measures to manage contaminated stormwater runoff or snow melt (from areas used
1869 to dispose contaminated snow) to minimize the amount of pollutants discharged from
1870 the site. The following control measure options or their equivalents shall be
1871 considered: covering storm sewer inlets, using booms, installing absorptive
1872 interceptors in the drain, establishing a dedicated deicing facility with a runoff
1873 collection and recovery system; using vacuum or collection trucks; storing
1874 contaminated stormwater or deicing fluids in tanks and releasing controlled amounts
1875 to a publicly owned treatment works (with permission of the treatment works);
1876 collecting contaminated runoff in a wet pond for biochemical decomposition; and
1877 directing runoff into vegetative swales or other infiltration measures. Procedures and

1878 selected control measures should at all times be consistent with considerations of
1879 flight safety.

1880 5. Routine facility inspections. ~~Personnel~~ Staff who possess the knowledge and skills to
1881 assess conditions and activities that could impact stormwater quality at the facility and
1882 who can also evaluate the effectiveness of control measures shall regularly inspect all
1883 areas of the facility where industrial materials or activities are exposed to stormwater,
1884 areas where spills or leaks have occurred in the past three years, discharge points, and
1885 control measures. At least one member of the pollution prevention team shall participate
1886 in the routine facility inspections.
1887 The inspection frequency shall be specified in the SWPPP based ~~upon~~ on a
1888 consideration of the level of industrial activity at the facility, but shall be at a minimum of
1889 once per calendar quarter unless more frequent intervals are specified elsewhere in the
1890 permit or written approval is received from the department for less frequent intervals.
1891 Inspections shall be performed during operating hours. At least once each calendar
1892 year, the routine facility inspection shall be conducted during a period when a
1893 stormwater discharge is occurring.
1894 The requirement for routine facility inspections is waived for facilities that have
1895 maintained an active VEEP E3/E4 status. Certain sectors in Part IV have additional
1896 inspection requirements. If the VEEP E3/E4 waiver language is not included for the
1897 sector specific inspections, these additional inspection requirements may not be waived.
1898 Any deficiencies in the implementation of the SWPPP that are found shall be corrected
1899 as soon as practicable, but not later than within 60 days of the inspection, unless
1900 permission for a later date is granted in writing by the director. The results of the
1901 inspections shall be documented in the SWPPP and shall include at a minimum:

- 1902 a. The inspection date;
- 1903 b. The names of the inspectors;
- 1904 c. Weather information and a description of any discharges occurring at the time of
1905 the inspection;
- 1906 d. Any previously unidentified discharges of pollutants from the site;
- 1907 e. Any control measures needing maintenance or repairs;
- 1908 f. Any failed control measures that need replacement;
- 1909 g. Any incidents of noncompliance observed; and
- 1910 h. Any additional control measures needed to comply with the permit requirements.

1911 C. Maintenance. The SWPPP shall include a description of procedures and a regular
1912 schedule for preventive maintenance of all control measures, and shall include a description of
1913 the back-up practices that are in place should a runoff event occur while a control measure is
1914 off-line. The effectiveness of nonstructural control measures shall also be maintained by
1915 appropriate means (e.g., spill response supplies available and ~~personnel~~ staff trained, etc.).

1916 All control measures identified in the SWPPP shall be maintained in effective operating
1917 condition and shall be observed at least annually when a stormwater discharge is occurring to
1918 ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby
1919 downstream locations shall be observed. The observations shall be documented in the SWPPP.

1920 If routine facility inspections required by Part III B 5 identify control measures that are not
1921 operating effectively, repairs or maintenance shall be performed before the next anticipated
1922 storm event. If maintenance ~~prior to~~ before the next anticipated storm event is not possible,
1923 maintenance shall be scheduled and accomplished as soon as practicable [but not later than
1924 within 60 days of the inspection, unless permission for a later date is granted in writing by the
1925 director] . In the interim, back-up measures shall be employed and documented in the SWPPP

1926 until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of
1927 maintenance and repairs of control measures, including the dates of regular maintenance, dates
1928 of discovery of areas in need of repair or replacement, dates for repairs, dates that the control
1929 measures returned to full function, and the justification for any extended maintenance or repair
1930 schedules.

1931 D. Nonstormwater discharges.

1932 1. Discharges of certain sources of nonstormwater listed in Part I B 1 are allowable
1933 discharges under this permit. All other nonstormwater discharges are not authorized and
1934 shall be either eliminated or covered under a separate VPDES permit.

1935 2. Annual outfall evaluation for unauthorized discharges.

1936 a. The SWPPP shall include documentation that all stormwater outfalls associated
1937 with industrial activity have been evaluated annually for the presence of unauthorized
1938 discharges. The documentation shall include:

1939 (1) The date of the evaluation;

1940 (2) A description of the evaluation criteria used;

1941 (3) A list of the outfalls or on-site drainage points that were directly observed during
1942 the evaluation;

1943 (4) A description of the results of the evaluation for the presence of unauthorized
1944 discharges; and

1945 (5) The actions taken to eliminate unauthorized discharges if any were identified.

1946 b. The permittee may request in writing to the department that the facility be allowed
1947 to conduct annual outfall evaluations at 20% of the outfalls. If approved, the
1948 permittee shall evaluate at least 20% of the facility outfalls each year on a rotating
1949 basis ~~such~~ so that all facility outfalls will be evaluated during the period of coverage
1950 under this permit.

1951 E. Signature and SWPPP review.

1952 1. Signature and location. The SWPPP, including revisions to the SWPPP to document
1953 any corrective actions taken as required by Part I A 6, shall be signed in accordance with
1954 Part II K, dated, and retained on-site at the facility covered by this permit in accordance
1955 with Part II B 2. All other changes to the SWPPP, and other permit compliance
1956 documentation, shall be signed and dated by the person preparing the change or
1957 documentation. For inactive and unstaffed facilities, the plan may be kept at the nearest
1958 office of the permittee.

1959 2. Availability. The permittee shall retain a copy of the current SWPPP (hard copy or
1960 electronic) required by this permit at the facility, and it shall be immediately available to
1961 the department, EPA, or the operator of an MS4 receiving discharges from the site at the
1962 time of an on-site inspection or upon request.

1963 3. Required modifications. The permittee shall modify the SWPPP whenever necessary
1964 to address all corrective actions required by Part I A 6 a (Data exceeding benchmark
1965 concentration values) or Part I A 6 b (Corrective actions). Changes to the SWPPP shall
1966 be made in accordance with the corrective action deadlines in Part I A 6 a and Part I A 6
1967 b, and shall be signed and dated in accordance with Part III E 1.

1968 The director may notify the permittee at any time that the SWPPP, control measures, or
1969 other components of the facility's stormwater program do not meet one or more of the
1970 requirements of this permit. The notification shall identify specific provisions of the permit
1971 that are not being met, and may include required modifications to the stormwater
1972 program, additional monitoring requirements, and special reporting requirements. The

1973 permittee shall make any required changes to the SWPPP within 60 days of receipt of
1974 such the notification, unless permission for a later date is granted in writing by the
1975 director, and shall submit a written certification to the director that the requested
1976 changes have been made.

1977 F. Maintaining an updated SWPPP.

- 1978 1. The permittee shall review and amend the SWPPP as appropriate whenever:
- 1979 a. There is construction or a change in design, operation, or maintenance at the
 - 1980 facility that has a significant effect on the discharge, or the potential for the
 - 1981 discharge, of pollutants from the facility;
 - 1982 b. Routine inspections or compliance evaluations determine that there are
 - 1983 deficiencies in the control measures, including BMPs;
 - 1984 c. Inspections by local, state, or federal officials determine that modifications to the
 - 1985 SWPPP are necessary;
 - 1986 d. There is a significant spill, leak, or other release at the facility;
 - 1987 e. There is an unauthorized discharge from the facility; or
 - 1988 f. The department notifies the permittee that a TMDL has been developed and
 - 1989 applies to the permitted facility, consistent with Part I B.
- 1990 2. SWPPP modifications shall be made within 60 calendar days after discovery,
- 1991 observation or event requiring a an SWPPP modification. Implementation of new or
- 1992 modified control measures (distinct from regular preventive maintenance of existing
- 1993 control measures described in Part III C) shall be initiated before the next storm event if
- 1994 possible, but no later than 60 days after discovery, or as otherwise provided or approved
- 1995 by the director. The amount of time taken to modify a control measure or implement
- 1996 additional control measures shall be documented in the SWPPP.
- 1997 3. If the SWPPP modification is based on a significant spill, leak, release, or
- 1998 unauthorized discharge, include a description and date of the incident, the
- 1999 circumstances leading to the incident, actions taken in response to the incident, and
- 2000 measures to prevent the recurrence of ~~such~~ releases. Unauthorized discharges are
- 2001 subject to the reporting requirements of Part II G of this permit.

2002 Part IV

2003 Sector Specific Permit Requirements

2004 **9VAC25-151-85. Sector specific permit requirements.**

2005 The permittee must only comply with the additional requirements of Part IV of this permit

2006 that apply to the sectors of industrial activity located at the facility. These sector specific

2007 requirements are in addition to the requirements specified in Parts I, II, and III of this permit. All

2008 numeric effluent limitations and benchmark monitoring concentration values reflect two

2009 significant digits, unless otherwise noted.

2010 **9VAC25-151-90. Sector A - Timber products facilities (including mulch, wood, and bark**

2011 **facilities and mulch dyeing facilities).**

2012 ~~The permittee must only comply with the additional requirements of Part IV (9VAC25-151-90~~

2013 ~~et seq.) that apply to the sectors of industrial activity located at the facility. These sector specific~~

2014 ~~requirements are in addition to the requirements specified in Parts I, II and III of this permit. All~~

2015 ~~numeric effluent limitations and benchmark monitoring concentration values reflect two~~

2016 ~~significant digits, unless otherwise noted.~~

2017 A. Discharges covered under this section. The requirements listed under this section apply

2018 to stormwater discharges associated with industrial activity from facilities generally classified

2019 under Standard Industrial Classification (SIC) Codes 2491 and 2499 that are engaged in the
2020 following activities: cutting timber and pulpwood (those that have log storage or handling areas),
2021 mills, including merchant, lath, shingle, cooperage stock, planing, plywood and veneer, and
2022 producing lumber and wood materials; wood preserving, manufacturing wood buildings or
2023 mobile homes; and manufacturing finished articles made entirely of wood or related materials,
2024 except for wood kitchen cabinet manufacturers (SIC Code 2434), and mulch, wood, and bark
2025 facilities, including mulch dyeing operations (SIC Code 24991303).

2026 B. Special conditions.

2027 1. Prohibition of nonstormwater discharges. Discharges of stormwater from areas where
2028 there may be contact with chemical formulations applied to provide surface protection
2029 are not authorized by this permit. Surface protection includes chemical application to
2030 control sap stain, mold, mildew, and insects. These discharges must be covered under a
2031 separate VPDES permit. Discharge of wet dye drippings from mulch dyeing operations
2032 are also prohibited.

2033 2. Authorized nonstormwater discharges. In addition to the discharges described in Part
2034 I B 1, the following nonstormwater discharges may be authorized by this permit provided
2035 the nonstormwater component of the discharge is in compliance with ~~9VAC25-151-90~~
2036 subsection C of this section and the effluent limitations described in ~~9VAC25-151-90~~
2037 subsection D of this section: discharges from the spray down of lumber and wood
2038 product storage yards where no chemical additives are used in the spray down waters
2039 and no chemicals are applied to the wood during storage.

2040 C. Stormwater controls. The description of stormwater management controls shall address
2041 the following areas of the site: log, lumber, and wood product storage areas; residue storage
2042 areas; loading and unloading areas; material handling areas; chemical storage areas; and
2043 equipment and vehicle maintenance, storage, and repair areas. Facilities that surface protect or
2044 preserve wood products shall address specific control measures, including any BMPs, for wood
2045 surface protection and preserving activities. Facilities that dye mulch shall address specific
2046 control measures to prevent the discharge of wet dye drippings and to prevent seepage of
2047 pollutants to groundwater.

2048 The SWPPP shall address the following minimum components:

2049 1. Good housekeeping. Good housekeeping measures in storage areas, loading and
2050 unloading areas, and material handling areas shall be designed to:

- 2051 a. Limit the discharge of wood debris;
- 2052 b. Minimize the leachate generated from decaying wood materials; and
- 2053 c. Minimize the generation of dust.

2054 2. Routine facility inspections. Inspections at processing areas, transport areas, and
2055 treated wood storage areas of facilities performing wood surface protection and
2056 preservation activities shall be performed monthly to assess the usefulness of practices
2057 in minimizing the deposit of treatment chemicals on unprotected soils and in areas that
2058 will come in contact with stormwater discharges. The requirement for routine facility
2059 inspections is waived for facilities that have maintained an active VEEP E3/E4 status.

2060 D. Numeric effluent limitations.

2061 The following numeric effluent limitations shall be met by existing and new facilities. Wet
2062 deck storage area runoff. Nonstormwater discharges from areas used for the storage of
2063 logs where water, without chemical additives, is intentionally sprayed or deposited on
2064 logs to deter decay or infestation by insects are required to meet the following effluent
2065 limitations: pH shall be within the range of 6.0-9.0, and there will be no discharge of
2066 debris. Chemicals are not allowed to be applied to the stored logs. The term "debris" is

2067 defined as woody material ~~such as, for example,~~ bark, twigs, branches, heartwood, or
 2068 sapwood that will not pass through a 2.54 cm (1 in.) diameter round opening and is
 2069 present in the discharge from a wet deck storage area. Permittees subject to these
 2070 numeric limitations shall be in compliance with these limitations through the duration of
 2071 permit coverage.

Table 90-1 Sector A - Numeric Effluent Limitations	
Parameter	Effluent Limitations
Wet Decking Discharges at Log Storage and Handling Areas (SIC Code 2411)	
pH	6.0 - 9.0 s.u.
Debris, (woody material such as (e.g., bark, twigs, branches, heartwood, or sapwood)	No discharge of debris that will not pass through a 2.54 cm (1") diameter round opening.

2072 E. Benchmark monitoring and reporting requirements. Wood preserving facilities; mulch,
 2073 wood, and bark facilities; and mulch dyeing facilities are required to monitor their stormwater
 2074 discharges for the pollutants of concern listed in the appropriate section of Table 90-2.

Table 90-2 Sector A - Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
General Sawmills and Planing Mills (SIC Code 2421)	
Total Suspended Solids (TSS)	100 mg/L
Wood Preserving Facilities (SIC Code 2491)	
Total Recoverable Arsenic ¹	50 150 µg/L
Total Recoverable Chromium ¹	16 µg/L
Total Recoverable Copper ¹	48 13 µg/L
Log Storage and Handling Facilities (SIC Code 2411)	
Total Suspended Solids (TSS)	100 mg/L
Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood and Structural Wood; Wood Containers; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified (SIC Codes 2426, 2429, 2431-2439 (except 2434), 2441, 2448, 2449, 2451, 2452, 2493, and 2499).	
Total Suspended Solids (TSS)	100 mg/L
Mulch, Wood, and Bark Facilities (SIC Code 24991303)	
Total Suspended Solids (TSS)	100 mg/L
Chemical Oxygen Demand (COD)	120 mg/L
Facilities with Mulch Dyeing/Coloring Operations (SIC Code 24991303): Monitor ONLY	

those outfalls from the facility that collect runoff from areas where mulch dyeing/coloring activities occur, including but not limited to areas where loading, transporting, and storage of dyed/colored mulch occurs.²

Total Suspended Solids (TSS)	100 mg/L
Biochemical Oxygen Demand (BOD5)	30 mg/L
Chemical Oxygen Demand (COD)	120 mg/L
Total Recoverable Aluminum	750 <u>1,100</u> µg/L
Total Recoverable Arsenic	50 <u>150</u> µg/L
Total Recoverable Cadmium	2.4 <u>1.8</u> µg/L
Total Recoverable Chromium	16 µg/L
Total Recoverable Copper	48 <u>13</u> µg/L
Total Recoverable Iron	1.0 mg/L
Total Recoverable Selenium	5.0 µg/L
Total Recoverable Silver	3.8 <u>3.2</u> µg/L
Total Recoverable Zinc	120 µg/L
Total Nitrogen	2.2 mg/L
Total Phosphorus	2.0 mg/L

¹Monitoring for metals (arsenic, chromium and copper) is not required for wood preserving facilities using only oil-based preservatives.

²Benchmark monitoring waivers are available to facilities utilizing mulch dye or colorant products that do not contain the specified parameters provided that: (i) monitoring from samples collected during one monitoring period demonstrates that the specific parameter in question is below the quantitation level; (ii) a waiver request with attached laboratory certificate of analysis is submitted to and approved by the ~~board~~ department; and (iii) a certification statement is submitted to the department annually that the facility does not use mulch dyeing products that contain any of the specifically waived parameters. Approved benchmark monitoring waivers shall be kept with the SWPPP.

2075 9VAC25-151-110. Sector C - Chemical and allied products manufacturing.

2076 A. Discharges covered under this section. The requirements listed under this section apply
2077 to stormwater discharges associated with industrial activity from facilities engaged in
2078 manufacturing the following products and generally described by the SIC code shown:

- 2079** 1. Industrial inorganic chemicals (including SIC Codes 2812-2819);
- 2080** 2. Plastic materials and synthetic resins, synthetic rubbers, and cellulosic and other
2081 synthetic fibers, except glass (including SIC Codes 2821-2824);
- 2082** 3. Soap and other detergents, including facilities producing glycerin from vegetable and
2083 animal fats and oils; specialty cleaning, polishing, and sanitation preparations; surface
2084 active preparations used as emulsifiers, wetting agents, and finishing agents, including
2085 sulfonated oils; and perfumes, cosmetics, and other toilet preparations (including SIC
2086 Codes 2841-2844); and

2087 4. Nitrogenous and phosphatic basic fertilizers, mixed fertilizer, pesticides, and other
 2088 agricultural chemicals (SIC Codes 2873-2879). Composting Facilities (SIC Code 2875)
 2089 are included.

2090 B. Numeric effluent limitations. The following numeric effluent limitations shall be met by
 2091 existing and new discharges with phosphate fertilizer manufacturing runoff. The provisions of
 2092 this ~~paragraph~~ subsection are applicable to stormwater discharges from the phosphate
 2093 subcategory of the fertilizer manufacturing point source category (40 CFR 418.10). The term
 2094 contaminated stormwater runoff shall mean precipitation runoff, that during manufacturing or
 2095 processing, comes into contact with any raw materials, intermediate product, finished product,
 2096 ~~by-products~~ byproducts, or waste product. The concentration of pollutants in stormwater
 2097 discharges shall not exceed the effluent limitations in Table 110-1.

Table 110-1 Sector C – Numeric Effluent Limitations		
Parameter	Effluent Limitations	
	Daily Maximum	30-day Average
Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category (40 CFR 418.10) - applies to precipitation runoff that, during manufacturing or processing, comes into contact with any raw materials, intermediate product, finished product, by-products <u>byproducts</u> , or waste product (SIC Code 2874)		
Total Phosphorus (as P)	105 mg/L	35 mg/L
Fluoride	75 mg/L	25 mg/L

2098 C. Benchmark monitoring and reporting requirements. Agricultural chemical manufacturing
 2099 facilities; industrial inorganic chemical facilities; soaps, detergents, cosmetics, and perfume
 2100 manufacturing facilities; and plastics, synthetics, and resin manufacturing facilities are required
 2101 to monitor their stormwater discharges for the pollutants of concern listed in Table 110-2.

Table 110-2 Sector C – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Agricultural Chemicals (SIC Codes 2873-2879)	
Total Nitrogen	2.2 mg/L
Total Recoverable Iron	4.0 mg/L
Total Recoverable Zinc	120 µg/L
Total Phosphorus	2.0 mg/L
Industrial Inorganic Chemicals (SIC Codes 2812-2819)	
Total Recoverable Aluminum	750 <u>1,100</u> µg/L
Total Recoverable Iron	4.0 mg/L
Total Nitrogen	2.2 mg/L
Soaps, Detergents, Cosmetics, and Perfumes (SIC Codes 2841-2844)	

Total Nitrogen	2.2 mg/L
Total Recoverable Zinc	120 µg/L
Plastics, Synthetics, and Resins (SIC Codes 2821-2824)	
Total Recoverable Zinc	120 µg/L
Composting Facilities (SIC Code 2875)	
Total Suspended Solids (TSS)	100 mg/L
Biochemical Oxygen Demand (BOD ₅)	30 mg/L
Chemical Oxygen Demand (COD)	120 mg/L
Ammonia	2.14 mg/L
Total Nitrogen	2.2 mg/L
Total Phosphorus	2.0 mg/L

2102 9VAC25-151-130. Sector E - Clay, cement, concrete, and gypsum products.

2103 A. Discharges covered under this section. The requirements listed under this section apply
2104 to stormwater discharges associated with industrial activity from facilities generally classified
2105 under SIC Codes 3251-3259, 3261-3269, 3274, and 3275 that are engaged in either
2106 manufacturing the following products or performing the following activities: structural clay
2107 products including tile and brick; pottery and porcelain electrical supplies; and concrete, plaster,
2108 and gypsum products.

2109 Concrete block and brick facilities (SIC Code 3271), concrete products facilities, except
2110 block and brick (SIC Code 3272), and ready-mixed concrete facilities (SIC Code 3273) are not
2111 covered by this permit.

2112 B. Stormwater controls. In addition to the requirements of Part III, the SWPPP shall include,
2113 at a minimum, the following items:

2114 1. Facilities shall prevent or minimize the discharge of: spilled cement; aggregate
2115 (including sand or gravel); kiln dust; fly ash; settled dust; and other significant materials
2116 in stormwater from paved portions of the site that are exposed to stormwater. Measures
2117 used to minimize the presence of these materials may include regular sweeping, or other
2118 equivalent measures. The SWPPP shall indicate the frequency of sweeping or
2119 equivalent measures. The frequency shall be determined based ~~upon~~ on consideration
2120 of the amount of industrial activity occurring in the area and frequency of precipitation,
2121 but shall not be less than once per week if cement, aggregate, kiln dust, fly ash, or
2122 settled dust are being handled or processed.

2123 2. Facilities shall prevent the exposure of fine granular solids (such as e.g., cement, fly
2124 ash, and kiln dust, ~~etc.~~) to stormwater. Where practicable, these materials shall be
2125 stored in enclosed silos or hoppers, buildings, or under other covering.

2126 C. Numeric effluent limitations. The following numeric effluent limitations shall be met by
2127 facilities with cement manufacturing and material storage runoff. Any discharge composed of
2128 runoff from the storage of materials, including raw materials, intermediate products, finished
2129 products, and waste materials from the manufacture of cement, shall not exceed the limitations
2130 in Table 130-1. Runoff from the storage piles shall not be diluted with other stormwater runoff or
2131 flows to meet these limitations. Any untreated overflow from facilities designed, constructed, and

2132 operated to treat the volume of material storage pile runoff that is associated with a 10-year, 24-
 2133 hour rainfall event shall not be subject to the TSS or pH limitations.

Table 130-1 Sector E – Numeric Effluent Limitations		
Parameter	Effluent Limitations	
	Daily Maximum	30-day Average
Cement Manufacturing Facility, Material Storage Runoff: Any discharge composed of runoff that derives from the storage of materials including raw materials, intermediate products, finished products, and waste materials that are used in or derived from the manufacture of cement.		
Total Suspended Solids (TSS)	50 mg/L	
pH	6.0 - 9.0 s.u.	

2134 D. Benchmark monitoring and reporting requirements. Clay product manufacturers (SIC
 2135 Codes 3251-3259, SIC Codes 3261-3269) and lime and gypsum product manufacturers (SIC
 2136 Codes 3274, 3275) are required to monitor their stormwater discharges for the pollutants of
 2137 concern listed in Table 130-2.

Table 130-2 Sector E – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Clay Product Manufacturers (SIC Codes 3251-3259, 3261-3269)	
Total Recoverable Aluminum	750 1,100 ug/L
Lime and Gypsum Product Manufacturers (SIC Codes 3274, 3275)	
Total Suspended Solids (TSS)	100 mg/L
pH	6.0 - 9.0 s.u.
Total Recoverable Iron	1.0 mg/L

2138 **9VAC25-151-140. Sector F - Primary metals.**

2139 A. Discharges covered under this section. The requirements listed under this section apply
 2140 to stormwater discharges associated with industrial activity from the following types of facilities
 2141 in the primary metal industry, and generally described by the SIC codes shown:

- 2142 1. Steel works, blast furnaces, and rolling and finishing mills, including: steel wire
 2143 drawing and steel nails and spikes; cold-rolled steel sheet, strip, and bars; and steel
 2144 pipes and tubes (SIC Codes 3312-3317).
- 2145 2. Iron and steel foundries, including: gray and ductile iron, malleable iron, steel
 2146 investment, and steel foundries not elsewhere classified (SIC Codes 3321-3325).
- 2147 3. Rolling, drawing, and extruding of nonferrous metals, including: rolling, drawing, and
 2148 extruding of copper; rolling, drawing, and extruding of nonferrous metals except copper
 2149 and aluminum; and drawing and insulating of nonferrous wire (SIC Codes 3351-3357).
- 2150 4. Nonferrous foundries (castings), including aluminum die-castings, nonferrous die-
 2151 castings, except aluminum, aluminum foundries, copper foundries, and nonferrous
 2152 foundries, except copper and aluminum (SIC Codes 3363-3369).

2153 B. Benchmark monitoring and reporting requirements. Primary metals facilities are required
 2154 to monitor their stormwater discharges for the pollutants of concern listed in Table 140.

Table 140 Sector F – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC Codes 3312-3317)	
Total Recoverable Aluminum	750 <u>1,100</u> µg/L
Total Recoverable Zinc	120 µg/L
Iron and Steel Foundries (SIC Codes 3321-3325)	
Total Recoverable Aluminum	750 <u>1,100</u> µg/L
Total Suspended Solids (TSS)	100 mg/L
Total Recoverable Copper	48 <u>13</u> µg/L
Total Recoverable Iron	1.0 mg/L
Total Recoverable Zinc	120 µg/L
Rolling, Drawing, and Extruding of Nonferrous Metals (SIC Codes 3351-3357)	
Total Recoverable Copper	48 <u>13</u> µg/L
Total Recoverable Zinc	120 µg/L
Nonferrous Foundries (SIC Codes 3363-3369)	
Total Recoverable Copper	48 <u>13</u> µg/L
Total Recoverable Zinc	120 µg/L

2155 **9VAC25-151-150. Sector G - Metal mining (ore mining and dressing).**

2156 A. Discharges covered under this section. The requirements listed under this section apply
 2157 to stormwater discharges associated with industrial activity from active, temporarily inactive, and
 2158 inactive metal mining and ore dressing facilities including mines abandoned on federal lands, as
 2159 classified under SIC Major Group 10. Coverage is required for facilities that discharge
 2160 stormwater that has come into contact with, or is contaminated by, any overburden, raw
 2161 material, intermediate product, finished product, byproduct, or waste product located on the site
 2162 of the operation. SIC Major Group 10 includes establishments primarily engaged in mining of
 2163 ores, developing mines, or exploring for metallic minerals (ores) and also includes ore dressing
 2164 and beneficiating operations, whether performed at colocated, dedicated mills or at separate
 2165 mills, such as (e.g., custom mills). For the purposes of this section, the term "metal mining"
 2166 includes any of the separate activities listed in this subsection. Covered discharges include:

- 2167 1. All stormwater discharges from inactive facilities;
- 2168 2. Stormwater discharges from the following areas of active and temporarily inactive
 2169 metal mining facilities: waste rock and overburden piles if composed entirely of
 2170 stormwater and not combining with mine drainage; topsoil piles; off-site haul and access
 2171 roads; on-site haul and access roads constructed of waste rock and overburden if
 2172 composed entirely of stormwater and not combining with mine drainage; on-site haul and

2173 access roads not constructed of waste rock, overburden, or spent ore except if mine
2174 drainage is used for dust control; runoff from tailings dams and dikes when not
2175 constructed of waste rock or tailings and no process fluids are present; runoff from
2176 tailings dams or dikes when constructed of waste rock or tailings and no process fluids
2177 are present if composed entirely of stormwater and not combining with mine drainage;
2178 concentration building if no contact with material piles; mill site if no contact with material
2179 piles; office or administrative building and housing if mixed with stormwater from
2180 industrial area; chemical storage area; docking facility if no excessive contact with waste
2181 product that would otherwise constitute mine drainage; explosive storage; fuel storage;
2182 vehicle and equipment maintenance area and building; parking areas (if necessary);
2183 power plant; truck wash areas if no excessive contact with waste product that would
2184 otherwise constitute mine drainage; unreclaimed, disturbed areas outside of active
2185 mining area; reclaimed areas released from reclamation bonds ~~prior to~~ before December
2186 17, 1990; and partially or inadequately reclaimed areas or areas not released from
2187 reclamation bonds;

2188 3. Stormwater discharges from exploration and development of metal mining and ore
2189 dressing facilities; and

2190 4. Stormwater discharges from facilities at mining sites undergoing reclamation.

2191 B. Limitations on coverage. Stormwater discharges from active metal mining facilities that
2192 are subject to the effluent limitation guidelines for the Ore Mining and Dressing Point Source
2193 Category (40 CFR Part 440) are not authorized by this permit.

2194 Discharges that come in contact with overburden and waste rock are subject to 40 CFR Part
2195 440, providing: the discharges drain to a point source (either naturally or as a result of
2196 intentional diversion), and they combine with mine drainage that is otherwise regulated under 40
2197 CFR Part 440. Discharges from overburden and waste rock can be covered under this permit if
2198 they are composed entirely of stormwater and do not combine with sources of mine drainage
2199 that are subject to 40 CFR Part 440.

2200 C. Special Conditions. Prohibition of nonstormwater discharges. In addition to the general
2201 prohibition of nonstormwater discharges in Part I B 1, the following discharge is not covered by
2202 this permit: adit drainage. Contaminated seeps and springs discharging from waste rock dumps
2203 that do not directly result from precipitation events are also not authorized by this permit.

2204 D. Special definitions. The following definitions are not intended to supersede the definitions
2205 of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii), and are only for
2206 this section of the general permit:

2207 "Active metal mining facility" means a place where work or other related activity to the
2208 extraction, removal, or recovery of metal ore is being conducted. For surface mines, this
2209 definition does not include any land where grading has returned the earth to a desired contour
2210 and reclamation has begun.

2211 "Active phase" means activities including the extraction, removal, or recovery of metal ore.
2212 For surface mines, this definition does not include any land where grading has returned the
2213 earth to a desired contour and reclamation has begun.

2214 "Construction phase" means the building of site access roads and removal of overburden
2215 and waste rock to expose mineable minerals. The construction phase is not considered part of
2216 "mining operations."

2217 "Exploration phase" means exploration and land disturbance activities to determine the
2218 financial viability of a site. The exploration phase is not considered part of "mining operations."

2219 "Final stabilization" means a site or portion of a site where all applicable federal and state
2220 reclamation requirements have been implemented.

2221 "Inactive metal mining facility" means a site or portion of a site where metal mining or milling
2222 occurred in the past but is not an active facility as defined in this permit, and where the inactive
2223 portion is not covered by an active mining permit issued by the applicable federal or state
2224 agency. An inactive metal mining facility has an identifiable owner or operator. Sites where
2225 mining claims are being maintained ~~prior to~~ before disturbances associated with the extraction,
2226 beneficiation, or processing of mined materials and sites where minimal activities are
2227 undertaken for the sole purpose of maintaining a mining claim are not considered either active
2228 or inactive mining facilities and do not require a VPDES industrial stormwater permit.

2229 "Mining operation" means the active and temporarily inactive phases and the reclamation
2230 phase, but excludes the exploration and construction phases.

2231 "Reclamation phase" means activities undertaken, in compliance with applicable mined land
2232 reclamation requirements, following the cessation of the "active phase," intended to return the
2233 land to an appropriate post-mining land use in order to meet applicable federal and state
2234 reclamation requirements. The reclamation phase is considered part of "mining operations."

2235 "Temporarily inactive metal mining facility" means a site or portion of a site where metal
2236 mining or milling occurred in the past but currently are not being actively undertaken, and the
2237 facility is covered by an active mining permit issued by the applicable federal or state agency.

2238 E. Clearing, grading, and excavation activities. Clearing, grading, and excavation activities
2239 being conducted as part of the exploration and construction phase of mining activities are
2240 covered under this permit.

2241 1. Management practices for clearing, grading, and excavation activities.

2242 a. Selecting and installing control measures. A combination of erosion and
2243 sedimentation control measures are required to achieve maximum pollutant
2244 prevention and removal. All control measures shall be properly selected, installed,
2245 and maintained in accordance with any relevant manufacturer specifications and
2246 good engineering practices.

2247 b. Good housekeeping. Litter, debris, and chemicals shall be prevented from
2248 becoming a pollutant source in stormwater discharges.

2249 c. Retention and detention of stormwater runoff. For drainage locations serving more
2250 than one acre, sediment basins or temporary sediment traps should be used. At a
2251 minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are
2252 required for all down slope boundaries (and for those side slope boundaries deemed
2253 appropriate as dictated by individual site conditions) of the development area unless
2254 a sediment basin providing storage for a calculated volume of runoff from a two-year,
2255 24-hour storm or 3,600 cubic feet of storage per acre drained is provided. Sediment
2256 shall be removed from sediment traps or sedimentation ponds when the design
2257 capacity has been reduced by 50%.

2258 d. Temporary stabilization of disturbed areas. Stabilization measures shall be
2259 initiated immediately in portions of the site where development activities have
2260 temporarily ceased, but in no case more than 14 days after the clearing, grading, and
2261 excavation activities in that portion of the site have temporarily ceased. In arid, semi-
2262 arid, and drought-stricken areas, or in areas subject to snow or freezing conditions,
2263 where initiating perennial vegetative stabilization measures is not possible within 14
2264 days after mining, exploration, or construction activity has temporarily ceased, final
2265 temporary vegetative stabilization measures shall be initiated as soon as practicable.
2266 Until temporary vegetative stabilization is achieved, interim measures ~~such as~~ (i.e.,
2267 erosion control blankets with an appropriate seed base and tackifiers) shall be
2268 employed used. In areas of the site where exploration or construction has
2269 permanently ceased ~~prior to~~ before active mining, temporary stabilization measures

2270 shall be implemented to minimize mobilization of sediment or other pollutants until
2271 ~~such time as~~ the active mining phase ~~commences~~ begins.

2272 2. Requirements for inspection of clearing, grading, and excavation activities.

2273 a. Inspection frequency. Inspections shall be conducted at least once every seven
2274 calendar days or at least once every 14 calendar days and within 24 hours of the end
2275 of a storm event of 0.5 inches or greater. Inspection frequency may be reduced to at
2276 least once every month if the entire site is temporarily stabilized, if runoff is unlikely
2277 due to winter (e.g., site is covered with snow or ice) or frozen conditions, or
2278 construction is occurring during seasonal dry periods in arid areas and semi-arid
2279 areas.

2280 b. Location of inspections. Inspections shall include all areas of the site disturbed by
2281 clearing, grading, and excavation activities and areas used for storage of materials
2282 that are exposed to precipitation. Sedimentation and erosion control measures
2283 identified in the SWPPP shall be observed to ensure proper operation. Discharge
2284 locations shall be inspected to ~~ascertain~~ determine whether erosion control
2285 measures are effective in preventing significant impacts to surface waters, where
2286 accessible. Where discharge locations are inaccessible, nearby downstream
2287 locations shall be inspected to the extent that ~~such~~ inspections are practicable.
2288 Locations where vehicles enter or exit the site shall be inspected for evidence of off-
2289 site sediment tracking.

2290 c. Inspection reports. For each inspection required in this subsection, an inspection
2291 report shall be completed. At a minimum, the inspection report shall include:

2292 (1) The inspection date;

2293 (2) Names, titles, and qualifications of ~~personnel~~ staff making the inspection;

2294 (3) Weather information for the period since the last inspection (or note if it is the first
2295 inspection) including a best estimate of the beginning of each storm event, duration
2296 of each storm event, approximate amount of rainfall for each storm event (in inches),
2297 and whether any discharges occurred;

2298 (4) Weather information and a description of any discharges occurring at the time of
2299 the inspection;

2300 (5) Locations of discharges of sediment or other pollutants from the site;

2301 (6) Locations of control measures that need to be maintained;

2302 (7) Locations of control measures that failed to operate as designed or proved
2303 inadequate for a particular location;

2304 (8) Locations where additional control measures are needed that did not exist at the
2305 time of inspection; and

2306 (9) Corrective actions required, including any changes to the SWPPP necessary and
2307 implementation dates.

2308 A record of each inspection and of any actions taken in accordance with this section
2309 shall be retained as part of the SWPPP for at least three years from the date that
2310 permit coverage expires or is terminated. The inspection reports shall identify any
2311 incidents of noncompliance with the permit conditions. Where a report does not
2312 identify any incidents of noncompliance, the report shall contain a certification that
2313 the clearing, grading, and excavation activities are in compliance with the SWPPP
2314 and this permit.

2315 3. Requirements for cessation of clearing, grading, and excavation activities.

2316 a. Inspections and maintenance. Inspections and maintenance of control measures,
2317 including BMPs, associated with clearing, grading, and excavation activities being
2318 conducted as part of the exploration and construction phase of a mining operation
2319 shall continue until final stabilization has been achieved on all portions of the
2320 disturbed area, or until the commencement of the active mining phase for those
2321 areas that have been temporarily stabilized as a precursor to mining.

2322 b. Final stabilization. Stabilization measures shall be initiated immediately in portions
2323 of the site where exploration or construction activities have permanently ceased, but
2324 in no case more than 14 days after the exploration or construction activity in that
2325 portion of the site has permanently ceased. In arid, semi-arid, and drought-stricken
2326 areas, or in areas subject to snow or freezing conditions, where initiating perennial
2327 vegetative stabilization measures is not possible within 14 days after exploration or
2328 construction activity has permanently ceased, final vegetative stabilization measures
2329 shall be initiated as soon as possible. Until final stabilization is achieved temporary
2330 stabilization measures, such as (e.g., erosion control blankets with an appropriate
2331 seed base and tackifiers,) shall be used.

2332 F. SWPPP requirements for active, inactive, and temporarily inactive metal mining facilities
2333 and sites undergoing reclamation. In addition to the requirements of Part III, the SWPPP shall
2334 include, at a minimum, the following items.

2335 1. Site description.

2336 a. Activities at the facility. A description of the mining and associated activities taking
2337 place at the site that can potentially affect stormwater discharges covered by this
2338 permit. The description shall include a general description of the location of the site
2339 relative to major transportation routes and communities.

2340 b. Site map. The site map shall identify the locations of the following, as appropriate:
2341 mining and milling site boundaries; access and haul roads; an outline of the drainage
2342 areas of each stormwater outfall within the facility, and an indication of the types of
2343 discharges from the drainage areas; locations of all permitted discharges covered
2344 under an individual VPDES permit; outdoor equipment storage, fueling, and
2345 maintenance areas; materials handling areas; outdoor manufacturing, storage or
2346 material disposal areas; outdoor storage areas for chemicals and explosives; areas
2347 used for storage of overburden, materials, soils, or wastes; location of mine drainage
2348 (where water leaves mine) or any other process water; tailings piles and ponds, both
2349 proposed and existing; heap leach pads; points of discharge from the property for
2350 mine drainage and process water; surface waters; boundary of tributary areas that
2351 are subject to effluent limitations guidelines; and locations of reclaimed areas.

2352 2. Summary of potential pollutant sources. For each area of the mine or mill site where
2353 stormwater discharges associated with industrial activities occur, the SWPPP shall
2354 identify the types of pollutants likely to be present in significant amounts (e.g., heavy
2355 metals, sediment). The following factors shall be considered: the mineralogy of the ore
2356 and waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced or
2357 discharged; the likelihood of contact with stormwater; vegetation of site, if any; and
2358 history of significant leaks and spills of toxic or hazardous pollutants. A summary of any
2359 existing ore or waste rock and overburden characterization data and test results for
2360 potential generation of acid rock shall also be included. If the ore or waste rock and
2361 overburden characterization data are updated due to a change in the ore type being
2362 mined, the SWPPP shall be updated with the new data.

2363 3. Stormwater controls.

- 2364 a. Routine facility inspections. Except for areas subject to clearing, grading, and
2365 excavation activities subject to subdivision E 2 of this section, sites shall be
2366 inspected at least quarterly unless adverse weather conditions make the site
2367 inaccessible. The requirement for routine facility inspections is waived for facilities
2368 that have maintained an active VEEP E3/E4 status.
- 2369 b. Employee training. Employee training shall be conducted at least annually at
2370 active mining and temporarily inactive sites. All employee training shall be
2371 documented in the SWPPP.
- 2372 c. Structural control measures. In addition to the control measures required by Part
2373 III B 4, each of the following control measures shall be documented in the SWPPP.
2374 The potential pollutants identified in subdivision 2 of this subsection shall determine
2375 the priority and appropriateness of the control measures selected. If control
2376 measures are implemented or planned but are not listed here (e.g., substituting a
2377 less toxic chemical for a more toxic one), descriptions of them shall be included in
2378 the SWPPP.
- 2379 (1) Stormwater diversion. A description of how and where stormwater will be diverted
2380 away from potential pollutant sources to prevent stormwater contamination. Control
2381 measures shall include one or more of the following:
- 2382 (a) Interceptor dikes and swales;
2383 (b) Diversion dikes, curbs, and berms;
2384 (c) Pipe slope drains;
2385 (d) Subsurface drains;
2386 (e) Drainage and stormwater conveyance systems; or
2387 (f) Equivalent measures.
- 2388 (2) Capping. When capping of a contaminant source is necessary, the source being
2389 capped and materials and procedures used to cap the contaminant source shall be
2390 identified.
- 2391 (3) Treatment. If treatment of a stormwater discharge is necessary to protect water
2392 quality, include a description of the type and location of stormwater treatment that will
2393 be used. Stormwater treatments include the following: chemical or physical systems,
2394 oil and water separators, artificial wetlands, etc. The permittee is encouraged to use
2395 both passive and active treatment of stormwater runoff. Treated runoff may be
2396 discharged as a stormwater source regulated under this permit provided the
2397 discharge is not combined with discharges subject to effluent limitation guidelines for
2398 the Ore Mining and Dressing Point Source Category (40 CFR Part 440).
- 2399 (4) Certification of discharge testing. The permittee shall test or evaluate all outfalls
2400 covered under this permit for the presence of specific mining-related nonstormwater
2401 discharges such as (e.g., seeps or adit discharges or discharges subject to effluent
2402 limitations guidelines (e.g., 40 CFR Part 440), such as mine drainage or process
2403 water). The permittee may certify in the SWPPP that a particular discharge
2404 composed of commingled stormwater and nonstormwater is covered under a
2405 separate VPDES permit; and that permit subjects the nonstormwater portion to
2406 effluent limitations ~~prior to~~ before any commingling. This certification shall identify the
2407 nonstormwater discharges, the applicable VPDES permits, the effluent limitations
2408 placed on the nonstormwater discharge by the permits, and the points at which the
2409 limitations are applied.
- 2410 G. Termination of permit coverage.

2411 1. Termination of permit coverage for sites reclaimed after December 17, 1990. A site or
2412 a portion of a site that has been released from applicable state or federal reclamation
2413 requirements after December 17, 1990, is no longer required to maintain coverage under
2414 this permit. If the site or portion of a site reclaimed after December 17, 1990, was not
2415 subject to reclamation requirements, the site or portion of the site is no longer required to
2416 maintain coverage under this permit if the site or portion of the site has been reclaimed
2417 as defined in subdivision 2 of this subsection.

2418 2. Termination of permit coverage for sites reclaimed before December 17, 1990. A site
2419 or portion of a site that was released from applicable state or federal reclamation
2420 requirements before December 17, 1990, or that was otherwise reclaimed before
2421 December 17, 1990, is no longer required to maintain coverage under this permit if the
2422 site or portion of the site has been reclaimed. A site or portion of a site is considered to
2423 have been reclaimed if: (i) stormwater runoff that comes into contact with raw materials,
2424 intermediate byproducts, finished products, and waste products does not have the
2425 potential to cause or contribute to violations of state water quality standards; (ii) soil-
2426 disturbing activities related to mining at the sites or portion of the site have been
2427 completed; (iii) the site or portion of the site has been stabilized to minimize soil erosion;
2428 and (iv) as appropriate depending on location, size, and the potential to contribute
2429 pollutants to stormwater discharges, the site or portion of the site has been revegetated,
2430 will be amenable to natural revegetation, or will be left in a condition consistent with the
2431 post-mining land use.

2432 H. Inactive and unstaffed sites. Permittees in Sector G seeking to exercise a waiver from the
2433 quarterly visual monitoring and routine facility inspection requirements for inactive and unstaffed
2434 sites (including temporarily inactive sites) are conditionally exempt from the requirement to
2435 certify that "there are no industrial materials or activities exposed to stormwater" in Part I A 4.

2436 This exemption is conditioned on the following:

2437 1. If circumstances change and the facility becomes active or staffed, this exception no
2438 longer applies and the permittee shall immediately begin complying with the quarterly
2439 visual assessment and routine facility inspection requirements; and

2440 2. The ~~board~~ department retains the authority to revoke this exemption and the
2441 monitoring waiver when it is determined that the discharge causes, has a reasonable
2442 potential to cause, or contributes to an instream excursion above an applicable water
2443 quality standard, including designated uses.

2444 Subject to the two conditions in subdivisions 1 and 2 of this subsection, if a facility is inactive
2445 and unstaffed, the permittee is waived from the requirement to conduct quarterly visual
2446 monitoring and routine facility inspections. The permittee is not waived from conducting at least
2447 one routine facility inspection per calendar year. The ~~board~~ department encourages the
2448 permittee to inspect the site more frequently when there is reason to believe that severe
2449 weather or natural disasters may have damaged control measures.

2450 I. Benchmark monitoring and reporting requirements. There are no benchmark monitoring
2451 requirements for inactive and unstaffed sites that have received a waiver in accordance with
2452 Part I A 4 (Inactive and unstaffed sites).

2453 1. Copper ore mining and dressing facilities. Active copper ore mining and dressing
2454 facilities are required to monitor their stormwater discharges for the pollutants of concern
2455 listed in Table 150-1-~~below~~.

2456 2. Discharges from waste rock and overburden piles at active sites. Discharges from
2457 waste rock and overburden piles at active sites shall be analyzed for the parameters
2458 listed in Table 150-2. Facilities shall also monitor for the parameters listed in Table 150-

2459 3. The director may also notify the facility that additional monitoring must be performed

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to accurately characterize the quality and quantity of pollutants discharged from the waste rock or overburden piles.

Table 150-1 Sector G – Benchmark Monitoring Requirements - Copper Ore Mining and Dressing Facilities	
Pollutants of Concern	Benchmark Concentration
Active Copper Ore Mining and Dressing Facilities (SIC Code 1021)	
Total Suspended Solids (TSS)	100 mg/L

Table 150-2 Sector G – Benchmark Monitoring Requirements - Discharges from Waste Rock and Overburden Piles from Active Ore Mining or Dressing Facilities	
Pollutants of Concern	Benchmark Concentration
Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores Except Vanadium; Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099)	
Total Suspended Solids (TSS)	100 mg/L
Turbidity (NTUs)	50 NTU
pH	6.0 - 9.0 s.u.
Hardness (as CaCO ₃)	no benchmark value
Total Recoverable Antimony	640 µg/L
Total Recoverable Arsenic	50 <u>150</u> µg/L
Total Recoverable Beryllium	130 µg/L
Total Recoverable Cadmium	2.4 <u>1.8</u> µg/L
Total Recoverable Copper	48 <u>13</u> µg/L
Total Recoverable Iron	1.0 mg/L
Total Recoverable Lead	[120 <u>82</u>] µg/L
Total Recoverable Mercury	1.4 µg/L
Total Recoverable Nickel	470 µg/L
Total Recoverable Selenium	5.0 µg/L
Total Recoverable Silver	3.8 <u>3.2</u> µg/L
Total Recoverable Zinc	120 µg/L

Table 150-3 Sector G – Additional Monitoring Requirements for Discharges from Waste Rock and Overburden Piles from Active Ore Mining or Dressing Facilities	
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Type of Ore Mined	Pollutants of Concern		
	TSS (mg/L)	pH	Metals, Total Recoverable
Tungsten Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H).
Nickel Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H).
Aluminum Ore	X	X	Iron.
Mercury Ore	X	X	Nickel (H).
Iron Ore	X	X	Iron (Dissolved).
Platinum Ore			Cadmium (H), Copper (H), Mercury, Lead (H), Zinc (H).
Titanium Ore	X	X	Iron, Nickel (H), Zinc (H).
Vanadium Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H).
Copper, Lead, Zinc, Gold, Silver and Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Mercury, Zinc (H).
Uranium, Radium and Vanadium	X	X	Chemical Oxygen Demand, Arsenic, Radium (Dissolved and Total Recoverable), Uranium, Zinc (H).
Note: (H) indicates that hardness shall also be measured when this pollutant is measured.			

2464 9VAC25-151-160. Sector H - Coal mines and coal mining-related facilities.

2465 A. Discharges covered under this section. The requirements listed under this section apply
2466 to stormwater discharges associated with industrial activity from coal mining-related areas (SIC
2467 Major Group 12) if (i) they are not subject to effluent limitations guidelines under 40 CFR Part
2468 434 or (ii) they are not subject to the standards of the Surface Mining Control and Reclamation
2469 Act of 1977 (SMCRA) (30 USC § 1201 et seq.) and the Virginia Department of Mines, Minerals
2470 and Energy's individual permit requirements.

2471 The requirements of this section shall apply to stormwater discharges from coal mining-
2472 related activities exempt from SMCRA, including the public financed exemption, the 16-2/3%
2473 exemption, the private use exemption, the under 250 tons exemption, the nonincidental tippie
2474 exemption, and the exemption for coal piles and preparation plants associated with the end
2475 user. Stormwater discharges from the following portions of eligible coal mines and coal mining
2476 related facilities may be eligible for this permit: haul roads (nonpublic roads on which coal or
2477 coal refuse is conveyed), access roads (nonpublic roads providing light vehicular traffic within
2478 the facility property and to public roadways), railroad spurs, sidings, and internal haulage lines
2479 (rail lines used for hauling coal within the facility property and to off-site commercial railroad
2480 lines or loading areas); conveyor belts, chutes, and aerial tramway haulage areas (areas under
2481 and around coal or refuse conveyor areas, including transfer stations); and equipment storage
2482 and maintenance yards, coal handling buildings and structures, coal tipples, coal loading
2483 facilities, and inactive coal mines and related areas (abandoned and other inactive mines,
2484 refuse disposal sites, and other mining-related areas).

2485 B. Special conditions. Prohibition of nonstormwater discharges. In addition to the general
2486 prohibition of nonstormwater discharges in Part I B 1, the following discharges are not covered
2487 by this permit: discharges from pollutant seeps or underground drainage from inactive coal
2488 mines and refuse disposal areas that do not result from precipitation events and discharges
2489 from floor drains in maintenance buildings and other similar drains in mining and preparation
2490 plant areas.

2491 C. SWPPP requirements. In addition to the requirements of Part III, the SWPPP shall
2492 include at a minimum, the following items.

2493 1. Site description.

2494 a. Site map. The site map shall identify where any of the following may be exposed
2495 to precipitation or surface runoff:

2496 (1) Haul and access roads;

2497 (2) Railroad spurs, sliding, and internal hauling lines;

2498 (3) Conveyor belts, chutes, and aerial tramways;

2499 (4) Equipment storage and maintenance yards;

2500 (5) Coal handling buildings and structures;

2501 (6) Inactive mines and related areas;

2502 (7) Acidic spoil, refuse or unreclaimed disturbed areas; and

2503 (8) Liquid storage tanks containing pollutants ~~such as~~ (e.g., caustics, hydraulic fluids,
2504 and lubricants).

2505 b. Summary of potential pollutant sources. A description of the potential pollutant
2506 sources from the following activities: truck traffic on haul roads and resulting
2507 generation of sediment subject to runoff and dust generation; fuel or other liquid
2508 storage; pressure lines containing slurry, hydraulic fluid, or other potential harmful
2509 liquids; and loading or temporary storage of acidic refuse or spoil.

2510 2. Stormwater controls.

2511 a. Good housekeeping. As part of the facility's good housekeeping program required
2512 by Part III B 4 b (1), the permittee shall consider the following: using sweepers,
2513 covered storage, and watering of haul roads to minimize dust generation; and
2514 conservation of vegetation (where possible) to minimize erosion.

2515 b. Preventive maintenance. The permittee shall also perform inspections of storage
2516 tanks and pressure lines for fuels, lubricants, hydraulic fluid, or slurry to prevent
2517 leaks due to deterioration or faulty connections; or other equivalent measures.

2518 c. Routine facility inspections. Sites shall be inspected at least quarterly unless
2519 adverse weather conditions make the site inaccessible. The requirement for routine
2520 facility inspections is waived for facilities that have maintained an active VEEP E3/E4
2521 status.

2522 D. Inactive and unstaffed sites. Permittees in Sector H seeking to exercise a waiver from the
2523 quarterly visual monitoring and routine facility inspection requirements for inactive and unstaffed
2524 sites (including temporarily inactive sites) are conditionally exempt from the requirement to
2525 certify that "there are no industrial materials or activities exposed to stormwater" in Part I A 4.

2526 This exemption is conditioned on the following:

2527 1. If circumstances change and the facility becomes active or staffed, this exception no
2528 longer applies and the permittee shall immediately begin complying with the quarterly
2529 visual monitoring requirements and routine facility inspection requirements; and

2530 2. The ~~board~~ department retains the authority to revoke this exemption and the
 2531 monitoring waiver when it is determined that the discharge causes, has a reasonable
 2532 potential to cause, or contributes to an instream excursion above an applicable water
 2533 quality standard, including designated uses.

2534 Subject to the two conditions in subdivisions 1 and 2 of this subsection, if a facility is inactive
 2535 and unstaffed, the permittee is waived from the requirement to conduct quarterly visual
 2536 monitoring and routine facility inspections. The permittee is not waived from conducting a
 2537 minimum of one annual site inspection. The ~~board~~ department encourages the permittee to
 2538 inspect the site more frequently when there is reason to believe that severe weather or natural
 2539 disasters may have damaged control measures.

2540 E. Benchmark monitoring and reporting requirements. Coal mining facilities are required to
 2541 monitor their stormwater discharges for the pollutants of concern listed in Table 160. There are
 2542 no benchmark monitoring requirements for inactive and unstaffed sites that have received a
 2543 waiver in accordance with Part I A 4 (Inactive and unstaffed sites).

Table 160 Sector H - Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Coal Mines and Related Areas (SIC Codes 1221-1241)	
Total Recoverable Aluminum	750 <u>1,100</u> µg/L
Total Recoverable Iron	1.0 mg/L
Total Suspended Solids (TSS)	100 mg/L

2544 **9VAC25-151-180. Sector K - Hazardous waste treatment, storage, or disposal facilities.**

2545 A. Discharges covered under this section. The requirements listed under this section apply
 2546 to stormwater discharges associated with industrial activity from facilities that treat, store, or
 2547 dispose of hazardous wastes, including those that are operating under interim status or a permit
 2548 under Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Industrial Activity
 2549 Code "HZ"). Disposal facilities that have been properly closed and capped, or clean closed, and
 2550 have no significant materials exposed to stormwater, do not require this permit.

2551 B. Special conditions. Prohibition of nonstormwater discharges. In addition to the general
 2552 prohibition of nonstormwater discharges in Part I B 1, the following discharges are not covered
 2553 by this permit: leachate, gas collection condensate, drained free liquids, contaminated
 2554 groundwater, laboratory-derived wastewater and contact washwater from washing truck,
 2555 equipment, and railcar exteriors and surface areas that have come in direct contact with solid
 2556 waste at the landfill facility.

2557 C. Definitions.

2558 "Contaminated stormwater" means stormwater that comes in direct contact with landfill
 2559 wastes, the waste handling and treatment areas, or landfill wastewater as defined in this
 2560 section. Some specific areas of a landfill that may produce contaminated stormwater include the
 2561 open face of an active landfill with exposed waste (no cover added); the areas around
 2562 wastewater treatment operations; trucks, equipment, or machinery that has been in direct
 2563 contact with the waste; and waste dumping areas.

2564 "Drained free liquids" means aqueous wastes drained from waste containers (e.g., drums,
 2565 etc.) ~~prior to~~ before landfilling.

2566 "Landfill" means an area of land or an excavation in which wastes are placed for permanent
 2567 disposal, that is not a land application or land treatment unit, surface impoundment,
 2568 underground injection well, waste pile, salt dome formation, a salt bed formation, an
 2569 underground mine, or a cave as these terms are defined in 40 CFR 257.2, 40 CFR 258.2 and
 2570 40 CFR 260.10.

2571 "Landfill wastewater," as defined in 40 CFR Part 445 (Landfills Point Source Category),
 2572 means all wastewater associated with, or produced by, landfilling activities except for sanitary
 2573 wastewater, noncontaminated stormwater, contaminated groundwater, and wastewater from
 2574 recovery pumping wells. Landfill wastewater includes leachate, gas collection condensate,
 2575 drained free liquids, laboratory derived wastewater, contaminated stormwater, and contact
 2576 washwater from washing truck, equipment, and railcar exteriors and surface areas that have
 2577 come in direct contact with solid waste at the landfill facility.

2578 "Leachate" means liquid that has passed through or emerged from solid waste and contains
 2579 soluble, suspended, or miscible materials removed from such waste.

2580 "Noncontaminated stormwater" means stormwater that does not come into direct contact
 2581 with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined
 2582 above. Noncontaminated stormwater includes stormwater that flows off the cap, cover,
 2583 intermediate cover, daily cover, or final cover of the landfill.

2584 D. Numeric effluent limitations. As set forth at 40 CFR Part 445 Subpart A, the numeric
 2585 limitations in Table 180-1 apply to contaminated stormwater discharges from hazardous waste
 2586 landfills subject to the provisions of RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) and 265
 2587 (Subpart N) except for any of the following facilities:

- 2588 1. Landfills operated in conjunction with other industrial or commercial operations when
 2589 the landfill only receives wastes generated by the industrial or commercial operation
 2590 directly associated with the landfill;
- 2591 2. Landfills operated in conjunction with other industrial or commercial operations when
 2592 the landfill receives wastes generated by the industrial or commercial operation directly
 2593 associated with the landfill and also receives other wastes provided the other wastes
 2594 received for disposal are generated by a facility that is subject to the same provisions in
 2595 40 CFR Subchapter N as the industrial or commercial operation or the other wastes
 2596 received are of similar nature to the wastes generated by the industrial or commercial
 2597 operation;
- 2598 3. Landfills operated in conjunction with centralized waste treatment (CWT) facilities
 2599 subject to 40 CFR Part 437 so long as the CWT facility commingles the landfill
 2600 wastewater with other nonlandfill wastewater for discharge. A landfill directly associated
 2601 with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater
 2602 separately from other CWT wastewater or commingles the wastewater from its landfill
 2603 only with wastewater from other landfills; or
- 2604 4. Landfills operated in conjunction with other industrial or commercial operations when
 2605 the landfill receives wastes from public service activities so long as the company owning
 2606 the landfill does not receive a fee or other remuneration for the disposal service.

Table 180-1 Sector K – Numeric Effluent Limitations		
Parameter	Effluent Limitations	
	Maximum Daily	Maximum Monthly Average
Hazardous Waste Treatment, Storage, or Disposal Facilities (Industrial Activity Code "HZ")		

Subject to the Provisions of 40 CFR Part 445 Subpart A.		
Biochemical Oxygen Demand (BOD ₅)	220 mg/L	56 mg/L
Total Suspended Solids (TSS)	88 mg/L	27 mg/L
Ammonia	10 mg/L	4.9 mg/L
Alpha Terpineol	0.042 mg/L	0.019 mg/L
Aniline	0.024 mg/L	0.015 mg/L
Benzoic Acid	0.119 mg/L*	0.073 mg/L
Naphthalene	0.059 mg/L	0.022 mg/L
p-Cresol	0.024 mg/L	0.015 mg/L
Phenol	0.048 mg/L	0.029 mg/L
Pyridine	0.072 mg/L	0.025 mg/L
Arsenic (Total)	1.1 mg/L	0.54 mg/L
Chromium (Total)	1.1 mg/L	0.46 mg/L
Zinc (Total)	0.535 mg/L*	0.296 mg/L*
pH	Within the range of 6.0 - 9.0 s.u.	
*These effluent limitations are three significant digits for reporting purposes.		

2607 E. Benchmark monitoring and reporting requirements. Permittees with hazardous waste
2608 treatment, storage, or disposal facilities (TSDFs) are required to monitor their stormwater
2609 discharges for the pollutants of concern listed in Table 180-2. These benchmark monitoring
2610 concentrations apply to stormwater discharges associated with industrial activity other than
2611 contaminated stormwater discharges from landfills subject to the numeric effluent limitations set
2612 forth in Table 180-1.

Table 180-2 Sector K – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Hazardous Waste Treatment, Storage, or Disposal Facilities (Industrial Activity Code "HZ")	
Total Kjeldahl Nitrogen (TKN)	1.5 mg/L
Total Suspended Solids (TSS)	100 mg/L
Total Organic Carbon (TOC)	110 mg/L
Total Recoverable Arsenic	50 <u>150</u> µg/L
Total Recoverable Cadmium	2.4 <u>1.8</u> µg/L
Total Cyanide	22 µg/L
Total Recoverable Lead	[420 <u>82</u>] µg/L

Total Magnesium	64 µg/L
Total Recoverable Mercury	1.4 µg/L
Total Recoverable Selenium	5.0 µg/L
Total Recoverable Silver	3.8 <u>3.2</u> µg/L

2613 9VAC25-151-190. Sector L - Landfills, land application sites and open dumps.

2614 A. Discharges covered under this section. The requirements listed under this section apply
2615 to stormwater discharges associated with industrial activity from waste disposal at landfills, land
2616 application sites, and open dumps that receive or have received industrial wastes (Industrial
2617 Activity Code "LF"), including sites subject to regulation under Subtitle D of the Resource
2618 Conservation and Recovery Act (RCRA). Landfills, land application sites, and open dumps that
2619 have stormwater discharges from other types of industrial activities ~~such as~~ (e.g., vehicle
2620 maintenance, truck washing, and recycling) may be subject to additional requirements specified
2621 elsewhere in this permit. This permit does not cover discharges from landfills that receive only
2622 municipal wastes. Landfills (including landfills in "post-closure care") that have been properly
2623 closed and capped in accordance with 9VAC20-81-160 and 9VAC20-81-170 and have no
2624 significant materials exposed to stormwater do not require this permit. Landfills closed in
2625 accordance with regulations or permits in effect ~~prior to~~ before December 21, 1988, do not
2626 require this permit, unless significant materials are exposed to stormwater.

2627 B. Special conditions. Prohibition of nonstormwater discharges. In addition to the general
2628 nonstormwater prohibition in Part I B 1, the following discharges are not covered by this permit:
2629 leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory
2630 wastewater, and contact washwater from washing truck, equipment, and railcar exteriors and
2631 surface areas that have come in direct contact with solid waste at the landfill facility.

2632 C. Definitions.

2633 "Contaminated stormwater" means stormwater that comes in direct contact with landfill
2634 wastes, the waste handling and treatment areas, or landfill wastewater. Some areas of a landfill
2635 that may produce contaminated stormwater include, ~~but are not limited to,~~ the working face of
2636 an active landfill; the areas around wastewater treatment operations; trucks, equipment, or
2637 machinery that has been in direct contact with the waste; and waste dumping areas.

2638 "Drained free liquids" means aqueous wastes drained from waste containers (e.g., drums,
2639 etc.) ~~prior to~~ before landfilling.

2640 "Landfill wastewater," as defined in 40 CFR Part 445 (Landfills Point Source Category),
2641 means all wastewater associated with, or produced by, landfilling activities except for sanitary
2642 wastewater, noncontaminated stormwater, contaminated groundwater, and wastewater from
2643 recovery pumping wells. Landfill wastewater includes leachate, gas collection condensate,
2644 drained free liquids, laboratory derived wastewater, contaminated stormwater, and contact
2645 washwater from washing truck, equipment, and railcar exteriors and surface areas that have
2646 come in direct contact with solid waste at the landfill facility.

2647 "Leachate" means liquid that has passed through or emerged from solid waste and contains
2648 soluble, suspended, or miscible materials removed from ~~such~~ the waste.

2649 "Noncontaminated stormwater" means stormwater that does not come into direct contact
2650 with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined
2651 ~~above~~. Noncontaminated stormwater includes stormwater that flows off the cap, intermediate
2652 cover, or final cover of the landfill.

2653 "Open dump" means a site on which any solid waste is placed, discharged, deposited,
2654 injected, dumped, or spilled so as to present a threat of a release of harmful substances into the

2655 environment or present a hazard to human health. Such a site is subject to the open dump
2656 criteria in 9VAC20-81-45.

2657 D. Stormwater controls. In addition to the requirements in Part III, the SWPPP shall include,
2658 at a minimum, the following items:

2659 1. Preventive maintenance program. As part of the preventive maintenance program, the
2660 permittee shall maintain all elements of leachate collection and treatment systems to
2661 prevent commingling of leachate with stormwater and the integrity and effectiveness of
2662 any intermediate or final cover (including making repairs to the cover as necessary), to
2663 minimize the effects of settlement, sinking, and erosion.

2664 2. Routine facility inspections.

2665 a. Inspections of active sites. Operating landfills, open dumps, and land application
2666 sites shall be inspected at least once every seven days. Qualified ~~personnel~~ staff
2667 shall inspect areas of landfills that have not yet been finally stabilized, active land
2668 application areas, areas used for storage of materials or wastes that are exposed to
2669 precipitation, stabilization and structural control measures, leachate collection and
2670 treatment systems, and locations where equipment and waste trucks enter and exit
2671 the site. Erosion and sediment control measures shall be observed to ensure they
2672 are operating correctly. For stabilized sites and areas where land application has
2673 been completed, inspections shall be conducted at least once every month.

2674 b. Inspections of inactive sites. Inactive landfills, open dumps, and land application
2675 sites shall be inspected at least quarterly. Qualified ~~personnel~~ staff shall inspect
2676 landfill (or open dump) stabilization and structural erosion control measures and
2677 leachate collection and treatment systems and all closed land application areas.

2678 3. Recordkeeping and internal reporting procedures. Landfill and open dump owners
2679 shall provide for a tracking system for the types of wastes disposed of in each cell or
2680 trench of a landfill or open dump. Land application site owners shall track the types and
2681 quantities of wastes applied in specific areas.

2682 4. Annual outfall evaluation for unauthorized discharges. The evaluation shall also be
2683 conducted for the presence of leachate and vehicle washwater.

2684 5. Sediment and erosion control plan. Landfill and open dump owners shall provide for
2685 temporary stabilization of materials stockpiled for daily, intermediate, and final cover.
2686 Stabilization practices to consider include temporary seeding, mulching, and placing
2687 geotextiles on the inactive portions of the stockpiles. Landfill and open dump owners
2688 shall provide for temporary stabilization of inactive areas of the landfill or open dump
2689 ~~which~~ that have an intermediate cover but no final cover. Landfill and open dump owners
2690 shall provide for temporary stabilization of any landfill or open dumping areas which
2691 have received a final cover until vegetation has established itself. Land application site
2692 owners shall also stabilize areas where waste application has been completed until
2693 vegetation has been established.

2694 E. Numeric effluent limitations. As set forth at 40 CFR Part 445 Subpart B, the numeric
2695 limitations in Table 190-1 apply to contaminated stormwater discharges from municipal solid
2696 waste landfills (MSWLFs) that have not been closed in accordance with 40 CFR 258.60, and
2697 contaminated stormwater discharges from those landfills that are subject to the provisions of 40
2698 CFR Part 257 (these include construction and debris landfills and industrial landfills) except for
2699 discharges from any of the following facilities:

2700 1. Landfills operated in conjunction with other industrial or commercial operations when
2701 the landfill only receives wastes generated by the industrial or commercial operation
2702 directly associated with the landfill;

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2. Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes provided the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
3. Landfills operated in conjunction with centralized waste treatment (CWT) facilities subject to 40 CFR Part 437 so long as the CWT facility commingles the landfill wastewater with other nonlandfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or
4. Landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Table 190-1 Sector L – Numeric Effluent Limitations		
Parameter	Effluent Limitations	
	Maximum Daily	Maximum Monthly Average
Landfills (Industrial Activity Code "LF") that are Subject to the Requirements of 40 CFR Part 445 Subpart B.		
Biochemical Oxygen Demand (BOD ₅)	140 mg/L	37 mg/L
Total Suspended Solids (TSS)	88 mg/L	27 mg/L
Ammonia	10 mg/L	4.9 mg/L
Alpha Terpineol	0.033 mg/L	0.016 mg/L
Benzoic Acid	0.12 mg/L	0.071 mg/L
p-Cresol	0.025 mg/L	0.014 mg/L
Phenol	0.026 mg/L	0.015 mg/L
Zinc (Total)	0.20 mg/L	0.11 mg/L
pH	Within the range of 6.0 - 9.0 s.u.	

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F. Benchmark monitoring and reporting requirements. Landfills, land application, and open dump sites are required to monitor their stormwater discharges for the pollutants of concern listed in Table 190-2. These benchmark monitoring concentrations apply to stormwater discharges associated with industrial activity other than contaminated stormwater discharges from landfills subject to the numeric effluent limitations set forth in Table 190-1.

Table 190-2 Sector L – Benchmark Monitoring Requirements

Pollutants of Concern	Benchmark Concentration
Landfills, Land Application Sites and Open Dumps (Industrial Activity Code "LF").	
Total Suspended Solids (TSS)	100 mg/L

2725 9VAC25-151-200. Sector M - Automobile salvage yards.

2726 A. Discharges covered under this section. The requirements listed under this section apply
2727 to stormwater discharges associated with industrial activity from facilities engaged in
2728 dismantling or wrecking used motor vehicles for parts recycling or resale, and for scrap (SIC
2729 Code 5015).

2730 B. Stormwater controls. In addition to the requirements of Part III, the SWPPP shall include,
2731 at a minimum, the following items:

2732 1. Spill and leak prevention procedures. All vehicles that are intended to be dismantled
2733 shall be properly drained of all fluids ~~prior to~~ before being dismantled or crushed, or
2734 other equivalent means shall be taken to prevent leaks or spills of fluids upon arrival at
2735 the site, or as soon thereafter as feasible. All drained fluids shall be managed to
2736 minimize leaks or spills.

2737 2. Inspections. Upon arrival at the site, or as soon thereafter as feasible, vehicles shall
2738 be inspected for leaks. Any equipment containing oily parts, hydraulic fluids, any other
2739 types of fluids, or mercury switches shall be inspected at least quarterly (four times per
2740 year) for signs of leaks. All vessels, containers, or tanks and areas where hazardous
2741 materials and general automotive fluids are stored, including mercury switches, brake
2742 fluid, transmission fluid, radiator water, and antifreeze, shall be inspected at least
2743 quarterly for leaks. Quarterly inspection records shall be maintained with the SWPPP.

2744 3. Employee training. Employee training shall, at a minimum, address the following
2745 areas when applicable to a facility: proper handling (collection, storage, and disposal) of
2746 oil, used mineral spirits, antifreeze, mercury switches, and solvents.

2747 4. Management of runoff. The permittee shall implement control measures to divert,
2748 infiltrate, reuse, contain, or otherwise reduce stormwater runoff to minimize pollutants in
2749 discharges from the facility. The following management practices shall be used to
2750 prevent or reduce the discharge of pollutants to surface waters:

2751 a. Berms or drainage ditches on the property line used to help prevent run-on from
2752 neighboring properties;

2753 b. Berms for uncovered outdoor storage of oily parts and engine blocks;

2754 c. Aboveground liquid storage;

2755 d. The installation of detention ponds, filtering devices, or oil/water separators; and

2756 e. Another control measure used to prevent or reduce the discharge of pollutants to
2757 surface waters.

2758 C. Benchmark monitoring and reporting requirements. Automobile salvage yards are
2759 required to monitor their stormwater discharges for the pollutants of concern listed in Table 200.

Table 200 Sector M – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Automobile Salvage Yards (SIC Code 5015)	
Total Suspended Solids (TSS)	100 mg/L

Total Recoverable Aluminum	750 1,100 µg/L
Total Recoverable Iron	1.0 mg/L
Total Recoverable Lead	[120 82] µg/L

2760 **9VAC25-151-210. Sector N - Scrap recycling and waste recycling facilities and material**
2761 **recovery facilities (MRF).**

2762 A. Discharges covered under this section. The requirements listed under this section apply
2763 to stormwater discharges associated with industrial activity from facilities typically identified as
2764 SIC code 5093 that are engaged in the processing, reclaiming, and wholesale distribution of
2765 scrap and waste materials such as ferrous and nonferrous metals, paper, plastic, cardboard,
2766 glass, animal hides (~~these types of activities are typically identified as SIC Code 5093~~), and
2767 facilities that are engaged in reclaiming and recycling liquid wastes such as used oil, antifreeze,
2768 mineral spirits, and industrial solvents (~~also identified as SIC Code 5093~~). Separate permit
2769 requirements have been established for recycling facilities that only receive source-separated
2770 recyclable materials primarily from nonindustrial and residential sources (~~also identified as SIC~~
2771 ~~Code 5093~~) (e.g., common consumer products including paper, newspaper, glass, cardboard,
2772 plastic containers, aluminum, and tin cans).

2773 Separate permit requirements have also been established for facilities that are engaged in
2774 dismantling ships, marine salvaging, and marine wrecking—ships for scrap (SIC Code 4499,
2775 limited to those listed; for others in SIC Code 4499 not listed in this subsection, see Sector Q
2776 (9VAC25-151-240)).

2777 B. Special conditions. Prohibition of nonstormwater discharges. Discharges from
2778 containment areas in the absence of a storm event are prohibited unless covered by a separate
2779 VPDES permit.

2780 C. SWPPP requirements. In addition to the requirements of Part III, the following items are
2781 applicable:

2782 1. Scrap recycling and waste recycling facilities (nonsource-separated, nonliquid
2783 recyclable materials). The following SWPPP special conditions have been established
2784 for facilities that receive, process, and do wholesale distribution of nonliquid recyclable
2785 wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper).
2786 These facilities may receive both nonrecyclable and recyclable materials. This section is
2787 not intended for those facilities that only accept recyclable materials primarily from
2788 nonindustrial and residential sources.

2789 a. Inbound recyclable and waste material control program. The SWPPP shall include
2790 a recyclable and waste material inspection program to minimize the likelihood of
2791 receiving materials that may be significant pollutant sources to stormwater
2792 discharges. Control measures shall include one or more of the following:

2793 (1) Provide information and education flyers, brochures, and pamphlets to suppliers
2794 of scrap and recyclable waste materials on draining and properly disposing of
2795 residual fluids ~~prior to~~ before delivery to the facility (e.g., from vehicles and
2796 equipment engines, radiators, and transmissions, oil-filled transformers, and
2797 individual containers or drums), and on removal of mercury switches ~~prior to~~ before
2798 delivery to the facility;

2799 (2) Establish procedures to minimize the potential of any residual fluids from coming
2800 in contact with precipitation or runoff;

2801 (3) Establish procedures for accepting scrap lead-acid batteries. Additional
2802 requirements for the handling, storage and disposal or recycling of batteries are

2803 contained in the scrap lead-acid battery program provisions in subdivision 2 f of this
2804 subsection;

2805 (4) Provide training targeted for those ~~personnel~~ staff engaged in the inspection and
2806 acceptance of inbound recyclable materials; or

2807 (5) Establish procedures to ensure that liquid wastes, including used oil, are stored in
2808 materially compatible and nonleaking containers and disposed or recycled in
2809 accordance with all requirements under the Resource Conservation and Recovery
2810 Act (RCRA), and other state or local requirements.

2811 b. Scrap and waste material stockpiles and storage (outdoor). The SWPPP shall
2812 describe measures and controls to minimize contact of stormwater runoff with
2813 stockpiled materials, processed materials, and nonrecyclable wastes. Control
2814 measures shall include one or more of the following:

2815 (1) Permanent or semipermanent covers;

2816 (2) The use of sediment traps, vegetated swales and strips, catch basin filters, and
2817 sand filters to facilitate settling or filtering of pollutants;

2818 (3) Diversion of runoff away from storage areas via dikes, berms, containment
2819 trenches, culverts, and surface grading;

2820 (4) Silt fencing;

2821 (5) Oil/water separators, sumps, and dry adsorbents for areas where potential
2822 sources of residual fluids are stockpiled (e.g., automotive engine storage areas); or

2823 (6) Another control measure used to prevent or reduce the discharge of pollutants to
2824 surface waters.

2825 c. Stockpiling of turnings exposed to cutting fluids (outdoor storage). The SWPPP
2826 shall implement measures necessary to minimize contact of surface runoff with
2827 residual cutting fluids. Control measures shall include one or more of the following:

2828 (1) Storage of all turnings exposed to cutting fluids under some form of permanent or
2829 semipermanent cover. Stormwater discharges from these areas are permitted
2830 provided the runoff is first treated by an oil/water separator or its equivalent.
2831 Procedures to collect, handle, and dispose or recycle residual fluids that may be
2832 present shall be identified in the SWPPP; or

2833 (2) Establish dedicated containment areas for all turnings that have been exposed to
2834 cutting fluids. Stormwater runoff from these areas can be discharged provided:

2835 (a) The containment areas are constructed of either concrete, asphalt, or other
2836 equivalent type of impermeable material;

2837 (b) There is a barrier around the perimeter of the containment areas to prevent
2838 contact with stormwater run-on (e.g., berms, curbing, and elevated pads, ~~etc.~~);

2839 (c) There is a drainage collection system for runoff generated from containment
2840 areas;

2841 (d) There is a schedule to maintain the oil/water separator (or its equivalent); and

2842 (e) Procedures are identified for the proper disposal or recycling of collected residual
2843 fluids.

2844 d. Scrap and waste material stockpiles and storage (covered or indoor storage). The
2845 SWPPP shall address measures and controls to minimize contact of residual liquids
2846 and particulate matter from materials stored indoors or under cover from coming in
2847 contact with surface runoff. Control measures shall include one or more of the
2848 following:

- 2849 (1) Good housekeeping measures, including the use of dry absorbent or wet vacuum
2850 cleanup methods, to contain, dispose, or recycle residual liquids originating from
2851 recyclable containers, or mercury spill kits from storage of mercury switches;
- 2852 (2) Prohibiting the practice of allowing washwater from tipping floors or other
2853 processing areas from discharging;
- 2854 (3) Disconnecting or sealing off all floor drains if necessary to prevent a discharge; or
2855 (4) Another control measure used to prevent or reduce the discharge of pollutants to
2856 surface waters.
- 2857 e. Scrap and recyclable waste processing areas. The SWPPP shall include
2858 measures and controls to minimize surface runoff from coming in contact with scrap
2859 processing equipment. In the case of processing equipment that generate visible
2860 amounts of particulate residue (e.g., shredding facilities), the SWPPP shall describe
2861 measures to minimize the contact of residual fluids and accumulated particulate
2862 matter with runoff (i.e., through good housekeeping, and preventive maintenance,
2863 etc.). Control measures shall include one or more of the following:
- 2864 (1) A schedule of regular inspections of equipment for leaks, spills, malfunctioning,
2865 worn, or corroded parts or equipment;
- 2866 (2) A preventive maintenance program for processing equipment;
- 2867 (3) Removal of mercury switches from the hood and trunk lighting units, and removal
2868 of anti-lock brake system units containing mercury switches;
- 2869 (4) Use of dry-absorbents or other cleanup practices to collect and to dispose of or
2870 recycle spilled or leaking fluids, or use of mercury spill kits for spills from storage of
2871 mercury switches;
- 2872 (5) Installation of low-level alarms or other equivalent protection devices on
2873 unattended hydraulic reservoirs over 150 gallons in capacity. Alternatively, provide
2874 secondary containment with sufficient volume to contain the entire volume of the
2875 reservoir;
- 2876 (6) Containment or diversion structures ~~such as~~ (e.g., dikes, berms, culverts,
2877 trenches, elevated concrete pads, and grading) to minimize contact of stormwater
2878 runoff with outdoor processing equipment or stored materials;
- 2879 (7) Oil/water separators or sumps;
- 2880 (8) Permanent or semipermanent covers in processing areas where there are
2881 residual fluids and grease;
- 2882 (9) Retention and detention basins or ponds, sediment traps, vegetated swales or
2883 strips, to facilitate pollutant settling and filtration;
- 2884 (10) Catch basin filters or sand filters; or
2885 (11) Another control measure used to prevent or reduce the discharge of pollutants
2886 to surface waters.
- 2887 f. Scrap lead-acid battery program. The SWPPP shall address measures and
2888 controls for the proper handling, storage, and disposal of scrap lead-acid batteries.
2889 Control measures shall include one or more of the following:
- 2890 (1) Segregate scrap lead-acid batteries from other scrap materials and store under
2891 cover;
- 2892 (2) A description of procedures and measures for the proper handling, storage, and
2893 disposal of cracked or broken batteries;
- 2894 (3) A description of measures to collect and dispose of leaking lead-acid battery fluid;

2895 (4) A description of measures to minimize and, whenever possible, eliminate
2896 exposure of scrap lead-acid batteries to precipitation or runoff; or
2897 (5) A description of employee training for the management of scrap batteries.
2898 g. Spill prevention and response procedures. The SWPPP shall include measures to
2899 minimize stormwater contamination at loading and unloading areas, and from
2900 equipment or container failures. Control measures shall include one or more of the
2901 following:
2902 (1) Description of spill prevention and response measures to address areas that are
2903 potential sources of fluid leaks or spills;
2904 (2) Immediate containment and cleanup of spills and leaks. If malfunctioning
2905 equipment is responsible for the spill or leak, repairs shall also be conducted as soon
2906 as possible;
2907 (3) Cleanup procedures shall be identified in the SWPPP, including the use of dry
2908 absorbents. Where dry absorbent cleanup methods are used, an adequate supply of
2909 dry absorbent material shall be maintained on-site. Used absorbent material shall be
2910 disposed of properly;
2911 (4) Drums containing liquids, especially oil and lubricants, shall be stored indoors, in
2912 a bermed area, in overpack containers or spill pallets, or in similar containment
2913 devices;
2914 (5) Overfill prevention devices shall be installed on all fuel pumps or tanks;
2915 (6) Drip pans or equivalent measures shall be placed under any leaking piece of
2916 stationary equipment until the leak is repaired. The drip pans shall be inspected for
2917 leaks and potential overflow and all liquids properly disposed of in accordance with
2918 RCRA requirements; or
2919 (7) An alarm or pump shut off system shall be installed on outdoor equipment with
2920 hydraulic reservoirs exceeding 150 gallons in order to prevent draining the tank
2921 contents ~~in the event of~~ due to a line break. Alternatively, the equipment may have a
2922 secondary containment system capable of containing the contents of the hydraulic
2923 reservoir plus adequate freeboard for precipitation. A mercury spill kit shall be used
2924 for any release of mercury from switches, anti-lock brake systems, and switch
2925 storage areas.
2926 h. Inspection program. All designated areas of the facility and equipment identified in
2927 the SWPPP shall be inspected at least quarterly. The requirement for routine facility
2928 inspections is waived for facilities that have maintained an active VEEP E3/E4
2929 status.
2930 i. Supplier notification program. The SWPPP shall include a program to notify major
2931 suppliers which scrap materials will not be accepted at the facility or are only
2932 accepted under certain conditions.
2933 2. Waste recycling facilities (liquid recyclable materials).
2934 a. Waste material storage (indoor). The SWPPP shall include measures and controls
2935 to eliminate contact between residual liquids from waste materials stored indoors and
2936 surface runoff. The SWPPP may refer to applicable portions of other existing plans
2937 such as SPCC plans required under 40 CFR Part 112. Control measures shall
2938 include one or more of the following:
2939 (1) Procedures for material handling (including labeling and marking);
2940 (2) A sufficient supply of dry-absorbent materials or a wet vacuum system to collect
2941 spilled or leaked materials (spilled or leaking mercury should never be vacuumed);

2942 (3) An appropriate containment structure, ~~such as~~ (e.g., trenches, curbing, gutters, or
2943 other equivalent measures); or

2944 (4) A drainage system, including appurtenances (e.g., pumps or ejectors, or
2945 manually operated valves), to handle discharges from diked or bermed areas.
2946 Drainage shall be discharged to an appropriate treatment facility, sanitary sewer
2947 system, or otherwise disposed of properly. Discharges from these areas may require
2948 coverage under a separate VPDES permit or industrial user permit under the
2949 pretreatment program.

2950 b. Waste material storage (outdoor). The SWPPP shall describe measures and
2951 controls to minimize contact between stored residual liquids and precipitation or
2952 runoff. The SWPPP may refer to applicable portions of other existing plans ~~such as~~
2953 (e.g., SPCC plans required under 40 CFR Part 112). Discharges of precipitation from
2954 containment areas containing used oil shall also be in accordance with applicable
2955 sections of 40 CFR Part 112. Control measures shall include one or more of the
2956 following:

2957 (1) Appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the
2958 volume of the largest single tank, with sufficient extra capacity for precipitation;

2959 (2) Drainage control and other diversionary structures;

2960 (3) For storage tanks, provide corrosion protection, or leak detection systems; or

2961 (4) Dry-absorbent materials or a wet vacuum system to collect spills.

2962 c. Truck and rail car waste transfer areas. The SWPPP shall describe measures and
2963 controls to minimize pollutants in discharges from truck and rail car loading and
2964 unloading areas. The SWPPP shall also address measures to clean up minor spills
2965 and leaks resulting from the transfer of liquid wastes. Control measures shall include
2966 one or more of the following:

2967 (1) Containment and diversionary structures to minimize contact with precipitation or
2968 runoff;

2969 (2) Use of dry cleanup methods, wet vacuuming, roof coverings, or runoff controls; or

2970 (3) Another control measure used to prevent or reduce the discharge of pollutants to
2971 surface waters.

2972 d. Inspections. Inspections shall be made quarterly and shall also include all areas
2973 where waste is generated, received, stored, treated, or disposed that are exposed to
2974 either precipitation or stormwater runoff. The requirement for routine facility
2975 inspections is waived for facilities that have maintained an active VEEP E3/E4
2976 status.

2977 3. Recycling facilities (source separated materials). The following SWPPP special
2978 conditions have been established for facilities that receive only source-separated
2979 recyclable materials primarily from nonindustrial and residential sources.

2980 a. Inbound recyclable material control. The SWPPP shall include an inbound
2981 materials inspection program to minimize the likelihood of receiving nonrecyclable
2982 materials (e.g., hazardous materials) that may be a significant source of pollutants in
2983 surface runoff. Control measures shall include one or more of the following:

2984 (1) Provide information and education measures to inform suppliers of recyclable
2985 materials on the types of materials that are acceptable and those that are not
2986 acceptable;

2987 (2) A description of training measures for drivers responsible for pickup of recyclable
2988 materials;

- 2989 (3) Clearly mark public drop-off containers regarding which materials can be
 2990 accepted;
- 2991 (4) Rejecting nonrecyclable wastes or household hazardous wastes at the source; or
 2992 (5) Establish procedures for the handling and disposal of nonrecyclable materials.
- 2993 b. Outdoor storage. The SWPPP shall include procedures to minimize the exposure
 2994 of recyclable materials to surface runoff and precipitation. The SWPPP shall include
 2995 good housekeeping measures to prevent the accumulation of particulate matter and
 2996 fluids, particularly in high traffic areas. Control measures shall include one or more of
 2997 the following:
- 2998 (1) Provide totally-enclosed drop-off containers for the public;
- 2999 (2) Install a sump and pump with each containment pit, and treat or discharge
 3000 collected fluids to a sanitary sewer system;
- 3001 (3) Provide dikes and curbs for secondary containment (e.g., around bales of
 3002 recyclable waste paper);
- 3003 (4) Divert surface runoff away from outside material storage areas;
- 3004 (5) Provide covers over containment bins, dumpsters, roll-off boxes; or
 3005 (6) Store the equivalent one day's volume of recyclable materials indoors.
- 3006 c. Indoor storage and material processing. The SWPPP shall include measures to
 3007 minimize the release of pollutants from indoor storage and processing areas. Control
 3008 measures shall include one or more of the following:
- 3009 (1) Schedule routine good housekeeping measures for all storage and processing
 3010 areas;
- 3011 (2) Prohibit a practice of allowing tipping floor washwaters from draining to any
 3012 portion of the storm sewer system; or
- 3013 (3) Provide employee training on pollution prevention practices.
- 3014 d. Vehicle and equipment maintenance. The SWPPP shall also provide for control
 3015 measures in those areas where vehicle and equipment maintenance is occurring
 3016 outdoors. Control measures shall include one or more of the following:
- 3017 (1) Prohibit vehicle and equipment washwater discharges;
- 3018 (2) Minimize or eliminate outdoor maintenance areas, wherever possible;
- 3019 (3) Establish spill prevention and clean-up procedures in fueling areas;
- 3020 (4) Avoid topping off fuel tanks;
- 3021 (5) Divert runoff from fueling areas;
- 3022 (6) Store lubricants and hydraulic fluids indoors; or
- 3023 (7) Provide employee training on proper handling, storage of hydraulic fluids and
 3024 lubricants.
- 3025 5. Facilities engaged in dismantling ships, marine salvaging, and marine wrecking—
 3026 ships for scrap. The following SWPPP special conditions have been established for
 3027 facilities that are engaged in dismantling ships, marine salvaging, and marine
 3028 wrecking—ships for scrap.
- 3029 Vessel breaking and scrapping activities. Scrapping of vessels shall be accomplished
 3030 ashore beyond the range of mean high tide, whenever practicable. If this activity must be
 3031 conducted while a vessel is afloat or grounded in state waters, then the permittee shall
 3032 employ control measures to reduce the amount of pollutants released. The following
 3033 control measures shall be implemented during those periods when vessels (ships,

3034 barges, yachts, etc.) are brought to the facility's site for recycling, scrapping, and storage
 3035 prior to before scrapping.

3036 a. Fixed or floating platforms sufficiently sized and constructed to catch and prevent
 3037 scrap materials and pollutants from entering surface waters (or equivalent measures
 3038 approved by the ~~board~~ department) shall be used as work surfaces when working on
 3039 or near the water surface. These platforms shall be cleaned as required to prevent
 3040 pollutants from entering surface waters and at the end of each work shift. All scrap
 3041 metals and pollutants shall be collected in a manner to prevent releases.

3042 b. There shall be no discharge of oil or oily wastewater at the facility. Drip pans and
 3043 other protective devices shall be required for all oil and oily waste transfer operations
 3044 to catch incidental spillage and drips from hose nozzles, hose racks, drums, or
 3045 barrels. Drip pans and other protective devices shall be inspected and maintained to
 3046 prevent releases. Oil and oily waste shall be disposed at a permitted facility and
 3047 adequate documentation of off-site disposition shall be retained for review by the
 3048 ~~board~~ before upon request.

3049 c. During the storage, breaking, and scrapping period, oil containment booms shall
 3050 be deployed either around the vessel being scrapped, or across the mouth of the
 3051 facility's wet slip, to contain pollutants in the event of a spill. Booms shall be
 3052 inspected, maintained, and repaired as needed. Oil, grease and fuel spills shall be
 3053 prevented from reaching surface waters. Cleanup shall be carried out immediately
 3054 after an oil, grease, or fuel spill is detected.

3055 d. Paint and solvent spills shall be immediately, upon discovery of the spills, cleaned
 3056 up to prevent pollutants from reaching storm drains, deck drains, and surface waters.

3057 e. Contaminated bilge and ballast water shall not be discharged to surface waters. If
 3058 it becomes necessary to dispose of contaminated bilge and ballast waters during a
 3059 vessel breaking activity, the wastewater shall be disposed at a permitted facility and
 3060 adequate documentation of off-site disposition shall be retained for review by the
 3061 ~~board~~ department upon request.

3062 D. Benchmark monitoring and reporting requirements. Scrap recycling and waste recycling
 3063 facilities (both source-separated and nonsource-separated facilities), and facilities engaged in
 3064 dismantling ships, marine salvaging, and marine wrecking—ships for scrap are required to
 3065 monitor their stormwater discharges for the pollutants of concern listed in Table 210.

Table 210 Sector N – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Scrap Recycling and Waste Recycling Facilities (nonsource-separated facilities only) (SIC Code 5093)	
Total Suspended Solids (TSS)	100 mg/L
Total Recoverable Aluminum	750 <u>1,100</u> µg/L
Total Recoverable Cadmium	2.4 <u>1.8</u> µg/L
Total Recoverable Chromium	16 µg/L
Total Recoverable Copper	48 <u>13</u> µg/L
Total Recoverable Iron	1.0 mg/L

Total Recoverable Lead	[420 <u>82</u>] µg/L
Total Recoverable Zinc	120 µg/L
Scrap Recycling and Waste Recycling Facilities (source-separated facilities) (SIC Code 5093)	
Total Suspended Solids (TSS)	100 mg/L
Total Recoverable Aluminum ¹	750 <u>1,100</u> µg/L
Total Recoverable Cadmium ¹	2.4 <u>1.8</u> µg/L
Total Recoverable Chromium ¹	16 µg/L
Total Recoverable Copper ¹	48 <u>13</u> µg/L
Total Recoverable Iron¹	4.0 mg/L
Total Recoverable Lead ¹	[420 <u>82</u>] µg/L
Total Recoverable Zinc ¹	120 µg/L
¹ Metals monitoring is only required at source-separated facilities for the specific metals listed above that are received at the facility.	
Facilities Engaged in Dismantling Ships, Marine Salvaging, and Marine Wrecking - Ships for Scrap (SIC Code 4499, limited to list)	
Total Recoverable Aluminum	750 <u>1,100</u> µg/L
Total Recoverable Cadmium	2.4 <u>1.8</u> µg/L
Total Recoverable Chromium	16 µg/L
Total Recoverable Copper	48 <u>13</u> µg/L
Total Recoverable Iron	4.0 mg/L
Total Recoverable Lead	[420 <u>82</u>] µg/L
Total Recoverable Zinc	120 µg/L
Total Suspended Solids (TSS)	100 mg/L

3066 9VAC25-151-220. Sector O - Steam electric generating facilities.

3067 A. Discharges covered under this section. The requirements listed under this section apply
3068 to stormwater discharges associated with industrial activity from steam electric power
3069 generating facilities using coal, natural gas, oil, nuclear energy, etc. to produce a steam source,
3070 including coal handling areas (Industrial Activity Code "SE").

3071 Stormwater discharges from coal pile runoff subject to numeric effluent limitations are
3072 eligible for coverage under this permit, but are subject to the limitations established by Part I A 1
3073 c (2).

3074 Stormwater discharges from ancillary facilities (e.g., fleet centers, gas turbine stations, and
3075 substations) that are not contiguous to a steam electric power generating facility are not covered
3076 by this permit. Heat capture and heat recovery combined cycle generation facilities are also not

3077 covered by this permit; however, dual fuel co-generation facilities that generate electric power
3078 are included.

3079 B. Stormwater controls. Good housekeeping measures.

3080 1. Fugitive dust emissions. The permittee shall describe and implement measures that
3081 prevent or minimize fugitive dust emissions from coal and ash handling areas. The
3082 permittee shall minimize off-site tracking of coal dust and ash. Control measures to
3083 consider include installing specially designed tires, or washing vehicles in a designated
3084 area before they leave the site, and controlling the wash water.

3085 2. Delivery vehicles. The SWPPP shall describe measures that prevent or minimize
3086 contamination of stormwater runoff from delivery vehicles arriving on the plant site. At a
3087 minimum the permittee shall consider the following:

3088 a. Develop procedures for the inspection of delivery vehicles arriving on the plant
3089 site, and ensure overall integrity of the body or container; and

3090 b. Develop procedures to deal with leakage and spillage from vehicles or containers.

3091 3. Fuel oil unloading areas. The SWPPP shall describe measures that prevent or
3092 minimize contamination of precipitation or surface runoff from fuel oil unloading areas. At
3093 a minimum the permittee shall consider using the following measures, or an equivalent:

3094 a. Use of containment curbs in unloading areas;

3095 b. During deliveries, having station ~~personnel~~ staff familiar with spill prevention and
3096 response procedures present to ensure that any leaks and spills are immediately
3097 contained and cleaned up; and

3098 c. Use of spill and overflow protection. Drip pans, drip diapers, or other containment
3099 devices may be placed beneath fuel oil connectors to contain potential spillage
3100 during deliveries or from leaks at the connectors.

3101 4. Chemical loading and unloading areas. The permittee shall describe and implement
3102 measures that prevent or minimize the contamination of precipitation or surface runoff
3103 from chemical loading and unloading areas. At a minimum the permittee shall consider
3104 using the following measures (or their equivalents):

3105 a. Use of containment curbs at chemical loading and unloading areas to contain
3106 spills;

3107 b. During deliveries, having station ~~personnel~~ staff familiar with spill prevention and
3108 response procedures present to ensure that any leaks or spills are immediately
3109 contained and cleaned up; and

3110 c. Covering chemical loading and unloading areas, and storing chemicals indoors.

3111 5. Miscellaneous loading and unloading areas. The permittee shall describe and
3112 implement measures that prevent or minimize the contamination of stormwater runoff
3113 from loading and unloading areas. The permittee shall consider the following, at a
3114 minimum (or their equivalents):

3115 a. Covering the loading area;

3116 b. Grading, berming, or curbing around the loading area to divert run-on; or

3117 c. Locating the loading and unloading equipment and vehicles so that leaks are
3118 contained in existing containment and flow diversion systems.

3119 6. Liquid storage tanks. The permittee shall describe and implement measures that
3120 prevent or minimize contamination of stormwater runoff from aboveground liquid storage
3121 tanks. At a minimum the permittee shall consider employing the following measures (or
3122 their equivalents):

- 3123 a. Use of protective guards around tanks;
 3124 b. Use of containment curbs;
 3125 c. Use of spill and overflow protection; and
 3126 d. Use of dry cleanup methods.
- 3127 7. Large bulk fuel storage tanks. The permittee shall describe and implement measures
 3128 that prevent or minimize contamination of stormwater runoff from large bulk fuel storage
 3129 tanks. At a minimum the permittee shall consider employing containment berms (or its
 3130 equivalent). The permittee shall also comply with applicable state and federal laws,
 3131 including Spill Prevention Control and Countermeasures (SPCC).
- 3132 8. Spill reduction measures. The permittee shall describe and implement measures to
 3133 reduce the potential for an oil or chemical spill, or reference the appropriate section of
 3134 their SPCC plan. The structural integrity of all aboveground tanks, pipelines, pumps, and
 3135 other related equipment shall be visually inspected as part of the routine facility
 3136 inspection. All repairs deemed necessary based on the findings of the inspections shall
 3137 be completed immediately to reduce the incidence of spills and leaks occurring from
 3138 such faulty equipment.
- 3139 9. Oil bearing equipment in switchyards. The permittee shall describe and implement
 3140 measures to prevent or minimize contamination of surface runoff from oil bearing
 3141 equipment in switchyard areas. The permittee shall consider the use of level grades and
 3142 gravel surfaces to retard flows and limit the spread of spills, and the collection of
 3143 stormwater runoff in perimeter ditches.
- 3144 10. Residue hauling vehicles. All residue hauling vehicles shall be inspected for proper
 3145 covering over the load, adequate gate sealing, and overall integrity of the container
 3146 body. Vehicles without load coverings or adequate gate sealing, or with leaking
 3147 containers or beds shall be repaired as soon as practicable.
- 3148 11. Ash loading areas. The permittee shall describe and implement procedures to
 3149 reduce or control the tracking of ash and residue from ash loading areas. Where
 3150 practicable, clear the ash building floor and immediately adjacent roadways of spillage,
 3151 debris, and excess water before departure of each loaded vehicle.
- 3152 12. Areas adjacent to disposal ponds or landfills. The permittee shall describe and
 3153 implement measures that prevent or minimize contamination of stormwater runoff from
 3154 areas adjacent to disposal ponds or landfills. The permittee shall develop procedures to:
 3155 a. Reduce ash residue ~~which~~ that may be tracked on to access roads traveled by
 3156 residue trucks or residue handling vehicles; and
 3157 b. Reduce ash residue on exit roads leading into and out of residue handling areas.
- 3158 13. Landfills, scrapyards, surface impoundments, open dumps, general refuse sites. The
 3159 SWPPP shall address and include appropriate control measures to minimize the
 3160 potential for contamination of runoff from landfills, scrapyards, surface impoundments,
 3161 open dumps, and general refuse sites.
- 3162 C. Numeric effluent limitations. Permittees with point sources of coal pile runoff associated
 3163 with steam electric power generation shall monitor these stormwater discharges for the
 3164 presence of TSS and for pH [~~at least annually~~] in accordance with Part I A 1 c (2).
- 3165 ~~D. Benchmark monitoring and reporting requirements. Steam electric power generating~~
 3166 ~~facilities are required to monitor their stormwater discharges for the pollutants of concern listed~~
 3167 ~~in Table 220.~~

Table 220

Sector O—Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Steam Electric Generating Facilities (Industrial Activity Code "SE")	
Total Recoverable Iron	1.0 mg/L

3168 **9VAC25-151-240. Sector Q - Water transportation and ship and boat building and**
3169 **repairing yards.**

3170 A. Discharges covered under this section. The requirements listed under this section apply
3171 to stormwater discharges associated with the following industrial activities:

3172 1. Water transportation facilities identified by SIC Codes 4412-4499 (except SIC Code
3173 4499 facilities as specified in Sector N - 9VAC25-151-210). The water transportation
3174 industry includes facilities engaged in foreign or domestic transport of freight or
3175 passengers in deep sea or inland waters, marine cargo handling operations, ferry
3176 operations, towing and tugboat services, and marinas.

3177 2. Ship building and repairing and boat building and repairing facilities identified by SIC
3178 Codes 3731 and 3732. The U.S. Coast Guard refers to a vessel 65 feet or greater in
3179 length as a "ship" and a vessel smaller than 65 feet as a "boat."

3180 B. Special conditions. Prohibition of nonstormwater discharges. In addition to the general
3181 nonstormwater prohibition in Part I B 1, the following discharges are not covered by this permit:
3182 bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating
3183 from vessels.

3184 C. Stormwater controls.

3185 1. Good housekeeping.

3186 a. Pressure washing area. As defined by this permit, process wastewater related to
3187 hull work at facilities shall be any water used on a vessel's hull for any purpose,
3188 regardless of application pressure, including the activities of removing marine salts,
3189 sediments, marine growth and paint, or other hull, weather deck, or superstructure
3190 cleaning activities using water, ~~such as (e.g., preparing those areas for inspection or~~
3191 ~~work (that may include cutting, welding, grinding, or coating), etc.).~~ The discharge
3192 water shall be permitted as a process wastewater by a separate VPDES permit.

3193 b. Blasting and painting areas. The permittee shall describe and implement
3194 measures to prevent spent abrasives, paint chips, and overspray from discharging
3195 into the receiving water or the storm sewer system. The permittee shall contain all
3196 blasting or painting activities or use other measures to prevent or minimize the
3197 discharge of contaminants (e.g., hanging plastic barriers or tarpaulins during blasting
3198 or painting operations to contain debris). Stormwater conveyances shall be regularly
3199 cleaned to remove deposits of abrasive blasting debris and paint chips. The SWPPP
3200 shall include any standard operating practices with regard to blasting and painting
3201 activities, ~~such as (e.g., the prohibition of uncontained blasting or painting over open~~
3202 ~~water, or the prohibition of blasting or painting during windy conditions which can~~
3203 ~~render containment ineffective).~~

3204 c. Material storage areas. All containerized materials shall be plainly labeled and
3205 stored in a protected, secure location away from drains. The permittee shall describe
3206 and implement measures to prevent or minimize the contamination of precipitation or
3207 surface runoff from the storage areas. The SWPPP shall specify which materials are
3208 stored indoors and consider containment or enclosure for materials that are stored
3209 outdoors. The permittee shall consider implementing an inventory control plan to limit

3210 the presence of potentially hazardous materials on-site. Where abrasive blasting is
3211 performed, the SWPPP shall specifically include a discussion on the storage and
3212 disposal of spent abrasive materials generated at the facility.

3213 d. Engine maintenance and repair areas. The permittee shall describe and
3214 implement measures to prevent or minimize contamination of precipitation or surface
3215 runoff from all areas used for engine maintenance and repair. The permittee shall
3216 consider the following measures (or their equivalent): performing all maintenance
3217 activities indoors, maintaining an organized inventory of materials used in the shop,
3218 draining all parts of fluids ~~prior to~~ before disposal, prohibiting the practice of hosing
3219 down the shop floor using dry cleanup methods, and treating or recycling stormwater
3220 runoff collected from the maintenance area.

3221 e. Material handling areas. The permittee shall describe and implement measures to
3222 prevent or minimize contamination of precipitation or surface runoff from material
3223 handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of
3224 process wastewater streams from vessels). The permittee shall consider the
3225 following measures (or their equivalents): covering fueling areas; using spill and
3226 overflow protection; mixing paints and solvents in a designated area (preferably
3227 indoors or under a shed); and minimizing run-on of stormwater to material handling
3228 areas.

3229 f. Drydock activities. The SWPPP shall address the routine maintenance and
3230 cleaning of the drydock to minimize the potential for pollutants in the stormwater
3231 runoff. The SWPPP shall describe the procedures for cleaning the accessible areas
3232 of the drydock ~~prior to~~ before flooding and final cleanup after the vessel is removed
3233 and the dock is raised. Cleanup procedures for oil, grease, or fuel spills occurring on
3234 the drydock shall also be included within the SWPPP. The permittee shall consider
3235 the following measures (or their equivalents): sweeping rather than hosing off debris
3236 and spent blasting material from the accessible areas of the drydock ~~prior to~~ before
3237 flooding; and having absorbent materials and oil containment booms readily
3238 available to contain or cleanup any spills.

3239 g. General yard area. The SWPPP shall include a schedule for routine yard
3240 maintenance and cleanup. Scrap metal, wood, plastic, miscellaneous trash, paper,
3241 glass, industrial scrap, insulation, welding rods, packaging, etc. shall be routinely
3242 removed from the general yard area.

3243 (1) Preventative maintenance. As part of the facility's preventive maintenance
3244 program, stormwater management devices shall be inspected and maintained in a
3245 timely manner (e.g., oil/water separators and sediment traps cleaned to ensure that
3246 spent abrasives, paint chips, and solids are intercepted and retained ~~prior to~~ before
3247 entering the storm drainage system). Facility equipment and systems shall also be
3248 inspected and tested to uncover conditions that could cause breakdowns or failures
3249 resulting in discharges of pollutants to surface waters.

3250 (2) Routine facility inspections. The following areas shall be included in all quarterly
3251 inspections: pressure washing area; blasting, sanding, and painting areas; material
3252 storage areas; engine maintenance and repair areas; material handling areas;
3253 drydock area; and general yard area. The requirement for routine facility inspections
3254 is waived for facilities that have maintained an active VEEP E3/E4 status.

3255 (3) Employee training. Training shall address, at a minimum, the following activities
3256 (as applicable): used oil management, spent solvent management, disposal of spent
3257 abrasives, disposal of vessel wastewaters, spill prevention and control, fueling

3258 procedures, general good housekeeping practices, painting and blasting procedures,
 3259 and used battery management.

3260 D. Benchmark monitoring and reporting requirements. These facilities are required to
 3261 monitor their stormwater discharges for the pollutants of concern listed in Table 240.

Table 240 Sector Q – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Water Transportation Facilities (SIC Codes 4412-4499 except 4499 as specified in Sector N) and Ship and Boat Building or Repairing Yards (SIC Codes 3731 and 3732)	
Total Suspended Solids (TSS)	100 mg/L
Total Recoverable Copper	48 <u>13</u> µg/L
Total Recoverable Zinc	120 µg/L

3262 **9VAC25-151-320. Sector Y - Rubber, miscellaneous plastic products, and miscellaneous**
 3263 **manufacturing industries.**

3264 A. Discharges covered under this section. The requirements listed under this section apply
 3265 to stormwater discharges associated with industrial activity from rubber and miscellaneous
 3266 plastic products manufacturing facilities, SIC Codes 3011, 3021, 3052, 3053, 3061, and 3069.

3267 B. SWPPP requirements. In addition to the requirements of Part III, the SWPPP shall
 3268 include, at a minimum, the following items:

3269 1. Site description. Summary of potential pollutant sources. Rubber manufacturing
 3270 facilities shall review the use of zinc at the facility and the possible pathways through
 3271 which zinc may be discharged in stormwater runoff.

3272 2. Stormwater controls.

3273 a. Controls for rubber manufacturers. Rubber manufacturing facilities shall describe
 3274 and implement specific controls to minimize the discharge of zinc in stormwater
 3275 discharges from the facility. Listed below are possible sources of zinc. These shall be
 3276 reviewed and the accompanying control measures (or their equivalents) shall be
 3277 documented in the SWPPP. Also, some general control measure options to consider
 3278 include: using chemicals that are purchased in pre-weighed, sealed polyethylene
 3279 bags; storing materials that are in use in sealable containers; ensuring an airspace
 3280 between the container and the cover to minimize "puffing" losses when the container
 3281 is opened; and using automatic dispensing and weighing equipment.

3282 (1) Zinc bags. All permittees shall review the handling and storage of zinc bags at
 3283 their facilities. Following are some control measure options: employee training
 3284 regarding the handling and storage of zinc bags; indoor storage of zinc bags;
 3285 cleanup of zinc spills without washing the zinc into the storm drain; and the use of
 3286 2,500-pound sacks of zinc rather than ~~50-~~ 50-pound to 100-pound sacks.

3287 (2) Dumpsters. The permittee shall minimize discharges of zinc from dumpsters.
 3288 Following are some control measure options: provide a cover for the dumpster; move
 3289 the dumpster to an indoor location; or provide a lining for the dumpster.

3290 (3) Dust collectors or baghouses. Permittees shall minimize contributions of zinc to
 3291 stormwater from dust collectors and baghouses. Improperly operating dust collectors
 3292 and baghouses shall be replaced or repaired as appropriate.

3293 (4) Grinding operations. Permittees shall minimize contamination of stormwater as a
 3294 result of dust generation from rubber grinding operations. One control measure
 3295 option is to install a dust collection system.

3296 (5) Zinc stearate coating operations. Permittees shall minimize the potential for
 3297 stormwater contamination from drips and spills of zinc stearate slurry that may be
 3298 released to the storm drain. One control measure option is to use alternative
 3299 compounds to zinc stearate.

3300 b. Controls for plastic products manufacturers. Plastic products manufacturing
 3301 facilities shall describe and implement specific controls to minimize the discharge of
 3302 plastic resin pellets in stormwater discharges from the facility. The following control
 3303 measures (or their equivalents) shall be documented in the SWPPP: minimizing
 3304 spills; cleaning up of spills immediately and thoroughly; sweeping thoroughly; pellet
 3305 capturing; employee education; and disposal precautions.

3306 C. Benchmark monitoring and reporting requirements. Rubber product manufacturing
 3307 facilities are required to monitor their stormwater discharges for the pollutants of concern listed
 3308 in Table 320.

Table 320 Sector Y – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Tires and Inner Tubes; Rubber Footwear; Gaskets, Packing and Sealing Devices; Rubber Hose and Belting; and Fabricated Rubber Products, Not Elsewhere Classified (SIC Codes 3011, 3021, 3052, 3053, 3061, and 3069).	
Total Recoverable Zinc	120 µg/L

3309 **9VAC25-151-340. Sector AA - Fabricated metal products.**

3310 A. Discharges covered under this section. The requirements listed under this section apply
 3311 to stormwater discharges associated with industrial activity from the following fabricated metals
 3312 industries, except for electrical related industries: fabricated metal products, except machinery
 3313 and transportation equipment, SIC Codes 3411-3471, 3479, and 3482-3499; and jewelry,
 3314 silverware, and plated ware, SIC Codes 3911-3915.

3315 B. Benchmark monitoring and reporting requirements. Metal fabricating facilities are required
 3316 to monitor their stormwater discharges for the pollutants of concern listed in Table 340.

Table 340 Sector AA – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Fabricated Metal Products Except Coating (SIC Codes 3411-3471, 3482-3499, 3911-3915)	
Total Recoverable Aluminum	750 <u>1,100</u> µg/L
Total Recoverable Iron	1.0 mg/L
Total Recoverable Zinc	120 µg/L
Total Recoverable Copper	48 <u>13</u> µg/L
Fabricated Metal Coating and Engraving (SIC Code 3479)	

Total Recoverable Zinc	120 µg/L
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3317 9VAC25-151-350. Sector AB - Transportation equipment, industrial, or commercial
3318 machinery.

3319 A. Discharges covered under this section. The requirements listed under this section apply
3320 to stormwater discharges associated with industrial activity from transportation equipment and
3321 industrial or commercial machinery manufacturing facilities commonly described by SIC Codes
3322 3511-3599, except SIC Codes 3571-3579.

3323 B. SWPPP requirements. In addition to the requirements of Part III, the SWPPP shall
3324 include, at a minimum, the following item:

3325 Site description. The site map shall identify where any of the following may be exposed to
3326 precipitation or surface runoff: vents and stacks from metal processing and similar operations.

3327 C. Benchmark monitoring and reporting requirements. Transportation equipment
3328 manufacturing facilities are required to monitor their stormwater discharges for the pollutants of
3329 concern listed in Table 350.

Table 350 Sector AB – Benchmark Monitoring Requirements	
Pollutants of Concern	Benchmark Concentration
Transportation equipment manufacturing facilities (SIC Codes 3511-3599 except SIC Codes 3571-3579)	
Total Petroleum Hydrocarbons (TPH)*	15.0 mg/L
Total Suspended Solids (TSS)	100 mg/L
Total Recoverable Copper	48 <u>13</u> µg/L
Total Recoverable Zinc	120 µg/L
*Total Petroleum Hydrocarbons (TPH) is the sum of individual gasoline range organics and diesel range organics (TPH-GRO and TPH-DRO) to be measured by EPA SW 846 Method 8015 for gasoline and diesel range organics, or by EPA SW 846 Methods 8260 Extended and 8270 Extended.	

3330 9VAC25-151-370. Sector AD - Nonclassified facilities or stormwater discharges
3331 designated by the ~~board~~ department as requiring permits.

3332 A. Discharges covered under this section. Sector AD is used to provide permit coverage for
3333 facilities designated by the ~~board~~ department as needing a stormwater permit under the
3334 provisions of 9VAC25-31-120 A 1 c or under 9VAC25-31-120 A 7 a (1) or (2) of the VPDES
3335 Permit Regulation. Therefore, almost any type of stormwater discharge may be covered under
3336 this sector. Permittees shall be assigned to Sector AD by the ~~board~~ department and may not
3337 choose Sector AD as the sector describing the facility's activities.

3338 B. [~~Benchmark Effluent limitations, benchmark~~] monitoring and reporting requirements. The
3339 ~~board~~ department shall establish any additional monitoring requirements for ~~your~~ a facility ~~prior~~
3340 ~~to~~ before authorizing coverage under this permit.

3341 9VAC25-151-380. Sector AE - Facilities with no analytical benchmark monitoring
3342 requirements.

3343 A. Discharges covered under this section. The requirements listed under this section apply
3344 to stormwater discharges associated with industrial activity from facilities with SIC Codes 2611,

3345 2621, 2652-2657, 2833-2836, 2851, 2861-2869, 2891-2899, 3952, 3211, 3221, 3229, 3231,
3346 3241, 3281, 3291-3299, 3331-3339, 3398, 3399, 3341, 1311, 1321, 1381-1389, 2911, 4512-
3347 4581 [(not subject to federal effluent guidelines)] , Treatment Works (TW), 2011-2015, 2032-
3348 2038, 2051-2053, 2061-2068, 2082-2087, 2091-2099, 2111-2141, 2211-2299, 2311-2399,
3349 3131-3199, 2434, 2511-2599, 2711-2796, 3081-3089, 3931, 3942-3949, 3951-3955 (except
3350 3952), 3961, 3965, 3991-3999, 3111, 3711-3799 (except 3731 and 3732 as identified in Sector
3351 Q), 3571-3579, 3612-3699, and 3812-3873.

3352 B. No additional sector-specific requirements apply to this sector.

3353 Part V

3354 Chesapeake Bay Total Maximum Daily Load Compliance

3355 **9VAC25-151-400. Chesapeake Bay total maximum daily load compliance.**

3356 A. Chesapeake Bay TMDL Compliance. EPA's Chesapeake Bay TMDL (December 29,
3357 2010) includes wasteload allocations for VPDES permitted industrial stormwater facilities as part
3358 of the regulated stormwater aggregate load. EPA used data submitted by Virginia with the
3359 Phase I Chesapeake Bay TMDL Watershed Implementation Plan, including the number of
3360 industrial stormwater permits per county and the number of urban acres regulated by industrial
3361 stormwater permits, as part of their development of the aggregate load. Aggregate loads for
3362 industrial stormwater facilities were appropriate because actual facility loading data were not
3363 available to develop individual facility wasteload allocations.

3364 Virginia estimated the loadings from industrial stormwater facilities using actual and
3365 estimated facility acreage information and total phosphorus (TP) and total nitrogen (TN) loading
3366 rates from the Northern Virginia Planning District Commission (NVPDC) Guidebook for
3367 Screening Urban Nonpoint Pollution Management Strategies (Annandale, VA November 1979),
3368 prepared for the Metropolitan Washington Council of Governments. The loading rates used
3369 were as follows:

3370 TP - High (80%) imperviousness industrial; 1.5 lb/ac/yr

3371 TN - High (80%) imperviousness industrial; 12.3 lb/ac/yr

3372 Actual facility area information and TP and TN data collected for facilities subject to Part V of
3373 this permit will be used by the department to quantify the nutrient and sediment loads from
3374 those VPDES permitted industrial stormwater facilities.

3375 1. Facilities that obtained coverage under the 2019 industrial stormwater general permit
3376 that demonstrated compliance with the Chesapeake Bay TMDL loading rates.

3377 a. Owners shall maintain documentation of their demonstration of compliance with
3378 the Chesapeake Bay TMDL loading rates with the SWPPP and shall continue
3379 implementing any BMPs that may have been developed as part of that
3380 demonstration. Documentation may include:

3381 (1) Calculations submitted to the department indicating that reductions were not
3382 necessary;

3383 (2) A completed TMDL Action Plan, including a description of the means and
3384 methods, such as management practices and retrofit programs that were utilized to
3385 meet the required reductions;

3386 (3) Other means accepted by the department indicating compliance with the
3387 Chesapeake Bay TMDL loading rates.

3388 2. Facilities that obtained coverage under the 2019 industrial stormwater general permit
3389 that did not demonstrate compliance with the Chesapeake Bay TMDL loading rates shall
3390 submit a demonstration to the department.

3391 a. Owners of facilities that submitted a Chesapeake Bay TMDL action plan during the
3392 2019 industrial stormwater general permit term that did not achieve reductions by the
3393 end of the 2019 permit term shall [~~demonstrate that they have achieved their~~
3394 update and resubmit their action plan to the department for approval no later than 60
3395 days following coverage under this general permit. Permittees shall achieve ten
3396 percent of the remaining reductions by December 31, 2024, and all remaining]
3397 reductions by December 31, 2025. [~~The demonstration~~ An annual report shall be
3398 submitted to the department by June 30 of each year describing the progress in
3399 meeting the interim and final reductions. A final report to demonstrate
3400 compliance] shall be submitted to the department no later than January 10, 2026.
3401 Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be
3402 maintained with the SWPPP.

3403 b. Owners of facilities that completed four samples for each outfall for TN and TP
3404 during the 2019 industrial stormwater general permit term that did not submit
3405 calculations by the end of the 2019 permit term shall utilize the procedures in Part V
3406 D to calculate their facility stormwater loads. The permittee shall submit a copy of the
3407 calculations, and a Chesapeake Bay TMDL action plan if required under Part V E, no
3408 later than 60 days following coverage under this general permit to the DEQ regional
3409 office serving the area where the industrial facility is located on a form provided by
3410 the department. Reductions, if applicable, shall be achieved by December 31, 2025,
3411 and [~~documentation that the reductions have been achieved~~ an annual report shall
3412 be submitted to the department by June 30 of each year describing the progress in
3413 meeting the required reductions until such time that the demonstration is completed.
3414 The demonstration] shall be submitted to the department no later than January 10,
3415 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates
3416 shall be maintained with the SWPPP.

3417 c. Owners of facilities registered prior to July 1, 2022, that did not complete four
3418 samples for each outfall for TN and TP by the end of the 2019 industrial stormwater
3419 general permit term shall monitor their discharges for TN and TP to characterize the
3420 contributions from their facility's specific industrial sector for these parameters. Total
3421 nitrogen is the sum of total Kjeldahl nitrogen (TKN) and nitrite + nitrate and shall be
3422 derived from the results of those tests. After the facility is granted coverage under the
3423 permit, samples shall be collected during each of the first four quarters of permit
3424 coverage. Samples shall be collected and analyzed in accordance with Part V B.
3425 Monitoring results shall be reported in accordance with Part V C and Part II C, and
3426 retained in accordance with Part II B. Calculations utilizing the procedures in Part V
3427 D, and a Chesapeake Bay TMDL action plan if required under Part V E, shall be
3428 submitted no later than 60 days following the completion of the fourth quarterly
3429 monitoring period to the DEQ regional office serving the area where the industrial
3430 facility is located on a form provided by the department. Reductions, if applicable,
3431 shall be achieved by December 31, 2025, and [~~documentation that the reductions~~
3432 have been achieved an annual report shall be submitted to the department by June
3433 30 of each year describing the progress in meeting the required reductions until such
3434 time that the demonstration is completed. The demonstration] shall be submitted to
3435 the department no later than January 10, 2026. Documentation of compliance with
3436 the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

3437 Facilities may use the applicable sampling data collected during the 2019 industrial
3438 stormwater general permit term to satisfy all or part of the four monitoring periods
3439 requirement in accordance with Part V A 2 c.

3440 d. Owners of facilities registered after June 30, 2022, that did not complete four
3441 samples for each outfall for TN and TP by the end of the 2019 industrial stormwater
3442 general permit term shall monitor their discharges in accordance with Part V A 3.

3443 Facilities may use the applicable sampling data collected during the 2019 industrial
3444 stormwater general permit term to satisfy all or part of the four monitoring periods
3445 requirements in accordance with Part V A 3.

3446 3. Facilities that obtain initial coverage under the 2024 industrial stormwater general
3447 permit, but are not newly constructed facilities as identified in 9VAC25-151-60 C 13.

3448 a. Owners of facilities in the Chesapeake Bay watershed that obtain initial coverage
3449 under the 2024 industrial stormwater general permit shall monitor their discharges for
3450 TN and TP to characterize the contributions from their facility's specific industrial
3451 sector for these parameters. Total nitrogen is the sum of total Kjeldahl nitrogen
3452 (TKN) and nitrite + nitrate and shall be derived from the results of those tests. After
3453 the facility is granted coverage under the permit, samples shall be collected during
3454 each of the first four quarters of permit coverage. Samples shall be collected and
3455 analyzed in accordance with Part V B. Monitoring results shall be reported in
3456 accordance with Part V C and Part II C, and retained in accordance with Part II B.
3457 Calculations utilizing the procedures in Part V D and a Chesapeake Bay TMDL
3458 action plan if required under Part V E shall be submitted no later than 60 days
3459 following the completion of the fourth quarterly monitoring period to the DEQ regional
3460 office serving the area where the industrial facility is located on a form provided by
3461 the department. Reductions, if applicable, shall be achieved by two years following
3462 the end of the fourth quarterly monitoring period [~~and documentation that the~~
3463 ~~reductions have been achieved~~ and an annual report shall be submitted to the
3464 department by June 30 of each year describing the progress in meeting the required
3465 reductions until such time that the demonstration is completed. The
3466 demonstration] shall be submitted to the department no later than the 10th of the
3467 month directly following the two year period. Documentation of compliance with the
3468 Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

3469 B. Monitoring instructions.

3470 1. Collection and analysis of samples. Sampling requirements shall be assessed on an
3471 outfall by outfall basis. Samples shall be collected and analyzed in accordance with the
3472 requirements of Part II A.

3473 2. When and how to sample. A minimum of one grab sample shall be taken from the
3474 discharge associated with industrial activity resulting from a storm event that results in a
3475 discharge from the site providing the interval from the preceding storm event discharge
3476 is at least 72 hours. The 72-hour storm interval is waived if the permittee is able to
3477 document that less than a 72-hour interval is representative for local storm events during
3478 the sampling period. In the case of snowmelt, the monitoring shall be performed at a
3479 time when a measurable discharge occurs at the site. For discharges from a stormwater
3480 management structure, the monitoring shall be performed at a time when a measurable
3481 discharge occurs from the structure.

3482 The grab sample shall be taken during the first 30 minutes of the discharge. If it is not
3483 practicable to take the sample during the first 30 minutes, the sample may be taken
3484 during the first three hours of the discharge, provided that the permittee explains why a
3485 grab sample during the first 30 minutes was impracticable. This information shall be
3486 submitted in the department's electronic discharge monitoring report (e-DMR) system
3487 and maintained with the SWPPP. If the sampled discharge commingles with process or

3488 nonprocess water, the permittee shall attempt to sample the stormwater discharge
3489 before it mixes with the nonstormwater.

3490 3. Storm event data. For each monitoring event, except snowmelt monitoring, along with
3491 the monitoring results, the permittee shall identify the date of the storm event sampled;
3492 rainfall total (in inches) of the storm event that generated the sampled runoff; and the
3493 interval between the storm event sampled and the end of the previous storm event
3494 discharge. For snowmelt monitoring, the permittee shall identify the date of the sampling
3495 event.

3496 4. Monitoring periods. Quarterly monitoring shall be conducted in each of the following
3497 three-month periods: January through March, April through June, July through
3498 September, and October through December.

3499 5. Documentation explaining a facility's inability to obtain a sample (including dates and
3500 times the outfalls were viewed or sampling was attempted), of no rain event, or of
3501 deviation from the 72-hour storm interval shall be submitted with the e-DMR and
3502 maintained with the SWPPP. Acceptable documentation includes National Climatic Data
3503 Center (NCDC) weather station data, local weather station data, facility rainfall logs, and
3504 other appropriate supporting data.

3505 6. Representative outfalls may be used in accordance with Part I A 2 f.

3506 C. Reporting monitoring results.

3507 1. Reporting to the department. The permittee shall follow the reporting requirements
3508 and deadlines in Table 400-1 if required by Part V A 2 or A 3:

<u>Table 400-1</u> <u>Monitoring Reporting Requirements</u>	
<u>Quarterly Chesapeake Bay TMDL Monitoring</u>	<u>Submit the results by January 10, April 10, July 10, and October 10.</u>

3509 2. Permittees shall submit results for each outfall associated with industrial activity
3510 according to the requirements of Part II C.

3511 3. Significant digits. The permittee shall report at least the same number of significant
3512 digits as a numeric effluent limitation or TMDL wasteload allocation for a given
3513 parameter; otherwise, at least two significant digits shall be reported for a given
3514 parameter. Regardless of the rounding convention used by the permittee (i.e., five
3515 always rounding up or to the nearest even number), the permittee shall use the
3516 convention consistently and shall ensure that consulting laboratories employed by the
3517 permittee use the same convention.

3518 D. Calculation of facility loads.

3519 1. Permittees required to collect nutrient and sediment data in accordance with Part V A
3520 2 or A 3 shall analyze the data collected to determine if pollution reductions are required.
3521 The permittee shall average the data collected at the facility for each of the pollutants of
3522 concern (POC) (e.g., TP and TN) and compare the results to the loading rates for TP
3523 and TN presented in Part V A.

3524 The following formula may be used to determine the loading rate:

3525 $L = 0.226 \times P \times P_j \times (0.05 + (0.9 \times I_a)) \times C$

3526 where:

3527 L = the POC loading rate (lb/acre/year)

3528 P = the annual rainfall (inches/year) - The permittee may use either actual annual
3529 average rainfall data for the facility location (in inches/year), the Virginia annual average
3530 rainfall of 44.3 inches/year, or another method approved by the department.

3531 P_i = the fraction of annual events that produce runoff - The permittee shall use 0.9
3532 unless the department approves another rate.

3533 I_a = the impervious fraction of the facility impervious area of industrial activity to the
3534 facility industrial activity area.

3535 C = the POC average concentration of all facility samples (mg/L) - Facilities with multiple
3536 outfalls shall calculate a weighted average concentration for each outfall using the
3537 drainage area of each outfall.

3538 For total phosphorus, all daily concentration data below the quantitation level (QL) for
3539 the analytical method used shall be treated as half the QL. All daily concentration data
3540 equal to or above the QL for the analytical method used shall be treated as it is reported.

3541 For total nitrogen, if none of the daily concentration data for the respective species (i.e.,
3542 TKN, nitrate, or nitrite) are equal to or above the QL for the respective analytical
3543 methods used, the daily TN concentration value reported shall equal one half of the
3544 largest QL used for the respective species. If one of the data is equal to or above the
3545 QL, the daily TN concentration value shall be treated as that data point is reported. If
3546 more than one of the data is above the QL, the daily TN concentration value shall equal
3547 the sum of the data points as reported.

3548 Calculations shall be submitted to the department within 60 days from the end of the last
3549 monitoring period that satisfies the monitoring requirements in Part V A 2 or A 3.

3550 Calculations shall be submitted to the DEQ regional office serving the area where the
3551 industrial facility is located, on a form provided by the department, and maintained with
3552 the facility's SWPPP.

3553 Alternative calculations may be accepted on a case by case basis by the department to
3554 accommodate facilities with outfalls that rarely discharge.

3555 E. Chesapeake Bay TMDL action plan requirements. For permittees required to submit
3556 calculations in accordance with Part V D, if the calculated facility loading rate for TP or TN is
3557 above the loading rates for TP or TN presented in Part V A, then the permittee shall develop
3558 and submit a Chesapeake Bay TMDL action plan to the department.

3559 The Chesapeake Bay TMDL action plan shall be submitted on a form provided by the
3560 department to the regional office serving the area where the industrial facility is located within 60
3561 days following the completion of the fourth quarterly monitoring period. A copy of the current
3562 Chesapeake Bay TMDL action plan and all facility loading rate calculations shall be maintained
3563 with the facility's SWPPP. The Chesapeake Bay TMDL action plan shall include:

3564 1. A determination of the total pollutant load reductions for TP and TN (as appropriate)
3565 necessary to reduce the annual loads from industrial activities. This shall be determined
3566 by multiplying the industrial average times the difference between the TMDL loading
3567 rates listed in Part V A and the actual facility loading rates calculated in accordance with
3568 Part V D. The reduction applies to the total difference calculated for each pollutant of
3569 concern; and

3570 2. The means and methods, such as management practices and retrofit programs that
3571 will be utilized to meet the required reductions determined in Part V E 1 and a schedule
3572 to achieve those reductions by the applicable deadline set in Part V A 2 or A 3. Pollutant
3573 reductions may be achieved using a combination of the following alternatives:

3574 a. Reductions provided by one or more of the BMPs from the Virginia Stormwater
3575 BMP Clearinghouse listed in 9VAC25-870-65, approved BMPs found on the Virginia

3576 Stormwater Clearinghouse website, or BMPs approved by the Chesapeake Bay
3577 Program. Any BMPs implemented to provide the required pollutant reductions shall
3578 be incorporated in the SWPPP and be permanently maintained by the permittee;
3579 b. Implementation of site-specific BMPs followed by a minimum of four stormwater
3580 samples collected in accordance with sampling requirements in Part I B 8 a that
3581 demonstrate pollutant loadings have been reduced below those calculated under
3582 Part I B 8 c. Any BMPs implemented to provide the required pollutant reductions
3583 shall be incorporated in the SWPPP and be permanently maintained by the
3584 permittee; or
3585 c. Acquisition of nonpoint source credits certified by the board as perpetual in
3586 accordance with § 62.1-44.19:20 of the Code of Virginia.

FACT SHEET
REISSUANCE OF A GENERAL VPDES PERMIT
FOR INDUSTRIAL ACTIVITY STORMWATER DISCHARGES

The Virginia State Water Control Board has under consideration the reissuance of a general VPDES permit for point source discharges of stormwater associated with industrial activity to surface waters.

Permit Number: VAR05

Name of Permittee: Any owner in the Commonwealth of Virginia agreeing to be regulated under the terms of this general permit.

Facility Location: Commonwealth of Virginia

Receiving Waters: Surface waters within the boundaries of the Commonwealth of Virginia, except waters specifically named in Board regulations or policies which prohibit such discharges.

On the basis of preliminary review and application of lawful standards and regulations, the State Water Control Board proposes to reissue the general permit subject to certain conditions and has prepared a draft permit. The category of discharges to be included involves stormwater discharges from subcategories of industrial facilities with the same or similar types of operations, and discharging the same or similar types of wastes. The Board has determined that this category of discharges is appropriately controlled under a general permit. The draft general permit requires that all covered facilities within a particular subcategory meet standardized permit conditions and monitoring requirements, and provides dates for submitting monitoring data. This permit will maintain the water quality standards adopted by the Board. This general permit will replace the general permit VAR05 which expires on June 30, 2024. Owners covered under the expiring general permit who wish to continue to discharge under a general permit must register for coverage under the new permit.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting:

Joseph Bryan
Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218
TEL: (804) 659-2659
joseph.bryan@deq.virginia.gov

Administrative

The general permit will have a fixed term of five (5) years effective, upon Board approval, July 1, 2024. Every authorization to discharge under this general permit will expire at the same time and all authorizations to discharge will be renewed on the same date. Discharges will be covered under the general permit upon approval of the Registration Statement and delivery of a copy of the general permit to the applicant.

This general permit does not apply to any new or increased discharge that will result in significant effects to the receiving waters. That determination is made in accordance with the State Water Control Board's Anti-degradation Policy contained in the Virginia Water Quality Standards, 9VAC25-260-30. Anti-backsliding will also be considered prior to granting coverage under this general permit to operations currently discharging stormwater under another VPDES permit.

If a discharge appears to qualify for this general permit, the operator must submit a general permit Registration Statement to apply for general permit coverage. The Department will either send a copy of the general permit to those applicants that qualify or send a copy of the VPDES individual permit application to those that do not qualify.

Activities Covered Under This General Permit

This permit covers point source discharges of stormwater associated with industrial activity to surface waters of the Commonwealth, including discharges through municipal or non-municipal separate storm sewer systems. This permit also covers stormwater discharges designated by the Board for permitting under the provisions of 9VAC25-31-120 A 1 c, or under 9VAC25-31-120 A 7 a (1) or (2) of the VPDES Permit Regulation.

To be eligible to discharge under the permit, an owner must (1) have a stormwater discharge associated with industrial activity from the facility's primary industrial activity, provided the primary industrial activity is included in Table 1 below, or (2) be notified that the stormwater discharges from the facility have been designated by the Board for permitting.

TABLE 1: SECTORS OF INDUSTRIAL ACTIVITY COVERED BY THIS PERMIT.

SIC Code or Activity Code	Activity Represented
Sector A: Timber Products	
2411	Log Storage and Handling (wet deck storage areas are only authorized if no chemical additives are used in the spray water or applied to the logs).
2421	General Sawmills and Planning Mills.
2426	Hardwood Dimension and Flooring Mills.
2429	Special Product Sawmills, Not Elsewhere Classified.
2431-2439 (except 2434 - see Sector W)	Millwork, Veneer, Plywood, and Structural Wood.
2441, 2448, 2449	Wood Containers.
2451, 2452	Wood Buildings and Mobile Homes.
2491	Wood Preserving.
2493	Reconstituted Wood Products.
2499	Wood Products, Not Elsewhere Classified (includes SIC Code 24991303 - Wood, Mulch and Bark facilities).
Sector B: Paper and Allied Products	
2631	Paperboard Mills.
Sector C: Chemical and Allied Products	
2812-2819	Industrial Inorganic Chemicals.
2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Synthetic Fibers except Glass.

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2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations.
2873-2879	Agricultural Chemicals (includes SIC Code 2875 - Composting facilities).
Sector D: Asphalt Paving and Roofing Materials and Lubricants	
2951, 2952	Asphalt Paving and Roofing Materials.
2992, 2999	Miscellaneous Products of Petroleum and Coal.
Sector E: Glass Clay, Cement, Concrete, and Gypsum Products	
3251-3259	Structural Clay Products.
3261-3269	Pottery and Related Products.
3274, 3275	Concrete, Gypsum and Plaster Products, except: Concrete Block and Brick; Concrete Products, except Block and Brick; and Ready-Mixed Concrete Facilities (SIC 3271-3273) (Concrete Block and Brick; Concrete Products, except Block and Brick; and Ready-Mixed Concrete Facilities (SIC 3271-3273) are covered under the Concrete Products General Permit (VAG11)).
Sector F: Primary Metals	
3312-3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills.
3321-3325	Iron and Steel Foundries.
3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals.
3363-3369	Nonferrous Foundries (Castings).
Sector G: Metal Mining (Ore Mining and Dressing)	
1011	Iron Ores.
1021	Copper Ores.
1031	Lead and Zinc Ores.
1041, 1044	Gold and Silver Ores.
1061	Ferroalloy Ores, Except Vanadium.
1081	Metal Mining Services.
1094, 1099	Miscellaneous Metal Ores.
Sector H: Coal Mines and Coal Mining Related Facilities	
1221-1241	Coal Mines and Coal Mining-Related Facilities.
(Sector J: Mineral Mining and Dressing Facilities (SIC 1411-1499) are not authorized under this permit – see the Non-Metallic Mineral Mining General Permit (VAG84) for permit coverage.)	
Sector K: Hazardous Waste Treatment, Storage, or Disposal Facilities	
HZ	Hazardous Waste Treatment Storage or Disposal.
Sector L: Landfills and Land Application Sites	
LF	Landfills, Land Application Sites, and Open Dumps.
Sector M: Automobile Salvage Yards	
5015	Automobile Salvage Yards.
Sector N: Scrap Recycling Facilities	

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5093	Scrap Recycling Facilities.
4499 (limited to list)	Dismantling Ships, Marine Salvaging, and Marine Wrecking - Ships for Scrap
Sector O: Steam Electric Generating Facilities	
SE	Steam Electric Generating Facilities.
Sector Q: Water Transportation and Ship and Boat Building or Repairing Yards	
4412-4499 (except 4499 facilities as specified in Sector N)	Water Transportation.
3731, 3732	Ship and Boat Building or Repairing Yards.
Sector U: Food and Kindred Products	
2021-2026	Dairy Products.
2041-2048	Grain Mill Products.
2074-2079	Fats and Oils.
Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries.	
3011	Tires and Inner Tubes.
3021	Rubber and Plastics Footwear.
3052, 3053	Gaskets, Packing, and Sealing Devices and Rubber and Plastics Hose and Belting.
3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified.
Sector AA: Fabricated Metal Products	
3411–3471, 3482-3499	Fabricated Metal Products, except Machinery and Transportation Equipment.
3479	Fabricated Metal Coating and Engraving
3911–3915	Jewelry, Silverware, and Plated Ware
Sector AB: Transportation Equipment, Industrial or Commercial Machinery	
3511-3599 (except 3571-3579)	Industrial and Commercial Machinery (except Computer and Office Equipment).
Sector AD: Non-classified Facilities/Stormwater Discharges Designated by the Department as Requiring Permits	
N/A	Stormwater Discharges Designated by the Department for Permitting under the Provisions of 9VAC25-31-120 A 1 c, or Under 9VAC25-31-120 A 7 a (1) or (2) of the VPDES Permit Regulation. Facilities may not elect to be covered under Sector AD. Only the department may assign a facility to Sector AD.
Sector AE: Facilities with No Analytical Benchmark Monitoring Requirements	
2611	Pulp Mills.
2621	Paper Mills.
2652-2657	Paperboard Containers and Boxes.

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2671-2679	Converted Paper and Paperboard Products, except Containers and Boxes.
2833-2836	Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; In Vitro and In Vivo Diagnostic Substances; Biological Products, except Diagnostic Substances.
2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products.
2861-2869	Industrial Organic Chemicals.
2891-2899	Miscellaneous Chemical Products.
3952 (limited to list)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors.
3211	Flat Glass.
3221, 3229	Glass and Glassware, Pressed or Blown.
3231	Glass Products Made of Purchased Glass.
3241	Hydraulic Cement.
3281	Cut Stone and Stone Products
3291-3299	Abrasive, Asbestos, and Miscellaneous Non-Metallic Mineral Products.
3331-3339	Primary Smelting and Refining of Nonferrous Metals.
3398, 3399	Miscellaneous Primary Metal Products.
3341	Secondary Smelting and Refining of Nonferrous Metals.
1311	Crude Petroleum and Natural Gas.
1321	Natural Gas Liquids.
1381-1389	Oil and Gas Field Services.
2911	Petroleum Refineries.
4512-4581	Air Transportation Facilities.
TW	Treatment Works.
2011-2015	Meat Products.
2032-2038	Canned, Frozen and Preserved Fruits, Vegetables and Food Specialties.
2051-2053	Bakery Products.
2061-2068	Sugar and Confectionery Products.
2082-2087	Beverages.
2091-2099	Miscellaneous Food Preparations and Kindred Products.
2111-2141	Tobacco Products.
2211-2299	Textile Mill Products.
2311-2399	Apparel and Other Finished Products Made from Fabrics and Similar Materials.
3131-3199	Leather and Leather Products, except Leather Tanning and Finishing.
2434	Wood Kitchen Cabinets.
2511-2599	Furniture and Fixtures.
2711-2796	Printing, Publishing, and Allied Industries.
3081-3089	Miscellaneous Plastics Products.
3931	Musical Instruments.
3942-3949	Dolls, Toys, Games and Sporting and Athletic Goods.
3951-3955 (except 3952)	Pens, Pencils, and Other Artists' Materials.

3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal.
3991-3999	Miscellaneous Manufacturing Industries.
3111	Leather Tanning, Currying and Finishing.
3711-3799 (except 3731, 3732 - see Sector Q)	Transportation Equipment (except Ship and Boat Building and Repairing).
3571-3579	Computer and Office Equipment.
3612-3699	Electronic and Other Electrical Equipment and Components, except Computer Equipment.
3812-3873	Measuring, Analyzing and Controlling Instruments; Photographic, Medical and Optical Goods; Watches and Clocks.
Sector AF: Facilities Limited to Total Suspended Solids Benchmark Monitoring Requirements	
4011, 4013	Railroad Transportation.
4111-4173	Local and Highway Passenger Transportation.
4212-4231	Motor Freight Transportation and Warehousing.
4311	United States Postal Service.
5171	Petroleum Bulk Stations and Terminals.

Owners/operators of facilities currently covered under the 2019 Industrial Stormwater General Permit (ISWGP) who wish to continue coverage under this general permit must submit a new Registration Statement to the Department.

This permit covers stormwater discharges from a wide variety of industrial activities. Because the conditions which affect the presence of pollutants in stormwater discharges vary among industries, the permit contains both general SWPPP requirements that apply to all facilities, and industry-specific sections (sector specific requirements) that describe any additional SWPPP requirements, applicable numeric effluent limitation requirements, and any benchmark monitoring requirements for that industrial sector.

The volume and quality of stormwater discharges associated with industrial activity will depend on a number of factors, including the industrial activities occurring at the facility, the nature of precipitation, and the degree of surface imperviousness. Pollutants in stormwater discharges from industrial plants may be reduced using the following methods: eliminating pollution sources, implementing Best Management Practices (BMPs) to prevent pollution, using traditional stormwater management practices, and providing end-of-pipe treatment.

This VPDES general permit follows the basic framework of the U.S. EPA Multi-Sector General Permit (MSGP). The reader is referred to the most recent 2021 MSGP and Fact Sheet for details on the profiles of the various industrial sectors, reviews of pollutants found in stormwater, selection of analytical monitoring parameters, estimated costs for pollution prevention measures, and stormwater pollution control options for each industry type (<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities-epas-2021-msgp>).

In the case where a facility has multiple industrial activities occurring on-site which are described by any of the subsectors in the general permit, those industrial activities are considered co-located industrial activities. Stormwater discharges from co-located industrial activities are authorized by this permit, provided that the permittee complies with any and all additional pollution prevention plan and monitoring requirements applicable to the co-located industrial activity. Permittees are required to determine which additional pollution prevention plan and monitoring requirements are applicable to the co-located industrial activity by examining the narrative descriptions of each sector specific coverage section of the permit (Discharges Covered Under This Section).

Limitations on Coverage

Because of the broad scope of this permit, most industrial activities regulated under the VPDES stormwater program are eligible to be covered under the permit. There are, however, several types of stormwater discharges which are *not* covered under this permit. Discharges into a waterbody where a discharge is prohibited by another regulation of the State Water Control Board are not authorized by this general permit. If an owner has been required to obtain an individual VPDES permit for their stormwater discharges pursuant to 9VAC25-31-170 B 3 (VPDES Permit Regulation), they are not authorized for coverage under this permit. Discharges from VPDES permitted construction activities are also not eligible for coverage under this permit.

Other discharges of stormwater that are not authorized under the general permit are:

1. Discharges that are not within the industrial sectors identified in Table 1 (unless they are designated by the Department for coverage under sector AD).
2. Discharges that violate or would violate the antidegradation policy in the Water Quality Standards at 9VAC25-260-30.
3. Discharges that are not consistent with the assumptions and requirements of an approved TMDL.
4. Discharges subject to stormwater effluent limitation guidelines not described in the permit.

Stormwater discharges from non-metallic mineral mining facilities (SIC Major Group 14), and concrete block and brick, concrete products (except block and brick), and ready-mixed concrete facilities (SIC codes 3271-3273) are not covered by this permit. Facilities in these SIC categories should seek coverage under separate VPDES general permits (VAG84 and VAG11) developed specifically for these industries.

Authorized non-stormwater discharges. The following non-stormwater discharges are authorized by this permit:

1. Discharges from emergency firefighting activities or firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia.
2. Fire hydrant flushing, managed in a manner to avoid an instream impact.
3. Potable water, including water line flushing, managed in a manner to avoid an instream impact.
4. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids.
5. Irrigation drainage.
6. Landscape watering provided all pesticides, herbicides, and fertilizers have been applied in accordance with the approved labeling.
7. Routine external building washdown provided no soaps, solvents, or detergents are used, external building surfaces do not contain hazardous substances, and wash water is filtered, settled, or similarly treated prior to discharge.
8. Pavement wash waters provided no soaps, solvents, detergents or hazardous cleaning products are used, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled or leaked material is removed prior to washing), and the wash water is filtered, settled, or similarly treated prior to discharge;
9. Uncontaminated groundwater or spring water.
10. Foundation or footing drains where flows are not contaminated with process materials.
11. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

All other non-stormwater discharges are not authorized and shall either be eliminated or covered under a separate VPDES permit.

Summary of Substantive Changes from the 2019 Industrial Stormwater General Permit

This general permit replaces the 2019 ISWGP which was issued for a five-year term on July 1, 2019. Following is a list of substantive changes included in the permit as compared to the 2019 permit:

Part I - Effluent Limitations, Monitoring Requirements and Special Conditions

- Quarterly visual monitoring: Removed requirement to sign documentation in accordance with Part II K given that visual monitoring documentation is not submitted to the department.
- Benchmark Monitoring: Sector-specific benchmark monitoring parameters listed in Table 70-1 were updated in accordance with EPA's 2021 MSGP, the Virginia Water Quality Standards (WQS), and the recommendations of the technical advisory committee (TAC).
- Effluent Limitation Guidelines: Table 70-2 (Stormwater-Specific Effluent Limitation Guidelines) was updated to clarify that facilities subject to 40 CFR Part 449 (discharges from primary airport deicing operations) may be covered under Sector AD of this permit.
- Facilities discharging to an impaired water with an approved TMDL wasteload allocation: Added language to allow sampling data collected during the 2019 permit term to be used to satisfy all or part of any monitoring required by this section. Added language requiring facilities exceeding the TMDL wasteload allocation to prepare and submit a pollutant minimization plan (PMP) upon notification from the department. The contents of a PMP are included in the new language.
- Facilities discharging to an impaired water without an approved TMDL wasteload allocation: Clarified that monitoring in accordance with this section is to be completed at least once every six months unless another sampling frequency is determined by the department for polychlorinated biphenyls (PCBs). PCB monitoring is expensive, so a reduced frequency (e.g., annual) may be more appropriate for initial impaired water monitoring.
- Monitoring Instructions: Replaced references to "measurable storm event" with "storm event discharge". Revised section to remove the requirement to report the duration (in hours) of storm events sampled. The language now requires the permittee to identify the date of the storm events sampled, total rainfall (in inches), and the interval between the storm event sampled and the end of the previous storm event discharge. Added requirement to submit documentation via e-DMR explaining a facility's inability to obtain a sample, of no rain event, or deviations from the 72-hour storm interval.
- Corrective actions: Section consolidated to remove repetition. Added requirement that exceedance reports submitted to the department must be signed in accordance with Part II K.
- Authorized nonstormwater discharges: Added firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia. Clarified that routine external building washdown must be managed in a manner to avoid instream impact.
- Chesapeake Bay TMDL conditions: The entirety of the Chesapeake Bay TMDL conditions are moved to Part V (see below).

Part II - Conditions Applicable to All VPDES Permits

- Reports of noncompliance: Updated link to the online Pollution Response Preparedness (PReP) portal. Clarified that the online portal shall be used for reports outside of normal working hours.

Part III - Stormwater Pollution Prevention Plan

- Stormwater controls: Added airport deicing operations condition to clarify that deicing operations are covered under this permit and to provide some control measure options for consideration. The new condition is based on language previously used for Sector S.

Part IV – Sector Specific Permit Requirements

- Benchmark Monitoring: Sector-specific benchmark monitoring parameters were updated in accordance with EPA's 2021 MSGP and the Virginia Water Quality Standards (WQS).

Part V – Chesapeake Bay Total Maximum Daily Load Compliance

- Total Suspended Solids: The reduction requirements for TSS under the Chesapeake Bay TMDL Compliance section have been removed. This is in accordance with Virginia’s Final Phase III Watershed Implementation Plan (WIP) based on the recommendations of the 2019 Chesapeake Bay Program Principals’ Staff Committee, discussed later in this fact sheet. Nutrient (nitrogen and phosphorus) reduction requirements remain in place and BMPs installed for the purposes of meeting these requirements will continue to provide sediment reductions. Further, TSS benchmarks and numeric effluent limitations are included on a sector-specific basis under Part IV of this permit.
- Chesapeake Bay TMDL Compliance: Requirements are now separated into three distinct categories depending on the status of a facility’s demonstration of compliance:
 1. Facilities that obtained coverage under the 2019 general permit that demonstrated compliance with the Chesapeake Bay TMDL loading rates.
 - a. Documentation of the demonstration of compliance is to be maintained with the stormwater pollution prevention plan (SWPPP) and permittees are to continue to implement any BMPs developed as part of the demonstration.
 2. Facilities that obtained coverage under the 2019 general permit that did not demonstrate compliance with the Chesapeake Bay TMDL loading rates.
 - a. If the required sampling was not completed under the 2019 permit, additional samples are to be collected during the first four quarters of permit coverage.
 - b. If stormwater load calculations and a Chesapeake Bay TMDL action plan (if required) were not submitted under the 2019 permit, they are to be submitted no later than 60 days following permit coverage (if sampling was already completed) or 60 days following the completion of the fourth sample collected during the first four quarters of permit coverage.
 - c. Reductions, if applicable, are to be achieved by December 31, 2025, and documentation that the reductions have been achieved is to be submitted to the department no later than February 1, 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates is to be maintained with the SWPPP.

Facilities registered under the 2019 industrial stormwater general permit *after* June 30, 2022, are treated the same as those that obtain initial coverage under the 2024 permit for the purposes of this section.

 3. Facilities that obtain initial coverage under the 2024 general permit (but are not newly constructed facilities).
 - a. Samples are to be collected during the first four quarters of permit coverage. Stormwater load calculations and a Chesapeake Bay TMDL action plan (if required) are to be submitted no later than 60 days following the completion of the fourth sample. Reductions, if applicable, are to be achieved two years following the end of the fourth quarterly monitoring period and documentation that the reductions have been achieved shall be submitted to the department no later than the 10th of the month directly following the two year period. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.
 - Reporting Monitoring Results: The Chesapeake Bay TMDL monitoring frequency is changed from semi-annual to quarterly in order to help facilitate meeting the December 31, 2025 deadline of the Chesapeake Bay TMDL.
 - Calculation of facility loads: Added language allowing for the proposal of alternative stormwater load calculations on a case-by-case basis to address facilities with outfalls that rarely discharge.

Part I.A - Permit Effluent Limitations and Monitoring Requirements

1. **Discharge Monitoring Requirements.** The permit contains four general types of monitoring requirements: (a) quarterly visual monitoring; (b) benchmark monitoring for specific industrial activities; (c) compliance monitoring for facilities subject to numerical effluent limitations, and (d) impaired waters monitoring, both for those with and without an approved TMDL. These are minimum monitoring requirements and if a permittee so chooses, additional sampling may be conducted to acquire more data to improve the statistical validity of the results. Through increased analytical or visual monitoring the permittee may be able to better ascertain the effectiveness of their SWPPP.

- a. **Quarterly visual examination of stormwater quality.**

Applicability: All facilities

Frequency: Quarterly each year of general permit coverage (January-March, April-June, July-September, October-December)

Due Date: By the end of the applicable quarter (March 31, June 30, September 30, and December 31)

Where to Submit: Report is kept with facility's SWPPP (not submitted to DEQ)

Facilities covered under this permit are required to conduct a quarterly visual examination of stormwater discharges associated with industrial activity from each outfall, except discharges exempted under the representative discharge provision. These visual examinations will assist with the evaluation of the SWPPP, and provides a simple, low cost means of assessing the quality of stormwater discharge with immediate feedback. The visual examination of stormwater outfalls must include any observations of color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, other obvious indicators of stormwater pollution, and identification of probably sources of any observed stormwater contamination.

No analytical tests are required to be performed on these visual examination samples.

The visual examination of the sample must be made in well lit areas during normal working hours, where practicable, and when considerations for safety and feasibility allow. The visual examination is not required if there is insufficient rainfall or snow-melt to runoff, or if hazardous conditions prevent sampling during the monitoring period. Grab samples for the examination shall be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed 3 hours) of when the runoff begins discharging. Reports of the visual examination include: the examination date and time, examination personnel, visual quality of the stormwater discharge, and probable sources of any observed stormwater contamination. The visual examination reports must be maintained on site with the SWPPP.

- b. **Benchmark monitoring requirements.**

Applicability: All facilities except those covered under Sector AE (see Table 2). Sector AE does not require benchmark monitoring.

Frequency: Every six months each year of general permit coverage (January-June and July-December). The semi-annual monitoring frequency, used since the original 2004 general permit, remains sufficient given the specific monitoring requirements (within 30 minutes of storm event, 72-hours since the last storm event) which are supported by quarterly visual monitoring and site inspections.

Due Date: July 10 for the January-June period and January 10 for the July-December period

Where to Submit: Submit results electronically through the eDMR system

Certain industrial sectors are required to conduct monitoring of their stormwater discharges associated with industrial activity for pollutants of concern. In some cases, the monitoring is applicable only to a subsector rather than the entire industrial sector. Benchmark monitoring requirements involve laboratory chemical analyses of samples collected by the permittee. Table 2 lists the industrial sectors, or subsectors, required to perform benchmark monitoring and the associated parameters.

TABLE 2. BENCHMARK MONITORING REQUIREMENTS.

Industry Sector ¹	SIC Code or Activity Code	Benchmark Monitoring Parameters
A	2421	TSS.
	2491	Arsenic, Chromium, Copper.
	2411	TSS.
	2426	TSS.
	2499 (24991303)	COD, TSS.
	2499 (Mulch Dyeing)	BOD, TSS, COD, Aluminum, Arsenic, Cadmium, Chromium, Copper, Selenium, Silver, Zinc, Total N, Total P.
B	2631	BOD.
C	2812-2819	Aluminum, Total N.
	2821-2824	Zinc.
	2841-2844	Total N, Zinc.
	2873-2879	Total N, Zinc, Total P.
	2875 (Composting Facilities)	TSS, BOD, COD, Ammonia, Total N, Total P.
D	2951, 2952	TSS.
E	3251-3259, 3261-3269	Aluminum.
	3274, 3275	TSS, pH.
F	3312-3317	Aluminum, Zinc.
	3321-3325	Aluminum, TSS, Copper, Zinc.
	3351-3357	Copper, Zinc.
	3363-3369	Copper, Zinc.
G ²	1021	TSS
H	1221-1241	TSS, Aluminum.
K	HZ (Hazardous Waste Treatment, Storage, or Disposal)	TKN, TSS, TOC, Arsenic, Cadmium, Cyanide, Lead, Mercury, Selenium, Silver.
L	LF (Landfills, Land Application Sites, and Open Dumps)	TSS.
M	5015	TSS, Aluminum, Lead.
N	5093	Aluminum, Cadmium, Chromium, Copper, Lead, Zinc, TSS.
	4499	Aluminum, Cadmium, Chromium, Copper, Lead, Zinc, TSS.
O	SE (Steam Electric Generating Facilities)	Facilities in Sector O are not subject to benchmark requirements.
Q	4412-4499 (except 4499 facilities as specified in Sector N)	TSS, Copper, Zinc.
	3731, 3732	TSS, Copper, Zinc.
U	2021-2026	BOD, TSS.
	2041-2048	TSS, TKN.

	2074-2079	BOD, Total N, TSS.
Y	3011-3069	Zinc.
AA	3411-3471, 3482-3499, 3911-3915	Aluminum, Copper, Zinc.
	3479	Zinc.
AB	3511-3599 (except 3571-3579)	TSS, TPH, Copper, Zinc.
AD	Nonclassified Facilities/Stormwater Discharges Designated By the Department As Requiring Permits	As determined by the director.
AE	2611, 2621, 2652-2657, 2671-2679, 2833-2836, 2851, 2861 2869, 2891 2899, 39523211, 3221, 3229, 3231, 3241, 3281, 3291 3299, 3331 3339, 3398, 3399, 3341, 1311, 1321, 1381 1389, 2911, 4512-4581, (TW) Treatment Works, 2011 2015, 2032 2038, 2051 2053, 2061 2068, 2082-2087, 2091 2099, 2111 2141, 2211 2299, 2311 2399, 3131 3199, 2434, 2511 2599, 2711 2796, 3081 3089, 3931, 3942 3949, 3951 3955 (except 3952), 3961, 3965, 3991 3999, 3111, 3711 3799 (except 3731, 3732 see Sector Q), 3571 3579, 3612 3699, 3812 3873	Facilities in Sector AE are not subject to benchmark monitoring requirements.
AF	4011, 4013, 4111 4173, 4212 4231, 4311, 5171	TSS.

¹ Table does not include parameters for compliance monitoring under effluent limitations guidelines.

² See Sector G (Part IV G) for additional monitoring discharges from waste rock and overburden piles from active ore mining or dressing facilities, inactive ore mining or dressing facilities, and sites undergoing reclamation.

Industries may reduce the level of pollutants in stormwater runoff from their sites through the development and proper implementation of a SWPPP. Benchmark monitoring is a means by which to measure the concentration of a pollutant in a stormwater discharge. Because these pollutants have been reported at or above benchmark levels, DEQ is requiring monitoring after the SWPPP has been implemented to assess the effectiveness of the SWPPP and to help ensure that a reduction of pollutants is realized. Analytical results are quantitative and therefore can be used to compare results from discharge to discharge and to quantify the improvement in stormwater quality attributable to the SWPPP, or to identify a pollutant that is not being successfully controlled by the plan. The results of the benchmark monitoring are not intended to be used to evaluate actual or potential exceedances of instream water quality criteria.

Development of Benchmark Values

To determine the industry sectors and subsectors that would be subject to benchmark monitoring requirements contained in the general permit, DEQ initially relied primarily upon the fact sheet prepared for the 1995 EPA MSGP and, in the years following, has continued to evaluate benchmarks in accordance with updates to the EPA MSGP, as deemed appropriate.

In developing the 1995 MSGP, EPA reviewed the data submitted in accordance with the 1990 group stormwater permit application process. EPA established benchmark concentrations for the pollutant parameters on which monitoring results had been received. EPA continued those benchmark requirements for their 2000 MSGP, but for the 2008 MSGP, EPA undertook an analysis of the monitoring requirements of the 2000 MSGP that included: how effective existing controls on these discharges have been based on the history of discharge monitoring data; Toxics Release Inventory (TRI) data; and results and conclusions from the University of California Los Angeles Final Report, *Industrial Stormwater Monitoring Program Existing Statewide Permit Utility and Proposed Modifications*. One of the primary purposes of these analyses was to determine if elimination of, or modification or addition to, benchmark monitoring requirements was warranted. This information helped EPA identify potential pollutants that may be present in the stormwater discharges.

The resulting benchmarks are the pollutant concentrations above which EPA views as levels of concern. The level of concern is a concentration at which a stormwater discharge could potentially impair or contribute to impairing water quality or affect human health from ingestion of water or fish. The benchmarks are also viewed by EPA as a level below which there is little potential for water quality concern.

The benchmark concentrations *are not effluent limitations* and should not be interpreted as such. These values are merely levels which EPA and DEQ have used to determine if a stormwater discharge from any given facility merits further monitoring to ensure that the facility has been successful in implementing a SWPPP. As such, these levels represent a target concentration for a facility to achieve through implementation of pollution prevention measures at the facility.

The reader is referred to the fact sheets of each iteration of the EPA MSGP and previous fact sheets of this general permit for more information on the periodic reevaluation of benchmarks. Changes for the 2024 general permit are discussed following Table 3 below.

Table 3 lists the parameter benchmark values and sources for the 2024 general permit. These values are based on an evaluation of the EPA fact sheets for the 1995, 2000, 2008, 2015 and 2021 MSGPs, the sector-specific analytical monitoring requirements, and the most recent Virginia WQS.

TABLE 3. PARAMETER BENCHMARK VALUES

Parameter Name	Benchmark Level	Source(s)
Aluminum, Total (pH 6.5-9)	1.10 mg/L	14
Ammonia	2.14 mg/L	12
Antimony, Total	0.64 mg/L	4
Arsenic, Total (c)	0.150 mg/L	2, 12
Beryllium, Total (c)	0.13 mg/L	3
Biochemical Oxygen Demand (5 day)	30 mg/L	5
Cadmium, Total (H)	0.0018 mg/L	1, 12
Chromium, Total	0.016 mg/L	12
Chemical Oxygen Demand	120 mg/L	6
Copper, Total (H)	0.013 mg/L	12
Cyanide	0.022 mg/L	1, 12
Lead, Total (H)	0.082 mg/L	2
Mercury, Total	0.0014 mg/L	1
Nickel, Total (H)	0.47 mg/L	1
pH	6.0-9.0 SU	5
Selenium, Total (*)	0.005 mg/L	12
Silver, Total (H)	0.0032 mg/L	1
Total Kjeldahl Nitrogen (added by DEQ)	1.5 mg/L	8
Total Nitrogen (added by DEQ)	2.2 mg/L	8
Total Organic Carbon (added by DEQ)	110 mg/L	11
Total Phosphorus	2.0 mg/L	7, 13
Total Petroleum Hydrocarbons (added by DEQ)	15 mg/L	10
Total Suspended Solids	100 mg/L	8
Turbidity	50 NTU	9

Zinc, Total (H)	0.120 mg/L	12
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Sources:

1. EPA Recommended Ambient Water Quality Criteria (acute, or low observed effect level (LOEL))
2. EPA Recommended Ambient Water Quality Criteria (chronic)
3. EPA Recommended Ambient Water Quality Criteria (Beryllium)
4. EPA Recommended Ambient Water Quality Criteria (Human Health)
5. Secondary Treatment Regulations (40 CFR 133)
6. North Carolina WQS - Factor of 4 times BOD5 concentration
7. North Carolina WQS - stormwater benchmark
8. National Urban Runoff Program (NURP) median concentration
9. Combination of Stormwater Effects Handbook (Burton and Pitt, 2001), Idaho WQS, and DMR data review
10. Discharge limitations and compliance data
11. Stormwater Effluent Limitation Guidelines (40 CFR Part 419) - Median Concentration
12. Virginia Water Quality Standards
13. Virginia policy for Nutrient Enriched Waters, 9VAC25-40-10 et seq
14. Industrial Stormwater Technical Memo for aluminum and copper criteria percentiles (EPA, 2019)

Notes:

- (*) Limit established for oil and gas exploration and production facilities only.
- (c) carcinogen
- (H) hardness dependent

Assumptions:

- Receiving water temperature - 20 C
- Receiving water pH - 7.8
- Receiving water hardness CaCO3 - 100 mg/L
- Receiving water salinity - 20 g/kg
- Acute to Chronic Ratio (ACR) - 10

There were several benchmark changes for the 2024 general permit in accordance with the recommendations of the Technical Advisory Committee, as noted below.

- Aluminum: Updated to match the 2021 MSGP benchmark (1.10 mg/L). There is no Virginia WQS for aluminum.
- Arsenic: Updated to match the 2021 MSGP benchmark, which matches the chronic criteria in the current Virginia WQS (0.150 mg/L).
- Cadmium: Updated to match the 2021 MSGP benchmark, which matches the acute criteria in the current Virginia WQS (0.0018 mg/L).
- Copper: EPA’s copper benchmark (0.00519 mg/L) in the 2021 MSGP is based on the biotic ligand model. This model was not adopted by Virginia for copper in the 2022 rulemaking (Triennial Review) of the WQS. Thus, the copper benchmark was updated to match the current acute criteria in the Virginia WQS (0.013 mg/L).
- Iron: Removed. EPA removed iron as a benchmark in the 2021 MSGP due to lack of acute toxicity. There is no acute criteria for iron in the Virginia WQS.
- Lead: Updated to match the 2021 MSGP benchmark (0.082 mg/L), which is slightly lower than the acute criteria in the current Virginia WQS (0.094 mg/L).
- Magnesium: Removed. EPA removed magnesium as a benchmark in the 2021 MSGP due to lack of acute toxicity. There is no Virginia WQS for magnesium.
- Silver: Updated to match the 2021 MSGP benchmark (0.0032 mg/L), which is slightly lower than the acute criteria in the current Virginia WQS (0.0034 mg/L).

To reiterate, benchmark concentrations are not effluent limitations and should not be interpreted as such. These values are merely levels to determine if a stormwater discharge from any given facility merits further monitoring to ensure that the facility has been successful in implementing a SWPPP. As such, these levels represent a target concentration for a facility to achieve through implementation of pollution prevention measures at the facility.

c. Compliance Monitoring for Facilities Subject to Numeric Effluent Limitations.

Applicability: Facility-specific (see Table 4)

Frequency: Every six months each year of general permit coverage (January-June and July-December)

Due Date: July 10 for the January-June period and January 10 for the July-December period

Where to Submit: Submit results electronically through eDMR system

Two types of effluent limitation compliance monitoring have been identified in the permit: (1) facilities subject to stormwater effluent limitation guidelines; and (2) coal pile runoff monitoring.

- (1) Facilities Subject to Stormwater Effluent Limitation Guidelines. Compliance monitoring requirements are imposed under this permit to ensure that discharges subject to numerical effluent limitations under the stormwater effluent limitations guidelines are in compliance with those limitations. Eight types of stormwater discharges subject to effluent limitation guidelines may be covered under this general permit. These discharges include contaminated stormwater runoff from timber products facilities, phosphate fertilizer manufacturing facilities, runoff associated with asphalt paving or roofing emulsion production, runoff from material storage piles at cement manufacturing facilities, contaminated runoff from hazardous waste landfills, contaminated runoff from municipal solid waste landfills, coal pile runoff at steam electric generating facilities, and airport deicing at primary airports (if covered under Sector AD). Effluent limitations are listed in the Sector-Specific Permit Requirements section of the permit (Part IV). These limitations are required under the VPDES permit regulation, 9VAC25-31-220 A, and EPA's stormwater effluent limitation guidelines in the Code of Federal Regulations at 40 CFR Part 429, Part 418, Part 443, Part 411, Part 445 Subparts A and B, Part 449, and Part 423. The effluent limitations for the eight discharge categories are listed in Table 4.

TABLE 4. NUMERIC EFFLUENT LIMITATIONS

Industrial Sector	Parameter	Effluent Limitation
Sector A - Timber Products. Wet Decking Discharges at Log Storage and Handling Areas (40 CFR Part 429 Subpart I) (SIC 2411).	pH	6.0 - 9.0 s.u.
	Debris, woody material (e.g., bark, twigs, branches, heartwood, or sapwood)	No discharge of debris that will not pass through a 2.54 cm (1") diameter round opening.
Sector C - Chemical and Allied Products Manufacturing. Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category (40 CFR 418.10) (SIC 2874).	Total Phosphorus (as P)	105 mg/L, Daily Maximum 35 mg/L, 30-day Average
	Fluoride	75 mg/L, Daily Maximum 25 mg/L, 30-day Average
Sector D - Asphalt Paving and Roofing Materials. Discharges from areas where production of asphalt paving and roofing emulsions occurs (40 CFR Part 443 Subpart A) (SIC 2951, 2952).	Total Suspended Solids (TSS)	23 mg/L, Daily Maximum 15 mg/L, 30-day Average
	Oil and Grease	15 mg/L, Daily Maximum 10 mg/L, 30-day Average
	pH	6.0 - 9.0 s.u.

Sector E - Glass, Clay, Cement, Concrete and Gypsum Products. Cement Manufacturing Facility, Material Storage Run-off (40 CFR Part 411 Subpart C).	Total Suspended Solids (TSS)	50 mg/L, Daily Maximum
	pH	6.0 - 9.0 s.u.
Sector K - Hazardous Waste TSD Facilities. Hazardous Waste Treatment, Storage, or Disposal Facilities (Industrial Activity Code "HZ") Subject to the Provisions of 40 CFR Part 445 Subpart A.	Biochemical Oxygen Demand (BOD ₅)	220 mg/L, Daily Maximum 56 mg/L, 30-day Average
	Total Suspended Solids (TSS)	88 mg/L, Daily Maximum 27 mg/L, 30-day Average
	Ammonia	10, Daily Maximum mg/L 4.9 mg/L, 30-day Average
	Alpha Terpineol	0.042, Daily Maximum mg/L 0.019 mg/L, 30-day Average
	Aniline	0.024, Daily Maximum mg/L 0.015 mg/L, 30-day Average
	Benzoic Acid	0.119, Daily Maximum mg/L 0.073 mg/L, 30-day Average
	Naphthalene	0.059, Daily Maximum mg/L 0.022 mg/L, 30-day Average
	p-Cresol	0.024, Daily Maximum 0.015 mg/L, 30-day Average
	Phenol	0.048, Daily Maximum mg/L 0.029 mg/L, 30-day Average
	Pyridine	0.072, Daily Maximum mg/L 0.025 mg/L, 30-day Average
	Arsenic (Total)	1.1, Daily Maximum mg/L 0.54 mg/L, 30-day Average
	Chromium (Total)	1.1, Daily Maximum mg/L 0.46 mg/L, 30-day Average
	Zinc (Total)	0.535, Daily Maximum mg/L 0.296 mg/L, 30-day Average

	pH	Within the range of 6.0 - 9.0 s.u.
Sector L – Landfills. Landfills (Industrial Activity Code "LF") Which Are Subject to the Requirements of 40 CFR Part 445 Subpart B.	Biochemical Oxygen Demand (BOD ₅)	140 mg/L, Daily Maximum 37 mg/L, 30-day Average
	Total Suspended Solids (TSS)	88 mg/L, Daily Maximum 27 mg/L, 30-day Average
	Ammonia	10, Daily Maximum mg/L 4.9 mg/L, 30-day Average
	Alpha Terpineol	0.033, Daily Maximum mg/L 0.016 mg/L, 30-day Average
	Benzoic Acid	0.12, Daily Maximum mg/L 0.071 mg/L, 30-day Average
	p-Cresol	0.025, Daily Maximum mg/L 0.014 mg/L, 30-day Average
	Phenol	0.026, Daily Maximum mg/L 0.015 mg/L, 30-day Average
	Zinc (Total)	0.20, Daily Maximum mg/L 0.11 mg/L, 30-day Average
	pH	Within the range of 6.0 - 9.0 s.u.
Sector O – Steam Electric. Coal pile runoff at steam electric generating facilities (40 CFR Part 423).	Total Suspended Solids (TSS)	50 mg/l, max
	pH	6.0 - 9.0 min. and max.
Sector AD (As needed for primary airports). Discharges from deicing operations at primary airports, (40 CFR Part 449)	Airfield Pavement Deicing, Ammonia as Nitrogen	14.7 mg/L, Daily Maximum
	Aircraft Deicing (NSPS), Chemical Oxygen Demand (COD)	271 mg/L, Daily Maximum 154 mg/L, Weekly Average

(2) Coal Pile Runoff Monitoring. This permit establishes effluent limitations of 50 mg/L total suspended solids and a pH range of 6.0-9.0 for coal pile runoff. Any untreated overflow from facilities designed, constructed, and operated to treat the volume of coal pile runoff associated with a 10-year, 24-hour rainfall event (maximum design criteria, 9VAC25-870 et seq.) is not subject

to the 50 mg/L limitation for total suspended solids. The permit extends these effluent limitations to all industrial operations that discharge coal pile runoff, where the coal pile runoff can be defined as a stormwater discharge associated with industrial activity (i.e., at a plant in one of the industrial sectors listed in Table 1). DEQ has adopted these technology-based pH limitations in this general permit in accordance with setting limits on a case-by-case basis as allowed under 9VAC25-31-220 A. These case-by-case limits are derived by transferring the known achievable technology from an effluent guideline to a similar type of discharge. When developing these technology-based limitations, variables such as rainfall pH, sizes of coal piles, pollutant characteristics, and runoff volume were considered. Therefore, these variables need not be considered again. As discussed above, these pH limitations are technology-based and are not based on water quality. Facilities must comply with these limitations upon submittal of the registration statement. Facilities with treatment works for coal pile runoff are expected to meet the limitations.

d. Impaired Waters Monitoring, For Both Facilities With and Without an Approved TMDL.

Applicability: If notified by DEQ

Frequency: Every six months each year of general permit coverage (January-June and July-December)

Due Date: July 10 for the January-June period and January 10 for the July-December period

Where to Submit: Submit results electronically through eDMR system

Two types of impaired waters monitoring have been identified in the permit: (1) facilities discharging to impaired waters with an approved TMDL wasteload allocation; and (2) facilities discharging to impaired waters without an approved TMDL wasteload allocation.

- (1) Facilities Discharging to Impaired Waters with an Approved TMDL Wasteload Allocation. Monitoring requirements for facilities subject to TMDL wasteload allocations are included in permit to ensure that discharges are in compliance with those allocations. DEQ will notify facilities in writing that they are subject to a TMDL wasteload allocation and that they are required to monitor their discharges for the pollutant of concern to evaluate compliance with the TMDL allocation. Monitoring must be performed at least semiannually (twice per year), and the monitoring periods are January through June, and July through December, unless another sampling frequency is determined by the department for polychlorinated biphenyls (PCBs). Monitoring commences with the first full monitoring period after the owner is granted coverage under the permit.

If the pollutant subject to the TMDL wasteload allocation is below the quantitation level in all of the samples from the first four monitoring periods, the permittee may request to the Department in writing that further sampling be discontinued, unless the TMDL has specific instructions to the contrary (in which case those instructions shall be followed). The laboratory certificate of analysis shall be submitted with the request. If approved, documentation of this shall be kept with the SWPPP.

If the pollutant subject to the TMDL wasteload allocation is above the quantitation level in any of the samples from the first four monitoring periods, the permittee must continue the scheduled TMDL monitoring throughout the term of the permit.

Upon written notification from the department, facilities exceeding the TMDL wasteload allocation shall prepare and submit a pollutant minimization plan (PMP) designed to investigate the location and potential reduction of sources in the facility's stormwater discharges. The PMP shall be developed and submitted to the department for approval within 180 days of the receipt of notification from the department.

The PMP shall include the following items, as appropriate:

- (a) Facility contact for the contents of the PMP and any activities associated with the PMP;
- (b) A proposed implementation schedule for minimization activities and prospective milestones;
- (c) Proposed actions for known or probable sources;

- (d) Proposed action to find and control unknown sources;
- (e) A summary of any previous minimization activities; and,
- (f) Information on continuing assessment of progress, which may include establishment of criteria to evaluate whether the location and potential reduction of sources have been addressed.

Chesapeake Bay TMDL requirements can be found in the final section of this fact sheet.

- (2) Facilities Discharging to Impaired Waters without an Approved TMDL Wasteload Allocation. Monitoring requirements for facilities discharging to impaired waters without an approved TMDL wasteload allocation are included in this permit to ensure that the facility is not causing or contributing to the water quality impairment. DEQ will notify facilities in writing that they are subject to the impaired waters monitoring, and that they are required to monitor their discharges for the pollutants that are causing the impairment. Monitoring must be performed at least semiannually (twice per year), and the monitoring periods are January through June, and July through December, unless another sampling frequency is determined by the department for polychlorinated biphenyls (PCBs). Monitoring commences with the first full monitoring period after the owner is granted coverage under the permit.

If the pollutant for which the waterbody is impaired is suspended solids, turbidity or sediment/sedimentation, the permittee must monitor for Total Suspended Solids (TSS). If the pollutant for which the waterbody is impaired is expressed in the form of an indicator or surrogate pollutant, the permittee must monitor for that indicator or surrogate pollutant. No monitoring is required when a waterbody's biological communities are impaired but no pollutant, including indicator or surrogate pollutants, is specified as causing the impairment, or when a waterbody's impairment is related to hydrologic modifications, impaired hydrology, or temperature.

If the pollutant for which the water is impaired is below the quantitation level in the discharges from the facility, or it is above the quantitation level but its presence is caused solely by natural background sources, the permittee may request to the Board that the impaired water monitoring be discontinued. To support a determination that the pollutant's presence is caused solely by natural background sources, the permittee must submit the following documentation with the request and keep a copy with the SWPPP: (i) an explanation of why the permittee believed that the presence of the impairment pollutant in the facility's discharge is not related to the activities at the facility; and (ii) data or studies that tie the presence of the impairment pollutant in the facility's discharge to natural background sources in the watershed. Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity at the facility's site, or pollutants in run-on from neighboring sources which are not naturally occurring.

e. Monitoring Requirements:

- (1) Collection and analysis of samples. Sampling requirements are to be assessed on an outfall-by-outfall basis and are to be collected and analyzed in accordance with the requirements of Part II A (Monitoring, Conditions Applicable to All VPDES Permits).
- (2) When and how to sample. A minimum of one grab sample is to be taken from each discharge associated with industrial activity resulting from a storm event that produces a discharge from the site, providing the interval from the preceding storm event discharge is at least 72 hours. The 72-hour storm interval is waived if the permittee is able to document that less than a 72-hour interval is representative for local storm events during the sampling period. In the case of snowmelt, the monitoring is to be performed at a time when a measurable discharge occurs at the site. For discharges from a stormwater management structure, the monitoring shall be performed at a time when a measurable discharge occurs from the structure.

The grab sample is to be taken during the first 30 minutes of the discharge. If it is not practicable to take the sample during the first 30 minutes, the sample may be taken during the first three hours of the discharge, provided that the permittee explains why a grab sample during the first 30 minutes was impracticable. This information is to be submitted with the e-DMR and maintained with the SWPPP. If the sampled discharge commingles with process or nonprocess water, the

permittee must attempt to sample the stormwater discharge before it mixes with the nonstormwater.

- (3) Storm Event Data. For each monitoring event (except snowmelt monitoring), along with the monitoring results, the permittee must identify the date of the storm event sampled; rainfall total (in inches) of the storm event that generated the sampled runoff; and the interval between the storm event sampled and the end of the previous storm event discharge. For snowmelt monitoring, the permittee must identify the date of the sampling event.
- (4) Monitoring periods. As noted in the sections above, visual monitoring is quarterly (Jan-Mar, Apr-Jun, July-Nov, Oct-Dec) while benchmark, effluent limitation, and impaired waters monitoring is semi-annual (Jan-June and July-Dec).

Chesapeake Bay TMDL sampling is quarterly and is discussed later in this fact sheet.

f. Monitoring Waivers, Inactive and Unstaffed Sites, Representative Outfalls, Record Keeping:

- (1) Monitoring Waivers: The general permit allows permittees to request a waiver of the benchmark monitoring requirements under certain circumstances. Permittees may request a waiver of the benchmark monitoring requirements on a outfall-by-outfall basis if they can demonstrate that the average of the samples at the outfall for four consecutive monitoring periods are all below the pollutant-specific benchmark concentration values. If so, then monitoring during the remaining permit monitoring periods may be waived. The waiver is conditional on the facility maintaining industrial operations and best management practices that will ensure a quality of stormwater discharges consistent with the average concentrations recorded during the earlier monitoring period. The waiver request must be submitted to the Department, along with the supporting monitoring data, and a certification that there has not been a significant change in industrial activity or the pollution prevention measures in area of the facility that drains to the outfall for which the sampling waiver is requested. Waiver requests are evaluated by the Department based upon: (i) benchmark monitoring results below the benchmark concentration values; (ii) a favorable compliance history (including inspection results); and (iii) no outstanding enforcement actions. The monitoring waiver may be revoked by the Department for just cause. The permittee will be notified in writing that the monitoring waiver is revoked, and that the benchmark monitoring requirements are again in force and will remain in effect until the permit's expiration date.

Permittees may take a substitute sample during the next qualifying storm event if adverse weather conditions make it unsafe or impossible to collect the sample.

- (2) Inactive and unstaffed sites (including temporarily inactive sites). A waiver of the quarterly visual assessments, routine facility inspections, and monitoring requirements (including benchmark, effluent limitation, and impaired waters monitoring) may be granted by the Department at a facility that is both inactive and unstaffed, as long as the facility remains inactive and unstaffed and there are no industrial materials or activities exposed to stormwater. The owner is only required to conduct an annual comprehensive site inspection. An inactive and unstaffed sites waiver request has to be submitted to the Department for approval. If circumstances change and industrial materials or activities become exposed to stormwater, or the facility becomes either active or staffed, the permittee has to notify the Department within 30 days, and all quarterly visual assessments, routine facility inspections, and monitoring requirements must resume immediately.

Inactive and unstaffed facilities covered under Sector G (Metal Mining) and Sector H (Coal Mines and Coal Mining-Related Facilities) are not required to meet the "no industrial materials or activities exposed to stormwater" standard to be eligible for this waiver, consistent with the conditional exemption requirements established in Part IV Sector G and Part IV Sector H of the permit.

- (3) Representative Outfalls - Substantially Identical Discharges. If a facility has two or more outfalls that discharge substantially identical effluents, based on similarities of the industrial activities, significant materials, size of drainage areas, and stormwater management practices occurring within the drainage areas of the outfalls, the permittee may conduct monitoring on the effluent of just one of the outfalls and report that the observations also apply to the substantially identical outfall or outfalls. The substantially identical outfall monitoring provisions apply to quarterly visual monitoring, benchmark monitoring, and impaired waters monitoring (both those with and without

an approved TMDL). The substantially identical outfall monitoring provisions are not available for numeric effluent limits monitoring.

The permittee has to include the following information in the SWPPP:

- (a) The locations of the outfalls;
 - (b) Why the outfalls are expected to discharge substantially identical effluents, including evaluation of monitoring data where available; and
 - (c) Estimates of the size of the drainage area (in square feet) for each of the outfalls.
- (4) Record Keeping: This permit requires permittees to retain all permit related records for a minimum of 3 years from the date that coverage under this permit expires or is terminated.

g. Corrective Actions and Follow-up Reporting

- (1) Corrective Actions. A corrective action requirement is included in the permit for actions the permittee must take in the event of the following:

- (a) Routine facility inspections, inspections by local, state or federal officials, or any other process, observation or event result in a determination that modifications to the stormwater control measures are necessary to meet the permit requirements; or
- (b) There is any exceedance of an effluent limitation (including coal pile runoff), TMDL wasteload allocation, or a reduction required by a local ordinance established by a municipality to meet Chesapeake Bay TMDL requirements; or
- (c) The department determines, or the permittee becomes aware, that the stormwater control measures are not stringent enough for the discharge to meet applicable water quality standards; or
- (d) Benchmark monitoring results exceed the benchmark concentration value for a parameter.

The permittee is required to review the SWPPP and modify it as necessary to address any deficiencies. Revisions to the SWPPP are to be completed within 60 days following the discovery of a deficiency. When control measures need to be modified or added (distinct from regular preventive maintenance of existing control measures described in Part III C), implementation is to be completed before the next anticipated storm event if possible, but no later than 60 days after the deficiency is discovered, or as otherwise provided or approved by the department. In cases where construction is necessary to implement control measures, the permittee is required to include a schedule in the SWPPP that provides for the completion of the control measures as expeditiously as practicable, but no later than three years after the deficiency is discovered. Where a construction compliance schedule is included in the SWPPP, the SWPPP will be modified to include appropriate nonstructural and temporary controls to be implemented in the affected portion of the facility before completion of the permanent control measure.

Any corrective actions taken are to be documented and retained with the SWPPP. Any control measure modifications are to be dated and document the amount of time taken to modify the applicable control measures or implement additional control measures.

- (2) Natural background pollutant levels. If the concentration of a pollutant exceeds a benchmark concentration value, and the permittee determines that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, corrective action is not required provided that:

- (a) The concentration of the benchmark monitoring result is less than or equal to the concentration of that pollutant in the natural background;
- (b) The permittee documents and maintains with the SWPPP the supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. The supporting rationale shall include any data previously collected by the facility or others (including literature studies) that describe the levels of natural background pollutants in the facility's stormwater discharges; and

- (c) The permittee notifies the department on the benchmark monitoring DMR that the benchmark exceedances are attributable solely to natural background pollutant levels.

Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on the facility's site, or pollutants in run-on from neighboring sources that are not naturally occurring.

- (3) Follow-up Reporting. If at any time monitoring results show that discharges from the facility exceed an effluent limitation or a TMDL wasteload allocation, or that discharges from the facility are causing or contributing to an exceedance of a water quality standard, the permittee must take immediate steps to eliminate the exceedances. For this permit reissuance, an Exceedance Report must be submitted to the Department within 30 calendar days of implementing the relevant corrective actions. The report must include the following:
- (a) General permit registration number;
 - (b) Facility name and address;
 - (c) Receiving water for each outfall exceeding an effluent limitation of TMDL wasteload allocation;
 - (d) Monitoring data from the event being reported;
 - (e) A narrative description of the situation;
 - (f) A description of actions taken since the event was discovered and steps taken to minimize to the extent feasible pollutants in the discharge; and
 - (g) A local facility contact name, email address, and phone number.

Part I.B – Permit Special Conditions

1. Authorized Nonstormwater Discharges. This general permit does not authorize non-stormwater discharges that are mixed with stormwater except as provided below. The only non-stormwater discharges that are intended to be authorized under this permit include:
- a. Discharges from emergency firefighting activities or firefighting training activities managed in a manner to avoid an instream impact in accordance with § 9.1-207.1 of the Code of Virginia;
 - b. Fire hydrant flushings, managed in a manner to avoid an instream impact;
 - c. Potable water, including water line flushings, managed in a manner to avoid an instream impact;
 - d. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
 - e. Irrigation drainage;
 - f. Landscape watering provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
 - g. Routine external building washdown provided no soaps, solvents, or detergents are used, external building surfaces do not contain hazardous substances, and the wash water is filtered, settled, or similarly treated prior to discharge;
 - h. Pavement wash waters provided no soaps, solvents, detergents or hazardous cleaning products are used, no spills or leaks of toxic or hazardous materials have occurred (unless all spilled or leaked material is removed prior to washing), and the wash water is filtered, settled, or similarly treated prior to discharge;
 - i. Uncontaminated groundwater or spring water;
 - j. Foundation or footing drains where flows are not contaminated with process materials; and
 - k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of the facility, but not intentional discharges from the cooling tower (e.g., "piped" cooling tower blowdown or drains).

This permit does not require pollution prevention measures to be identified and implemented for non-stormwater flows from fire-fighting activities because these flows will generally be unplanned emergency situations where it is necessary to take immediate action to protect the public.

Where a stormwater discharge is mixed with non-stormwater that is not authorized by this general permit or another VPDES permit, the discharger should submit the appropriate application forms (Forms 1, 2C, and/or 2E) to obtain separate VPDES permit coverage of the non-stormwater portion of the discharge.

2. Releases of Hazardous Substances or Oil. The permit prohibits discharges of oil and-hazardous substances from spills. The discharge of hazardous substances or oil from a facility must be eliminated or minimized in accordance with the SWPPP developed for the facility. If there is a discharge of a material in excess of a reportable quantity established under 40 CFR Parts 110, 117, or 302 the permittee must make a report to DEQ within 24 hours. The permittee must also notify the MS4 operator if the release enters an MS4. The pollution prevention plan for the facility must be reviewed and revised as necessary to prevent a reoccurrence of the spill. This does not relieve the permittee from any reporting to federal or state authorities required under 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 or § 62.1-44.34:19 of the Code of Virginia.
3. Co-located Industrial Activity. Where more than one regulated industrial activity occurs at the site, the permittee is required to implement the industry specific monitoring and pollution prevention requirements for all applicable industrial categories. Co-located industrial activities occur when activities being conducted onsite meet more than one of the industrial sector descriptions in the permit (e.g., a landfill at a wood treatment facility or a vehicle maintenance garage at an asphalt batching plant). Determination of which co-located activities require action is the responsibility of the permittee.

Authorizing co-located discharges allows industrial facilities to develop pollution prevention plans that fully address all industrial activities at the site. For example, if a wood treatment facility has a landfill, the pollution prevention plan requirements for the wood treatment facility will differ greatly from those needed for the landfill. Therefore, by authorizing co-located industrial activities, the wood treatment facility will develop a pollution prevention plan to meet the requirements addressing the stormwater discharges from the wood treatment facility and the landfill. The facility is also subject to applicable monitoring requirements for each type of industrial activity as described in the applicable sections of the permit. By monitoring the discharges from the different industrial activities, the facility can better determine the effectiveness of the pollution prevention plan requirements for controlling stormwater discharges from all activities.

4. Combined Discharges. The stormwater discharges regulated by the permit may be combined with unregulated stormwater provided that the combined effluent meets the requirements of the general permit.
5. Floating Solids or Visible Foam. The permit prohibits discharges of waste, garbage, or floating debris in other than trace amounts.
6. Responsibility to Comply With Any Other Applicable Federal, State, or Local Statute, Ordinance, or Regulation. Approval for coverage under this general permit does not relieve the permittee of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation. This condition comes from the regulation section (9VAC25-151-50 E) but is included in the general permit section for emphasis.
7. Discharges to Waters Subject to TMDL Wasteload Allocations. The permit requires facilities that are a source of the specified pollutant of concern to waters for which a TMDL wasteload allocation has been approved by EPA prior to the term of this permit to incorporate measures and controls into the SWPPP that are consistent with the assumptions and requirements of the TMDL. DEQ will provide notification to the owner in writing that the facility is subject to the TMDL requirements. The facility's SWPPP needs to specifically address any conditions or requirements included in the TMDL that are applicable to discharges from the facility. If there is a specific numeric wasteload allocation established in the TMDL that applies to discharges from the facility, the owner has to perform any required monitoring in accordance with the permit requirements and implement BMPs designed to meet that allocation.

Discussion of discharges subject to the Chesapeake Bay TMDL are found later in this fact sheet.

8. Discharges through a regulated MS4 to waters subject to the Chesapeake Bay TMDL. In addition to the requirements of this permit, any facility with industrial activity discharges through a regulated MS4 that is notified by the MS4 operator that the locality has adopted ordinances to meet the Chesapeake Bay TMDL must incorporate measures and controls into their SWPPP to comply with applicable local TMDL ordinance requirements.

9. Expansion of facilities that discharge to waters subject to the Chesapeake Bay TMDL. Virginia's Phase I Chesapeake Bay TMDL Watershed Implementation Plan (November 29, 2010), states that the wasteloads from any expansion of an existing permitted facility discharging stormwater in the Chesapeake Bay watershed cannot exceed the nutrient and sediment loadings that were discharged from the expanded portion of the land prior to the land being developed for the expanded industrial activity.

For any industrial activity area expansions (i.e., construction activities, including clearing, grading and excavation activities) that commence on or after July 1, 2024 (the effective date of this permit), the permittee has to document in the SWPPP the information and calculations used to determine the nutrient and sediment loadings discharged from the expanded land area prior to the land being developed, and the measures and controls that were employed to meet the no net increase of stormwater nutrient and sediment load as a result of the expansion of the industrial activity. Any land disturbance that is exempt from permitting under the Virginia Stormwater Management Act (§ 62.1-44.15:34 C of the Code of Virginia) is exempt from this requirement.

The permittee may use the VSMP water quality design criteria to meet the above requirements. Under this criteria, the total phosphorus load can't exceed the greater of: (i) the total phosphorus load that was discharged from the expanded portion of the land prior to the land being developed for the industrial activity or (ii) 0.41 pounds per acre per year. Compliance with the water quality design criteria may be determined utilizing the Virginia Runoff Reduction Method or another equivalent methodology approved by the department. Design specifications and pollutant removal efficiencies for specific BMPs can be found on the [Virginia Stormwater BMP Clearinghouse](#) website.

The permittee may consider utilization of any pollutant trading or offset program in accordance with §§ 62.1-44.19:20 through 62.1-44.19:23 of the Code of Virginia, governing trading and offsetting, to meet the no net increase requirement.

10. Water Quality Protection. The permit requires that discharges authorized by the permit be controlled as necessary to meet applicable water quality standards. The department expects that compliance with the conditions in this permit will control discharges as necessary to meet applicable water quality standards. If there is evidence indicating that the stormwater discharges authorized by the permit are causing, have the reasonable potential to cause, or are contributing to an excursion above an applicable water quality standard, an excursion above a TMDL wasteload allocation, or are causing downstream pollution (as defined in § 62.1-44.3 of the Code of Virginia), the department may require the permittee to take corrective action in accordance with the permit, and include and implement appropriate controls in the SWPPP to correct the problem, or may require the permittee to obtain an individual permit.
11. Adding/Deleting Stormwater Outfalls. The permit allows the permittee to add new and/or delete existing stormwater outfalls at the facility as necessary or appropriate. The permittee must update the SWPPP and notify DEQ of all outfall changes within 30 days of the change and submit a copy of the updated SWPPP site map with their notification.
12. Antidegradation Requirements for New or Increased Discharges to High Quality Waters. Facilities that add new outfalls or increase their discharges from existing outfalls that discharge directly to high quality waters designated under Virginia's water quality standards antidegradation policy may be notified by the Department that additional control measures, or other permit conditions are necessary to comply with the applicable antidegradation requirements or may be notified that an individual permit is required.
13. Termination of permit coverage. The termination of permit coverage section was taken from the regulation section (previously 9VAC25-151-65) and inserted into the permit special conditions section. This was done so the permittee (who usually only has a copy of the permit) would have the requirements in the permit itself.
- a. The owner may terminate coverage under this general permit by filing a complete notice of termination. The notice of termination may be filed after one or more of the following conditions have been met:
- (1) Operations have ceased at the facility and there are no longer discharges of stormwater associated with industrial activity from the facility;
 - (2) A new owner has assumed responsibility for the facility (Note: A notice of termination does not have to be submitted if a VPDES Change of Ownership Agreement Form has been submitted);

- (3) All stormwater discharges associated with industrial activity have been covered by an individual VPDES permit; or
 - (4) Termination of coverage is being requested for another reason, provided the board agrees that coverage under this general permit is no longer needed.
- b. The notice of termination must contain the following information:
- (1) Owner's name, mailing address, telephone number, and email address (if available);
 - (2) Facility name and location;
 - (3) VPDES industrial stormwater general permit registration number;
 - (4) The basis for submitting the notice of termination, including:
 - (a) A statement indicating that a new owner has assumed responsibility for the facility;
 - (b) A statement indicating that operations have ceased at the facility, and there are no longer discharges of stormwater associated with industrial activity from the facility;
 - (c) A statement indicating that all stormwater discharges associated with industrial activity have been covered by an individual VPDES permit; or
 - (d) A statement indicating that termination of coverage is being requested for another reason (state the reason).
 - (5) The following certification: "I certify under penalty of law that all stormwater discharges associated with industrial activity from the identified facility that are authorized by this VPDES general permit have been eliminated, or covered under a VPDES individual permit, or that I am no longer the owner of the industrial activity or permit coverage should be terminated for another reason listed above. I understand that by submitting this notice of termination, that I am no longer authorized to discharge stormwater associated with industrial activity in accordance with the general permit, and that discharging pollutants in stormwater associated with industrial activity to surface waters is unlawful where the discharge is not authorized by a VPDES permit. I also understand that the submittal of this notice of termination does not release an owner from liability for any violations of this permit or the Clean Water Act."

Part II – Conditions Applicable to All VPDES Permits

This general permit is a VPDES permit. As such, it is necessary to include certain conditions required by the VPDES Permit Regulation, 9VAC25-31. These conditions are included in all VPDES permits. With a few minor exceptions, the language is not modified to reflect their use in the general permit. Conditions in this section of the permit may not have direct application at all covered facilities.

Parts III – Stormwater Pollution Prevention Plans

The conditions of this permit have been designed to comply with the technology-based standards of the CWA (BAT/BCT). Based on a consideration of the appropriate factors for BAT and BCT requirements, the general permit lists a set of tailored requirements for developing and implementing SWPPPs.

For discharges covered by the permit, other than those regulated by numeric effluent limitations, the permit conditions reflect DEQ's decision to identify a number of best management practices and traditional stormwater management practices which prevent pollution in stormwater discharges as the BAT/BCT level of control for the majority of stormwater discharges covered by this permit. The permit conditions applicable to these discharges are not numeric effluent limitations, but rather are flexible requirements for developing and implementing site specific plans to minimize and control pollutants in stormwater discharges associated with industrial activity.

DEQ is authorized under 9VAC25-31-220 K (the VPDES Permit Regulation) to impose BMPs in lieu of numeric effluent limitations in VPDES permits when the agency finds numeric effluent limitations to be infeasible. DEQ may also impose BMPs which are "reasonably necessary ... to carry out the purposes of the Law and the CWA" under 9VAC25-31-220 K 3. The conditions in the permit are issued under the authority of both of these regulatory provisions. The pollution prevention or BMP requirements in this permit operate as limitations on

effluent discharges that reflect the application of BAT/BCT. This is because the BMPs identified require the use of source control technologies which, in the context of this general permit, are the best available of the technologies economically achievable (or the equivalent BCT finding).

All facilities intending to be covered by this general permit must prepare and implement a SWPPP. Existing general permit holders that are renewing coverage under the permit must update and implement any changes to their SWPPP within 90 days of the Board granting coverage under the permit. Facilities that are seeking new coverage under the general permit must develop and implement the SWPPP prior to submittal of the Registration Statement. Facilities are not required to submit the pollution prevention plans for review unless they are requested by the Department. When a plan is reviewed by DEQ, the Director can require the permittee to amend the plan if it does not meet the minimum permit requirements.

The permit addresses general SWPPP requirements that apply to all facilities that are covered under the permit, and sector-specific SWPPP requirements that apply to specific categories of industries (see discussion of Part IV below). The following is a discussion of the common SWPPP requirements for all industries. These are the permit requirements which apply to discharges associated with any of the industrial activities covered by this permit. These common requirements may be amended or further clarified in the industry sector-specific pollution prevention plan requirements of the permit.

Both the general SWPPP and the industry sector-specific requirements were initially derived from the 2000 EPA MSGP and have been updated with each general permit reissuance in accordance with each iteration of the EPA MSGP. The requirements are based on an evaluation of the nature of the industrial activity, the pollutants in that activity's stormwater and applicable pollution control options. This framework provides the necessary flexibility to address the variable risk for pollutants in stormwater discharges associated with the different types of industrial activity addressed by this permit. This approach also assures that facilities have the opportunity to identify procedures to prevent stormwater pollution at a particular site that are appropriate, given processes employed, engineering aspects, functions, costs of controls, location, and age of the facility. The approach taken also allows the flexibility to establish controls that can appropriately address different sources of pollutants at different facilities. These industry sector-specific requirements are additive for facilities where co-located industrial activities occur. For example, if a facility has both a primary metals operation and a scrap recycling operation, then that facility is subject to the pollution prevention plan requirements of both of those sectors in the permit.

The pollution prevention approach in this general permit focuses on two major objectives: (1) to identify sources of pollution potentially affecting the quality of discharges from the facility; and (2) to describe and ensure implementation of practices to minimize and control pollutants in discharges from the facility and to ensure compliance with the terms and conditions of this permit.

The SWPPP requirements in the general permit are intended to facilitate a process whereby the operator of the industrial facility thoroughly evaluates potential pollution sources at the site and selects and implements appropriate measures designed to prevent or control the discharge of pollutants in stormwater runoff. The process involves the following four steps: (1) formation of a team of qualified plant personnel who will be responsible for preparing the plan and assisting the plant manager in its implementation; (2) site description and assessment of potential stormwater pollution sources; (3) selection and implementation of appropriate management practices and controls; and (4) periodic evaluation of the effectiveness of the plan to prevent stormwater contamination and comply with the terms and conditions of this permit.

SWPPPs may reference the existence of other plans such as those for erosion and sediment control (ESC), Spill Prevention Control and Countermeasure (SPCC) plans developed for the facility under Section 31.1 of the CWA, or Best Management Practices (BMP) programs otherwise required for the facility as long as the other plan meets the minimum requirements of the permit and it is incorporated into the SWPPP. Any other plans so referenced become enforceable parts of the permit.

The pollution prevention approach is the most environmentally sound and cost-effective way to control the discharge of pollutants in stormwater runoff from industrial facilities. Two classes of management practices are generally employed at industries to control the non-routine discharge of pollutants from sources such as stormwater runoff, drainage from raw material storage and waste disposal areas, and discharges from places where spills or leaks have occurred. The first class of management practices includes those that are low in cost, applicable to a broad class of industries and substances, and widely considered essential to a good pollution control program. Some examples of practices in this class are good housekeeping, employee

training, and spill response and prevention procedures. The second class includes management practices that provide a second line of defense against the release of pollutants. This class addresses containment, mitigation, and cleanup. Experience with these practices and controls has shown that they can be used in permits to reduce pollutants in stormwater discharges in a cost-effective manner. Pollution prevention has been and continues to be the cornerstone of the VPDES permitting program for stormwater.

1. Contents of the Plan. The SWPPPs generally must describe the following elements:

- a. Pollution Prevention Team. As a first step in the process of developing and implementing a SWPPP, permittees are required to identify a qualified individual or team of individuals to be responsible for developing the plan and assisting the facility or plant manager in its implementation. When selecting members of the team, the plant manager should draw on the expertise of all relevant departments within the plant to ensure that all aspects of plant operations are considered when the plan is developed. The plan must clearly describe the responsibilities of each team member as they relate to specific components of the plan. In addition to enhancing the quality of communication between team members and other personnel, clear delineation of responsibilities will ensure that every aspect of the plan is addressed by a specified individual or group of individuals. Pollution Prevention Teams may consist of one individual where appropriate (e.g., in certain small businesses with limited stormwater pollution potential).
- b. Site Description. Each SWPPP must describe activities, materials, and physical features of the facility that may contribute significant amounts of pollutants to stormwater runoff or, during periods of dry weather, result in pollutant discharges through the separate storm sewers or stormwater drainage systems that drain the facility. This assessment of stormwater pollution risk will support subsequent efforts to identify and set priorities for necessary changes in materials, materials management practices, or site features, as well as aid in the selection of appropriate structural and nonstructural control techniques. Some operators may find that significant amounts of pollutants are running onto the facility property. Such operators should identify and address the contaminated run-on in the SWPPP. If the run-on cannot be addressed or diverted by the permittee, the Department should be notified. If necessary, the DEQ may require the operator of the adjacent facility to obtain a permit.

The plan must contain a map of the site that shows the location of outfalls covered by the permit (or by other VPDES permits), the pattern of stormwater drainage, an indication of the types of discharges contained in the drainage areas of the outfalls, structural features that control pollutants in runoff, surface water bodies (including wetlands), places where significant materials are exposed to rainfall and runoff, and locations of major spills and leaks that occurred in the 3 years prior to the date of the submission of a registration statement to be covered under this permit. The map also must show areas where the following activities are exposed to precipitation: fueling stations; vehicle and equipment maintenance and/or cleaning areas; loading/unloading areas; locations used for the treatment, storage or disposal of wastes; liquid storage tanks; processing and storage areas; access roads, rail cars and tracks; the location of transfer of substance in bulk; and machinery. The map must also show the location and description of non-stormwater discharges, and the location and source of run-off from adjacent property containing significant quantities of pollutants of concern to the facility (the permittee may include an evaluation of how the quality of the stormwater running onto the facility impacts the facility's stormwater discharges). The name of the nearest receiving waters, including intermittent streams, dry sloughs, arroyos and the areal extent and description of wetland sites that may receive discharges from the facility must also be included.

- c. Summary of Potential Pollutant Sources. The description of potential pollution sources culminates in a narrative assessment of the risk potential that sources of pollution pose to stormwater quality. This assessment should clearly point to activities, materials, and physical features of the facility that have a reasonable potential to contribute significant amounts of pollutants to stormwater. Any such activities, materials, or features must be addressed by the measures and controls subsequently described in the plan. In conducting the assessment, the facility operator must consider the following activities: loading and unloading operations; outdoor storage activities; outdoor manufacturing or processing activities; significant dust or particulate generating processes; and onsite waste disposal practices. The assessment must list any significant pollution sources at the site and identify the pollutant parameter or parameters (i.e., biochemical oxygen demand, suspended solids, etc.) associated with each source.

The plan must include a list of any significant spills and leaks of toxic or hazardous pollutants that occurred in the 3 years prior to the date the SWPPP was prepared or amended. Significant spills include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under Section 311 of CWA (see 40 CFR 110.10 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (see 40 CFR 302.4). Significant spills may also include releases of oil or hazardous substances that are not in excess of reporting requirements and releases of materials that are not classified as oil or a hazardous substance.

The listing should include a description of the causes of each spill or leak, the actions taken to respond to each release, and the actions taken to prevent similar such spills or leaks in the future. This effort will aid the facility operator as she or he examines existing spill prevention and response procedures and develops any additional procedures necessary to fulfill the requirements of the permit.

Any existing data on the quality or quantity of stormwater discharges from the facility must be summarized in the plan. These data may be useful for locating areas that have contributed pollutants to stormwater. The description should include a discussion of the methods used to collect and analyze the data. Sample collection points should be identified in the plan and shown on the site map.

- d. Stormwater Controls. Following completion of the source identification and assessment phase, the permit requires the permittee to evaluate, select, and describe the pollution prevention measures, best management practices (BMPs), and other controls that will be implemented at the facility. BMPs include processes, procedures, schedules of activities, prohibitions on practices, and other management practices that prevent or reduce the discharge of pollutants in stormwater runoff.

Source reduction measures include, among others, preventive maintenance, chemical substitution, spill prevention, good housekeeping, training, and proper materials management. Where such practices are not appropriate to a particular source or do not effectively reduce pollutant discharges, DEQ supports the use of source control measures and BMPs such as material segregation or covering, water diversion, and dust control. Like source reduction measures, source control measures and BMPs are intended to keep pollutants out of stormwater. The remaining classes of BMPs, which involve recycling or treatment of stormwater, allow the reuse of stormwater or attempt to lower pollutant concentrations prior to discharge.

The pollution prevention plan must discuss the reasons each selected control or practice is appropriate for the facility and how each will address one or more of the potential pollution sources identified in the plan. The plan also must include a schedule specifying the time or times during which each control or practice will be implemented. In addition, the plan should discuss ways in which the controls and practices relate to one another and, when taken as a whole, produce an integrated and consistent approach for preventing or controlling potential stormwater contamination problems. The permit requirements included for the various industry sectors in the permit generally require that the portion of the plan that describes the measures and controls address the following minimum components.

When "minimize/reduce" is used relative to pollution prevention plan measures, it means to consider and implement best management practices that will result in an improvement over the baseline conditions as it relates to the levels of pollutants identified in stormwater discharges with due consideration to economic feasibility and effectiveness.

The permit includes the following non-numeric technology-based control measures to be implemented, unless it can be demonstrated and documented that such controls are not relevant to the discharges:

- (1) Good Housekeeping. Good housekeeping involves using practical, cost-effective methods to identify ways to maintain a clean and orderly facility and keep contaminants out of separate storm sewers. It includes establishing protocols to reduce the possibility of mishandling chemicals or equipment and training employees in good housekeeping techniques. These protocols must be described in the plan and communicated to appropriate plant personnel.
- (2) Eliminating and Minimizing Exposure. Eliminating exposure of all industrial activities to precipitation may make the facility eligible for the "Conditional Exclusion for No Exposure" provision of 9VAC25-31-120 E, thereby eliminating the need to have a permit. Where practicable,

industrial materials and activities should be protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, or run-off.

- (3) Preventive Maintenance. Permittees must develop a preventive maintenance program that involves regular inspection and maintenance of stormwater management devices and other equipment and systems. The program description should identify the devices, equipment, and systems that will be inspected; provide a schedule for inspections and tests; and address appropriate adjustment, cleaning, repair, or replacement of devices, equipment, and systems. For stormwater management devices such as catch basins and oil/water separators, the preventive maintenance program should provide for periodic removal of debris to ensure that the devices are operating efficiently. For other equipment and systems, the program should reveal and enable the correction of conditions that could cause breakdowns or failures that may result in the release of pollutants.
- (4) Spill Prevention and Response Procedures. Based on an assessment of possible spill scenarios, permittees must specify appropriate material handling procedures, storage requirements, containment or diversion equipment, and spill cleanup procedures that will minimize the potential for spills and in the event of a spill enable proper and timely response. Areas and activities that typically pose a high risk for spills include loading and unloading areas, storage areas, process activities, and waste disposal activities. These activities and areas, and their accompanying drainage points, must be described in the plan. For a spill prevention and response program to be effective, employees should clearly understand the proper procedures and requirements and have the equipment necessary to respond to spills.
- (5) Salt Storage Piles or Piles Containing Salt. Storage piles of salt or piles containing salt used for deicing or other commercial or industrial purposes must be enclosed or covered to prevent exposure to precipitation. The permittee must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. All salt storage piles are to be located on an impervious surface. All runoff from the pile, and runoff that comes in contact with salt, including under drain systems, must be collected and contained within a bermed basin lined with concrete or other impermeable materials, or within an underground storage tank or tanks, or within an above ground storage tank or tanks, or disposed of through a sanitary sewer (with the permission of the owner of the treatment facility). A combination of any or all of these methods may be used. In no case shall salt contaminated stormwater be allowed to discharge directly to the ground or to surface waters.
- (6) Employee Training. Annual training must be provided to for all employees who work in areas where industrial materials or activities are exposed to stormwater, and for employees who are responsible for implementing activities identified in the SWPPP. The training must cover the components and goals of the SWPPP, and include such topics as spill response, good housekeeping, material management practices, control measure operation and maintenance, etc. The SWPPP shall include a summary of any training performed.

Although training is required annually, more frequent training may be necessary at facilities with high turnover of employees or where employee participation is essential to the effective implementation of the facility's SWPPP.
- (7) Sediment and Erosion Control. The SWPPP must identify areas that, due to topography, activities, soils, cover materials, or other factors have a high potential for significant soil erosion. The plan must identify measures that will be implemented to limit erosion in these areas.
- (8) Management of Runoff. The plan must contain a narrative evaluation of the appropriateness of traditional stormwater management practices (i.e., practices other than those that control pollutant sources) that divert, infiltrate, reuse, or otherwise manage stormwater runoff so as to reduce the discharge of pollutants. Appropriate measures may include, among others, vegetative swales, collection and reuse of stormwater, inlet controls, snow management, infiltration devices, and wet detention/retention basins.

Based on the results of the evaluation, the plan must identify practices that the permittee determines are reasonable and appropriate for the facility. The plan also should describe the

particular pollutant source area or activity to be controlled by each stormwater management practice. Reasonable and appropriate practices must be implemented and maintained according to the provisions prescribed in the plan.

In selecting stormwater management measures, it is important to consider the potential effects of each method on other water resources, such as ground water. Although SWPPPs primarily focus on stormwater management, facilities must also consider potential ground water pollution problems and take appropriate steps to avoid adversely impacting ground water quality. For example, if the water table is unusually high in an area, an infiltration pond may contaminate a ground water source unless special preventive measures are taken.

- (9) Dust suppression and vehicle tracking of industrial materials. Control measures to minimize the generation of dust and off-site tracking of raw, final, or waste materials must be implemented. Stormwater collected on-site may be used for the purposes of dust suppression or for spraying stockpiles. Potable water, well water, and uncontaminated reuse water may also be used for this purpose. However, no direct discharge to surface waters from dust suppression activities or as a result of spraying stockpiles is authorized.
- (10) Airport deicing operations. For facilities engaged in deicing or anti-icing activities, the permittee is required to minimize, and where practicable eliminate, the use of deicing or anti-icing chemicals in order to reduce the aggregate amount of deicing or anti-icing chemicals used and lessen the environmental impact.

The permittee is required to minimize contamination of stormwater runoff from aircraft deicing and anti-icing operations and runway deicing operations, if applicable. Where deicing and anti-icing operations occur, the SWPPP should include a description of the procedures and control measures used to manage contaminated stormwater runoff or snow melt (from areas used to dispose contaminated snow) to minimize the amount of pollutants discharged from the site.

The following control measure options (or their equivalents) are to be considered: covering storm sewer inlets, using booms, installing absorptive interceptors in the drain, establishing a dedicated deicing facility with a runoff collection and recovery system; using vacuum or collection trucks; storing contaminated stormwater water or deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works (with their permission); collecting contaminated runoff in a wet pond for biochemical decomposition; and directing runoff into vegetative swales or other infiltration measures.

Procedures and selected control measures should at all times be consistent with considerations of flight safety.

- e. Routine facility inspections. Staff who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility and who can also evaluate the effectiveness of control measures are to regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater, areas where spills or leaks have occurred in the past three years, discharge points, and control measures. At least one member of the pollution prevention team is to participate in the routine facility inspections.

The inspection frequency is to be at a minimum of quarterly unless more frequent intervals are specified elsewhere in the permit or written approval is received from the department for less frequent intervals. The frequency is to be specified in the SWPPP. Inspections are to be performed during operating hours. At least once each calendar year, the routine facility inspection is to be conducted during a period when a stormwater discharge is occurring.

The requirement for routine facility inspections is waived for facilities that have maintained an active VEEP E3/E4 status. Certain sectors in Part IV have additional inspection requirements. If the VEEP E3/E4 waiver language is not included for the sector specific inspections, these additional inspection requirements may not be waived.

Any deficiencies in the implementation of the SWPPP that are found are to be corrected as soon as practicable, but not later than within 60 days of the inspection, unless permission for a later date is granted in writing by the director.

The results of the inspections shall be documented in the SWPPP and shall include at a minimum, the inspection date, the names of the inspectors, weather information and a description of any discharges occurring at the time of the inspection, any previously unidentified discharges of pollutants from the site, any control measures needing maintenance or repairs, any failed control measures that need replacement, any incidents of noncompliance observed, and any additional control measures needed to comply with the permit requirements.

2. Maintenance. The SWPPP must include a description of procedures and a regular schedule for preventative maintenance of all control measures, including back-up practices should a runoff event occur while control measures are offline.

The permittee must maintain all BMPs identified in the plan in effective operating condition. If the facility site inspections identify BMPs that are not operating effectively, the permittee must perform maintenance before the next anticipated storm event or, if not possible, schedule maintenance as soon as practicable. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. In the case of non-structural BMPs, the effectiveness of the BMP must be maintained by appropriate means, such as spill response supplies available and personnel trained, etc.

3. Non-stormwater Discharges.

- a. Discharges of certain sources of non-stormwater are allowable discharges under this permit. All other non-stormwater discharges are not authorized and must be either eliminated or covered under a separate VPDES permit.
- b. Annual outfall evaluation for unauthorized discharges. The permit requires that discharges from the site be tested or evaluated annually for the presence of non-stormwater discharges. The evaluation documentation must include the date of the evaluation, a description of the evaluation criteria used, a list of the outfalls or on-site drainage points that were directly observed during the evaluation, a description of the results of the evaluation for the presence of unauthorized discharges, and the actions taken to eliminate unauthorized discharges if any were identified. Evaluation techniques may include dye tests, television surveillance, observation of outfalls or other appropriate locations during dry weather, water balance calculations, and analysis of piping and drainage schematics.

The permit also allows the permittee to request in writing to the Department that the facility be allowed to conduct annual outfall evaluations at 20% of the outfalls. If approved, the permittee must evaluate at least 20% of the facility outfalls each year on a rotating basis such that all facility outfalls will be evaluated during the period of coverage under this permit.

4. Signature and SWPPP Review.

- a. Signature and location. The SWPPP, including revisions to document corrective actions taken, is to be signed in accordance with Part II K, dated, and retained onsite (hard copy or electronic) at the facility covered by this permit. All other changes in documentation are to be signed and dated by the individual preparing the documentation. For inactive/unstaffed sites, the plan may be kept at the nearest office of the permittee.
- b. Availability. A copy of the SWPPP is to be retained onsite (hard copy or electron) and be immediately available at the time of an on-site inspection or upon request from DEQ, EPA, or the operator of an MS4 that receives discharges from the site.
- c. Required modifications. The SWPPP must be modified when necessary to address correction actions required by Part I A 6 a (Data exceeding benchmark concentration values) or Part I A 6 b (Corrective actions) and meet the associated deadlines. The SWPPP must also be modified, if required, within 60 days of receipt of a notification from the director that the SWPPP, control measures, or other components of the facility's stormwater program do not meet one or more of the requirements of the permit.

5. Maintaining an updated SWPPP. The permittee is required to review and amend the SWPPP as appropriate whenever: there is construction or a change in design, operation, or maintenance at the facility that has a significant effect on the discharge, or the potential for the discharge, of pollutants from the facility; routine inspections or compliance evaluations determine that there are deficiencies in the control measures, including BMPs; inspections by local, state, or federal officials determine that modifications to

the SWPPP are necessary; there is a significant spill, leak, or other release at the facility; there is an unauthorized discharge from the facility; or, the department notifies the permittee that a TMDL has been developed and applies to the permitted facility, consistent with Part I B.

SWPPP modifications are to be made as noted under Signature and SWPPP Review above. If a modification is based on a significant spill, leak, release, or unauthorized discharge, the SWPPP must include a description and date of the incident, the circumstances leading to the incident, actions taken in response to the incident, and measures to prevent the recurrence of such releases. Unauthorized discharges are subject to the reporting requirements of Part II G of this general permit.

Part IV – Sector-Specific Permit Requirements

The permittee must only comply with the additional requirements of Part IV (9VAC25-151-85 et seq.) that apply to the sectors of industrial activity located at the facility. These sector specific requirements are in addition to the requirements specified in Parts I, II and III of this permit. All numeric effluent limitations and benchmark monitoring concentration values reflect two significant digits, unless otherwise noted.

The following is a discussion of the history of the numeric effluent limitations and/or benchmarks for each Sector. Current benchmark values and numeric effluent limitations are noted in Tables 3 and 4 above.

Sector A – Timber Products

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities generally classified under Standard Industrial Classification (SIC) Codes 2491 and 2499 that are engaged in the following activities: cutting timber and pulpwood (those that have log storage or handling areas), mills, including merchant, lath, shingle, cooperage stock, planing, plywood and veneer, and producing lumber and wood materials; wood preserving, manufacturing wood buildings or mobile homes; and manufacturing finished articles made entirely of wood or related materials, except for wood kitchen cabinet manufacturers (SIC Code 2434), and mulch, wood, and bark facilities, including mulch dyeing operations (SIC Code 24991303).

Numeric Effluent Limitations:

SIC 2411 (Wet Decking Discharges at Log Storage and Handling Facilities)

The 2004 permit included numeric effluent limitations for pH and woody debris based on 40 CFR Part 429, Subpart I. These limitations have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Benchmark Monitoring Parameters:

SIC 2421 (General Sawmills and Planing Mills)

The 2004 permit included TSS and zinc benchmarks. The zinc benchmark was removed in the 2009 permit and the TSS benchmark has been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 2491 (Wood Preserving Facilities)

The 2004 permit included arsenic, chromium, and copper benchmarks. A footnote was added in the 2009 permit indicating that monitoring for these metals is not required for wood preserving facilities using only oil-based preservatives. These benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 2411 (Log Storage and Handling Facilities)

The 2004 permit included a TSS benchmark that has been carried forward through the 2009, 2014, 2019 and 2024 permits.

SICs 2426, 2429, 2431-2439 (except 2434), 2448, 2449, 2451, 2452, 2493, and 2499 (Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood and Structural Wood; Wood Containers; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified)

The 2004 permit included a TSS benchmark that has been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 24991303 (Mulch Wood, and Bark Facilities)

This subcategory was added in the 2014 permit and included TSS and BOD5 benchmarks. The 2019 permit replaced the BOD benchmark with a COD benchmark which has been carried forward to the 2024 permit. The TSS benchmark has been carried forward through the 2019 and 2024 permits.

SIC 24991303 (Facilities with Mulch Dyeing/Coloring Operations)

This subcategory was added in the 2014 permit and applies only to those outfalls from the facility that collect runoff from areas where mulch dyeing/coloring activities occur, including but not limited to areas where loading, transporting, and storage of dyed/colored mulch occurs.

The following benchmarks were included in the 2014 permit: TSS, BOD5, COD, aluminum, arsenic, cadmium, chromium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, zinc, total nitrogen, and total phosphorus.

A footnote was also included in the 2014 permit indicating that benchmark monitoring waivers are available to facilities utilizing mulch dye or colorant products that do not contain the specified parameters provided that: (i) monitoring from samples collected during one monitoring period demonstrates that the specific parameter in question is below the quantitation level; (ii) a waiver request is submitted to and approved by the board. The laboratory certificate of analysis must be submitted with the request. If approved, documentation of this shall be kept with the SWPPP; and (iii) a certification statement is submitted to the department annually that the facility does not use mulch dyeing products that contain any of the specifically waived parameters.

Benchmarks for lead, manganese, mercury, and nickel were removed in the 2019 permit. The iron benchmark was removed in the 2024 permit due to lack of acute toxicity. All other benchmark parameters have been carried forward to the 2024 permit.

Sector B – Paper and Allied Products Manufacturing

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities generally classified as paperboard mills, SIC Code 2631.

Numeric Effluent Limitations: None.

Benchmarks Monitoring Parameters:

The 2004 permit included a BOD benchmark that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector C – Chemical and Allied Products Manufacturing

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities engaged in manufacturing the following products: Industrial inorganic chemicals (including SIC Codes 2812-2819); Plastic materials and synthetic resins, synthetic rubbers, and cellulosic and other synthetic fibers, except glass (including SIC Codes 2821-2824); Soap and other detergents, including facilities producing glycerin from vegetable and animal fats and oils; specialty cleaning, polishing, and sanitation preparations; surface active preparations used as emulsifiers, wetting agents, and finishing agents, including sulfonated oils; and perfumes, cosmetics, and other toilet preparations (including SIC Codes 2841-2844); Nitrogenous and phosphatic basic fertilizers, mixed fertilizer, pesticides, and other agricultural chemicals (SIC Codes 2873-2879). Composting Facilities (SIC Code 2875) are included.

Numeric Effluent Limitations:

SIC 2874 (Phosphate Subcategory of the Fertilizer Manufacturing Point Source Category (40 CFR 418.10))

These numeric effluent limitations apply to precipitation runoff that, during manufacturing or processing, comes into contact with any raw materials, intermediate product, finished product, by-products or waste product.

The 2004 permit included numeric effluent limitations for total phosphorus and fluoride based on 40 CFR Part 418 Subpart A. These limitations have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Benchmark Monitoring Parameters:

2873-2879 (Agricultural Chemicals)

The 2004 permit included nitrogen, iron, zinc, and phosphorus benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

2812-2819 (Industrial Inorganic Chemicals)

The 2004 permit included aluminum, iron, and nitrogen benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

2841-2844 (Soaps, Detergents, Cosmetics, and Perfumes)

The 2024 permit included nitrogen and zinc benchmarks that have been carried forward through the 2009, 2014, 2019 and 2024 permits.

2821-2824 (Plastics, Synthetics, and Resins)

The 2004 permit included a zinc benchmark that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

2875 (Composting Facilities)

This subcategory was added in the 2014 permit and includes benchmarks for TSS, BOD₅, COD, ammonia, nitrogen, and phosphorus. These benchmarks have been carried forward through the 2019 and 2024 permits.

Sector D – Asphalt Paving and Roofing Materials and Lubricant Manufacturers

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities engaged in the following activities: manufacturing asphalt paving and roofing materials, including those facilities commonly identified by SIC Codes 2951 and 2952; portable asphalt plants (also commonly identified by SIC Code 2951); and manufacturing miscellaneous products of petroleum and coal, including those facilities classified as SIC Code 2992 and 2999.

Numeric Effluent Limitations:

SIC 2951, 2952 (Asphalt Paving and Roofing Materials)

These numeric effluent limitations apply to discharges from areas where production of asphalt paving and roofing emulsions occur.

The 2004 permit included numeric effluent limitations for TSS, oil and grease, and pH based on 40 CFR Part 443 Subpart A which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Benchmark Monitoring Parameters:

SIC 2951, 2952 (Asphalt Paving and Roofing Materials)

The 2004 permit included a benchmark for TSS that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector E – Clay, Cement, Concrete, and Gypsum Products

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities generally classified under SIC Codes 3251-3259, 3261-3269, 3274, and 3275 that are engaged in either manufacturing the following products or performing the following activities: structural clay products including tile and brick; pottery and porcelain electrical supplies; and concrete, plaster, and gypsum products.

Concrete block and brick facilities (SIC Code 3271), concrete products facilities, except block and brick (SIC Code 3272), and ready-mixed concrete facilities (SIC Code 3273) are not covered by this permit.

Numeric Effluent Limitations:

Cement Manufacturing Facility, Material Storage Runoff

These numeric effluent limitations apply to any discharge composed of runoff that derives from the storage of materials including raw materials, intermediate products, finished products, and waste materials that are used in or derived from the manufacture of cement.

The 2004 permit included numeric effluent limitations for TSS and pH based on 40 CFR Part 411 Subpart C which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Benchmark Monitoring Parameters:

SIC 3251-3259, 3261-3269 (Clay Product Manufacturers)

The 2004 permit included a benchmark for aluminum that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

3271-3275 - Lime and Gypsum Product Manufacturers

The 2004 permit included benchmarks for TSS, pH, and iron. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector F – Primary Metals

The requirements listed under this section apply to stormwater discharges associated with industrial activity from the following types of facilities in the primary metal industry. Steel works, blast furnaces, and rolling and finishing mills, including steel wire drawing and steel nails and spikes; cold-rolled steel sheet, strip, and bars; and steel pipes and tubes (SIC Codes 3312-3317). Iron and steel foundries, including gray and ductile iron, malleable iron, steel investment, and steel foundries not elsewhere classified (SIC Codes 3321-3325). Rolling, drawing, and extruding of nonferrous metals, including rolling, drawing, and extruding of copper; rolling, drawing and extruding of nonferrous metals except copper and aluminum; and drawing and insulating of nonferrous wire (SIC Codes 3351-3357). Nonferrous foundries (castings), including aluminum die-castings, nonferrous die-castings, except aluminum, aluminum foundries, copper foundries, and nonferrous foundries, except copper and aluminum (SIC Codes 3363-3369).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3312-3317 (Steel Works, Blast Furnaces, and Rolling and Finishing Mills)

The 2004 permit included aluminum and zinc benchmarks which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

SIC 3321-3325 (Iron and Steel Foundries)

The 2004 permit included aluminum, TSS, copper, iron, and zinc benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 3351-3357 (Rolling, Drawing, and Extruding of Nonferrous Metals)

The 2004 permit included copper and zinc benchmarks which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

SIC 3363-3369 (Nonferrous Foundries)

The 2004 permit included copper and zinc benchmarks which have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector G – Metal Mining (Ore Mining and Dressing)

The requirements listed under this section apply to stormwater discharges associated with industrial activity from active, temporarily inactive and inactive metal mining and ore dressing facilities including mines abandoned on federal lands, as classified under SIC Major Group 10. Coverage is required for facilities that discharge stormwater that has come into contact with, or is contaminated by, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation. SIC Major Group 10 includes establishments primarily engaged in mining of ores, developing mines, or exploring for metallic minerals (ores) and also includes ore dressing and beneficiating operations, whether performed at colocated, dedicated mills or at separate mills (e.g., custom mills).

Stormwater discharges from active metal mining facilities that are subject to the effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440) are not authorized by this permit.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 1021 (Active Copper Ore Mining and Dressing Facilities)

The 2004 permit included an aluminum benchmark which has been carried forward through the 2009, 2014, 2019, and 2024 permits.

SIC 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1099 (Iron Ores, Copper Ores, Lead and Zinc Ores, Gold and Silver Ores, Ferroalloy Ores except Vanadium, Miscellaneous Metal Ores.)

These benchmarks apply to discharges from waste rock and overburden piles from active ore mining and dressing facilities.

The 2004 permit included benchmarks for TSS, turbidity, pH, hardness (monitoring only), antimony, arsenic, beryllium, cadmium, copper, iron, lead, manganese, mercury, nickel, selenium, silver, and zinc. The manganese benchmark was removed in the 2009 permit and the iron benchmark was removed in the 2024 permit. All other benchmarks have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Additional monitoring requirements (no benchmarks) for were also included in the 2004 permit for various metals deemed “pollutants of concern”. Iron was removed as a pollutant of concern in the 2024 permit.

Sector H – Coal Mines and Coal Mining-Related Facilities

The requirements listed under this section apply to stormwater discharges associated with industrial activity from coal mining-related areas (SIC Major Group 12) if (i) they are not subject to effluent limitations guidelines under 40 CFR Part 434 or (ii) they are not subject to the standards of the Surface Mining Control and Reclamation Act of 1977 (SMCRA) (30 USC § 1201 et seq.) and the Virginia Department of Mines, Minerals and Energy's individual permit requirements.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 1221-1241 (Coal Mines and Related Areas)

The 2004 permit included aluminum, iron and TSS benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector I (Repealed) – Oil and Gas Extraction and Refining

During the 2019 reissuance, SIC codes associated with Sector I (Major Group 13, 2911) were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from oil and gas extraction and refining facilities listed under SIC Major Group 13 which have had a discharge of a reportable quantity (RQ) of oil or a hazardous substance for which notification is required under 40 CFR 110.6, 40 CFR 117.21 or 40 CFR 302.6. These include oil and gas exploration, production, processing, or treatment operations, or transmission facilities that discharge stormwater contaminated by contact with or that has come into contact with any overburden raw material, intermediate products, finished products, by-products or waste products located on the site of such operations. Industries in SIC Major Group 13 include the extraction and production of crude oil, natural gas, oil sands and shale; the production of hydrocarbon liquids and natural gas from coal; and associated oilfield service, supply and repair industries. This section also covers petroleum refineries listed under SIC Code 2911.

Contaminated stormwater discharges from petroleum refining or drilling operations that are subject to nationally established BAT or BPT guidelines found at 40 CFR Part 419 and 40 CFR Part 435 respectively are not authorized by this permit. Note: most contaminated discharges from petroleum refining and drilling facilities are subject to these effluent guidelines and are not eligible for coverage under this permit.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None

Sector J – Mineral Mining and Dressing Facilities

SIC Codes 1411-1499 are not authorized under this permit. See 9VAC25-190 Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Nonmetallic Mineral Mining.

Sector K – Hazardous Waste Treatment, Storage, or Disposal Facilities

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities that treat, store, or dispose of hazardous wastes, including those that are operating under interim status or a permit under Subtitle C of the Resource Conservation and Recovery Act (RCRA) (Industrial Activity Code "HZ"). Disposal facilities that have been properly closed and capped, or clean closed, and have no significant materials exposed to stormwater, do not require this permit.

Numeric Effluent Limitations:

Industrial Activity Code "HZ" (Hazardous Waste Treatment, Storage, or Disposal Facilities)

These numeric effluent limitations apply to contaminated stormwater discharges from hazardous waste landfills subject to the provisions of RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) and 265 (Subpart N), with some exceptions noted in the permit.

The 2004 permit included numeric effluent limitations for BOD, TSS, ammonia, alpha terpineol, aniline, benzoic acid, naphthalene, p-Cresol, phenol, pyridine, arsenic (Total), chromium (Total), zinc (Total), and pH based on 40 CFR Part 445 Subpart A. These limits have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Benchmark Monitoring Parameters:

Industrial Activity Code "HZ" (Hazardous Waste Treatment, Storage, or Disposal Facilities)

The 2004 permit included TKN, TSS, TOC, arsenic, cadmium, cyanide, lead, mercury, selenium, and silver benchmarks. A magnesium benchmark was added in the 2014 permit and is removed in the 2024 permit. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector L – Landfills, Land Application Sites and Open Dumps

The requirements listed under this section apply to stormwater discharges associated with industrial activity from waste disposal at landfills, land application sites, and open dumps that receive or have received industrial wastes (Industrial Activity Code "LF"), including sites subject to regulation under Subtitle D of the Resource Conservation and Recovery Act (RCRA). Landfills, land application sites, and open dumps that have stormwater discharges from other types of industrial activities such as vehicle maintenance, truck washing, and recycling may be subject to additional requirements specified elsewhere in this permit. This permit does not cover discharges from landfills that receive only municipal wastes.

Landfills (including landfills in "post-closure care") that have been properly closed and capped in accordance with 9VAC20-81-160 and 9VAC20-81-170 and have no significant materials exposed to stormwater do not require this permit. Landfills closed in accordance with regulations or permits in effect prior to December 21, 1988, do not require this permit, unless significant materials are exposed to stormwater.

Numeric Effluent Limitations:

Industrial Activity Code "LF" (Landfills, Land Application Sites and Open Dumps)

These numeric effluent limitations apply to contaminated stormwater discharges from municipal solid waste landfills (MSWLFs) that have not been closed in accordance with 40 CFR 258.60, and contaminated stormwater discharges from those landfills that are subject to the provisions of 40 CFR Part 257 (these include construction and debris landfills and industrial landfills), with some exceptions noted in the permit.

The 2004 permit included numeric effluent limitations for BOD, TSS, ammonia, alpha terpineol, benzoic acid, p-Cresol, phenol, zinc (Total), and pH based on 40 CFR Part 445 Subpart B. These limits have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Benchmark Monitoring Parameters:

Industrial Activity Code "LF" (Landfills, Land Application Sites and Open Dumps)

The 2004 permit included TSS and iron benchmarks. The TSS benchmark has been carried forward through the 2009, 2014, 2019, and 2024 permits.

The iron benchmark was removed in the 2014 permit based on a recommendation from the TAC. High iron concentrations are prevalent in the soils throughout Virginia, and it was determined that having these facilities continue to monitor for iron is no longer useful or necessary for this industrial sector. DEQ did an analysis of background metals concentrations in Virginia soils and compiled the data in the report "Background Metals Project", Adam Koling, DEQ, August 23, 2012. This report consolidated more than 30 years of background data for metals in Virginia soils and reported a statistical upper prediction limit (UPL) for each of 19 metals. Based on the high iron concentrations throughout Virginia, as verified by the report, it was decided to remove the iron benchmark monitoring for this sector.

Sector M – Automobile Scrap Yards

The requirements listed under this section apply to storm water discharges associated with industrial activity from facilities engaged in dismantling or wrecking used motor vehicles for parts recycling/resale and for scrap (SIC Code 5015).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 5015 (Automobile Salvage Yards)

The 2004 permit included TSS, aluminum, iron, and lead benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector N – Scrap Recycling and Waste Recycling Facilities and Material Recovery Facilities

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities typically identified as SIC code 5093 that are engaged in the processing, reclaiming and wholesale distribution of scrap and waste materials such as ferrous and nonferrous metals, paper, plastic, cardboard, glass, animal hides, and facilities that are engaged in reclaiming and recycling liquid wastes such as used oil, antifreeze, mineral spirits, and industrial solvents. Separate permit requirements have been established for recycling facilities that only receive source-separated recyclable materials primarily from nonindustrial and residential sources (e.g., common consumer products including paper, newspaper, glass, cardboard, plastic containers, aluminum and tin cans).

Separate permit requirements have also been established for facilities that are engaged in dismantling ships, marine salvaging, and marine wrecking—ships for scrap (SIC Code 4499, limited to those listed; for others in SIC Code 4499 not listed in this subsection, see Sector Q (9VAC25-151-240)).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 5093 (Scrap Recycling and Waste Recycling Facilities (nonsource-separated facilities only))

The 2004 permit included TSS, aluminum, cadmium, chromium, copper, iron, zinc, and lead benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 5093 (Scrap Recycling and Waste Recycling Facilities (source-separated facilities only))

The 2014 permit added TSS, aluminum, cadmium, chromium, copper, iron, zinc, and lead benchmarks for source-separated facilities. A footnote was also included stating “Metals monitoring is only required at source-separated facilities for the specific metals listed above that are received at the facility.” The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2019 and 2024 permits.

SIC 4499 (Facilities Engaged in Dismantling Ships, Marine Salvaging, and Marine Wrecking - Ships for Scrap)

The 2004 permit included a copper benchmark. The 2009 permit added TSS, aluminum, cadmium, chromium, iron, zinc, and lead benchmarks. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019 and 2024 permits.

Sector O – Steam Electric Generating Facilities

The requirements listed under this section apply to stormwater discharges associated with industrial activity from steam electric power generating facilities using coal, natural gas, oil, nuclear energy, etc. to produce a steam source, including coal handling areas (Industrial Activity Code "SE").

Stormwater discharges from coal pile runoff subject to numeric effluent limitations are eligible for coverage under this permit, but are subject to the limitations established by Part I A 1 c (2).

Stormwater discharges from ancillary facilities (e.g., fleet centers, gas turbine stations, and substations) that are not contiguous to a steam electric power generating facility are not covered by this permit. Heat capture and heat recovery combined cycle generation facilities are also not covered by this permit; however, dual fuel co-generation facilities that generate electric power are included.

Numeric Effluent Limitations:

Industrial Activity Code “SE” (Steam Electric Generating Facilities)

Permittees with point sources of coal pile runoff associated with steam electric power generation shall monitor these stormwater discharges for the presence of TSS and for pH in accordance with Part I A 1 c (2) of the permit (based on 40 CFR Part 423).

Benchmark Monitoring Parameters:

Industrial Activity Code “SE” (Steam Electric Generating Facilities)

The 2004 permit included an iron benchmark that was carried through the 2009, 2014, and 2019 permits. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. There are currently no benchmark requirements for this sector.

Sector P (Repealed) – Land Transportation and Warehousing

During the 2019 reissuance the SIC codes associated with Sector P were transferred to Sector AF (Facilities Limited to Total Suspended Solids Benchmark Monitoring). The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from ground transportation facilities and rail transportation facilities (generally identified by SIC Codes 40, 41, 42, 43, and 5171), that have vehicle and equipment maintenance shops (vehicle and equipment rehabilitation, mechanical repairs, painting, fueling and lubrication) or equipment cleaning operations. Also covered under this section are facilities found under SIC Codes 4221 through 4225 (public warehousing and storage) that do not have vehicle and equipment maintenance shops or equipment cleaning operations.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 4011, 4013, 4111-4173, 4212-4231, 4311, and 5171 - Land Transportation and Warehousing Facilities

The 2009 permit included TPH and TSS benchmarks which were carried through the 2014 permit. Data collected during the 2014 permit term indicated a benchmark exceedance rate for TPH of 0.6% and the TPH benchmark was removed in the 2019 permit. Given that the sector was left with only a TSS benchmark, the sector was repealed in the 2019 permit and the associated SIC codes were moved to Sector AF.

Sector Q – Water Transportation and Ship and Boat Building and Repairing Yards

The requirements listed under this section apply to stormwater discharges associated with the following industrial activities:

1. Water transportation facilities identified by SIC Codes 4412-4499 (except SIC Code 4499 facilities as specified in Sector N - 9VAC25-151-210). The water transportation industry includes facilities engaged in foreign or domestic transport of freight or passengers in deep sea or inland waters, marine cargo handling operations, ferry operations, towing and tugboat services, and marinas.
2. Ship building and repairing and boat building and repairing facilities identified by SIC Codes 3731 and 3732. The U.S. Coast Guard refers to a vessel 65 feet or greater in length as a "ship" and a vessel smaller than 65 feet as a "boat."

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 4412-4499, except 4499 as specified in Sector N (Water Transportation Facilities); SIC 3731-3732 (Ship and Boat Building or Repairing Yards)

The 2004 permit included aluminum, iron, and zinc benchmarks. The aluminum and iron benchmarks were removed in the 2014 permit and TSS and copper benchmarks were added. This was done to align the benchmarks between Sector Q and Sector R which have nearly identical stormwater discharge characteristics. In the 2019 permit, Sector R was consolidated into Sector Q. All remaining benchmarks have been carried forward in the 2024 permit.

Sector R (Repealed) – Ship and Boat Building or Repair Yards

During the 2019 reissuance Sector R was combined with Sector Q given that the benchmarks and sector-specific language was essentially identical. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from ship building and repairing and boat building and repairing facilities identified by SIC Codes 3731 and 3732. The U.S. Coast Guard refers to a vessel 65 feet or greater in length as a "ship" and a vessel smaller than 65 feet as a "boat."

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3731-3732 (Ship and Boat Building or Repairing Yards)

The 2009 permit included a TSS benchmark. The 2014 permit added copper and zinc benchmarks. In the 2019 permit, Sector R was consolidated into Sector Q (same benchmarks) and Sector R was repealed.

Sector S (Repealed) – Air Transportation Facilities

During the 2019 reissuance authorization for coverage of discharges subject to effluent limitations in 40 CFR Part 449 was removed as it was determined at the time that such facilities should be covered under Individual VPDES Permits. Benchmarks were also removed due to low exceedance rates. Given that Sector S no longer had any benchmark monitoring requirements or numeric effluent limitations, the sector was repealed and the Air Transportation Facility SIC codes were grouped into Sector AE (Facilities with no analytical benchmark monitoring requirements). The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from air transportation facilities including airports, airport terminal services, air transportation (scheduled and nonscheduled), flying fields, air courier services, and establishments engaged in operating and maintaining airports, and servicing, repairing or maintaining aircraft (generally classified under SIC Code 45), which have vehicle maintenance shops, material handling facilities, equipment cleaning operations, or airport or aircraft deicing or anti-icing operations. For the purpose of this section, the term "deicing" is defined as the process to remove frost, snow, or ice and "anti-icing" is the process which prevents the accumulation of frost, snow, or ice. Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or deicing or anti-icing operations are addressed under this section.

Numeric Effluent Limitations:

SIC 4512-4581 (Air Transportation Facilities)

The 2014 permit included the following numeric effluent limitations:

1. Existing primary airports and primary airports meeting the definition of a new source (new primary airports) with at least 1,000 annual jet departures (non-propeller aircraft) that discharge wastewater associated with airport pavement deicing comingled with stormwater shall either use deicing products that do not contain urea or, alternatively, airfield pavement discharges at every discharge point shall achieve the numeric limitations for ammonia (14.7 mg/L, per 40 CFR 449) prior to any dilution or commingling with any non-deicing discharge. Primary airports that only use deicing products that do not contain urea shall certify this fact annually to the department.
2. Airports meeting the definition of a new source (new airports) with 10,000 annual departures, and located in cold climate zones, shall collect at least 60% of available Aircraft Deicing Fluid (ADF) after deicing. New airports shall achieve the performance standards for COD (271 mg/L daily max; 154 mg/L weekly average, per 40 CFR 449) in the available ADF collected.

The 2019 permit removed authorization for coverage of discharges subject to effluent limitations in 40 CFR Part 449 as it was determined at the time that such facilities should be covered under Individual VPDES Permits. However, during the 2019 permit term a handful of such airports were covered under Sector AD (Nonclassified Facilities/Stormwater Discharges Designated By the Department As Requiring Permits) in order to avoid the additional cost and administrative burden of an Individual Permit. The use of Sector AD allowed coverage of these airports at the department's discretion and allowed for the inclusion of the ELG requirements (40 CFR 449) and any other benchmarks deemed necessary.

The 2024 permit clarifies that facilities subject to federal effluent guidelines at 40 CFR 449 may be covered under Sector AD.

Benchmark Monitoring Parameters:

SIC 4512-4581 (Air Transportation Facilities)

The 2004 permit included BOD, TKN, and pH benchmarks for facilities that used more than 100,000 gallons of glycol-based deicing/anti-icing chemicals and/or 100 tons or more of urea on an average

annual basis. The 2009 permit added COD and TSS benchmarks. During the 2009 permit term, no DMR data was collected for these parameters, indicating that no facility exceeded the deicing/anti-icing thresholds noted above. As a result, these deicing/anti-icing benchmarks were removed during the 2014 reissuance, but TSS and TPH benchmarks were added for discharges from vehicle maintenance and equipment cleaning areas.

Data collected during the 2014 permit term indicated a benchmark exceedance rate of 4% for TSS and 0% for TPH. These benchmarks were removed during the 2019 reissuance.

Given that Sector S no longer had any benchmark monitoring requirements (or numeric effluent limitations as noted above), the sector was repealed and the Air Transportation Facility SIC codes were grouped into Sector AE (Facilities with no analytical benchmark monitoring requirements).

The 2024 continues to cover Air Transportation Facilities not subject to federal effluent guidelines under Sector AE.

Sector T (Repealed) – Treatment Works

During the 2019 reissuance, the Industrial Activity Code "TW" was transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from treatment works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including lands dedicated to the disposal of sewage sludge that are located within the confines of the facility with a design flow of 1.0 MGD or more, or required to have an approved pretreatment program under 9VAC25-31-730 (Industrial Activity Code "TW"). Farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and that are not physically located within the facility, or areas that are in compliance with § 405 of the CWA are not required to have permit coverage.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector U – Food and Kindred Products

The requirements listed under this section apply to stormwater discharges associated with industrial activity from food and kindred products processing facilities, including dairy products SIC Codes 2021 2026; grain mill products SIC Codes 2041 2048; and fats and oils SIC Codes 2074 2079.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 2021-2026 (Dairy Products)

The 2009 permit included BOD and TSS benchmarks that have been carried forward through the 2014, 2019, and 2024 permits.

SIC 2041-2048 (Grain Mill Products)

The 2004 permit included TKN and TSS benchmarks that have been carried forward through the 2009, 2014, 2019 and 2024 permits.

SIC 2074-2079 (Fats and Oils Products)

The 2004 permit included BOD, TN, and TSS benchmarks that have been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector V (Repealed) – Textile Mills, Apparel, and Other Fabric Products

During the 2019 reissuance, the SIC codes associated with Sector V were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from textile mills, apparel and other fabric product manufacturing, generally described by SIC 22 and 23. This section also covers facilities engaged in manufacturing finished leather and artificial leather products (SIC 31, except 3111). Facilities in this sector are primarily engaged in the following activities: textile mill products, of and regarding facilities and establishments engaged in the preparation of fiber and subsequent manufacturing of yarn, thread, braids, twine, and cordage, the manufacturing of broad woven fabrics, narrow woven fabrics, knit fabrics, and carpets and rugs from yarn; processes involved in the dyeing and finishing of fibers, yarn fabrics, and knit apparel; the integrated manufacturing of knit apparel and other finished articles of yarn; the manufacturing of felt goods (wool), lace goods, nonwoven fabrics, miscellaneous textiles, and other apparel products.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector W (Repealed) – Furniture and Fixtures

During the 2019 reissuance, the SIC codes associated with Sector W were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities involved in the manufacturing of wood kitchen cabinets (generally described by SIC Code 2434), and furniture and fixtures (generally classified under SIC Major Group 25), including: household furniture (SIC 251); office furniture (SIC 252); public buildings and related furniture (SIC 253); partitions, 2014 Reissuance 97 Final Stage – As Adopted 12-17-2013 shelving, lockers, and office and store fixtures (SIC 254); and miscellaneous furniture and fixtures (SIC 259).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector X (Repealed) – Printing and Publishing

During the 2019 reissuance, the SIC codes associated with Sector X were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from printing and publishing facilities (generally classified under SIC Major Group 27), and include the following types of facilities: newspaper, periodical, and book publishing and printing (SIC Codes 271 through 273); miscellaneous publishing (SIC Code 274); commercial printing (SIC Code 275); manifold business forms, greeting cards, bankbooks, looseleaf binders and book binding and related work (SIC Codes 276 through 278); and service industries for the printing trade (SIC 279).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector Y – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries

The requirements listed under this section apply to stormwater discharges associated with industrial activity from rubber and miscellaneous plastic products manufacturing facilities, SIC Codes 3011, 3021, 3052, 3053, 3061, and 3069.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3011, 3021, 3052, 3053, 3061, and 3069 (Tires and Inner Tubes; Rubber Footwear; Gaskets, Packing and Sealing Devices; Rubber Hose and Belting; and Fabricated Rubber Products, Not Elsewhere Classified)

The 2004 permit included a zinc benchmark that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector Z (Repealed) – Leather Tanning and Finishing

During the 2019 reissuance, the SIC codes associated with Sector Z were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from leather tanning, currying and finishing (commonly identified by SIC Code 3111).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3111 (Leather Tanning and Fishing)

The 2004 permit included a zinc benchmark that was carried forward through the 2009 and 2014 permits. During the 2019 reissuance it was noted that no data had been collected for this benchmark requirement because there were no facilities covered under this Sector in Virginia. The benchmark was removed for the 2019 permit and the associated SIC codes were moved to Sector AE.

Sector AA – Fabricated Metals Products

The requirements listed under this section apply to stormwater discharges associated with industrial activity from the following fabricated metals industries, except for electrical related industries: fabricated metal products, except machinery and transportation equipment, SIC Codes 3411-3471, 3479, and 3482-3499; and jewelry, silverware, and plated ware, SIC Codes 3911-3915

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3411-3471, 3482-3499, 3911-3915 (Fabricated Metal Products Except Coating)

The 2004 permit included aluminum, iron, and zinc benchmarks. The 2014 permit added a copper benchmark. The iron benchmark is removed in the 2024 permit due to lack of acute toxicity. All other benchmarks have been carried forward through the 2009, 2014, 2019, and 2024 permits.

SIC 3479 (Fabricated Metal Coating and Engraving)

The 2004 permit included a zinc benchmark that has been carried forward through the 2009, 2014, 2019, and 2024 permits.

Sector AB – Transportation Equipment, Industrial, or Commercial Machinery

The requirements listed under this section apply to stormwater discharges associated with industrial activity from transportation equipment and industrial or commercial machinery manufacturing facilities commonly described by SIC Codes 3511-3599, except SIC Codes 3571-3579.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC 3511-3599 except 3571-3579 (Transportation Equipment Manufacturing Facilities)

The 2014 permit included TPH, TSS, copper, and zinc benchmarks which have been carried forward through the 2019 and 2024 permits.

Sector AC (Repealed) – Electronic, Electrical Equipment and Components, Photographic and Optical Goods

During the 2019 reissuance, the SIC codes associated with Sector AC were transferred to Sector AE (Facilities with No Analytical Benchmark Monitoring Requirements) given the lack of applicable effluent

limitations or benchmark monitoring requirements. The description below is for informational purposes only.

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities that manufacture: electronic and other electrical equipment and components, except computer equipment (SIC Major Group 36); measuring, analyzing, and controlling instruments; photographic, medical and 2014 Reissuance 103 Final Stage – As Adopted 12-17-2013 optical goods; watches and clocks (SIC Major Group 38) and computer and office equipment (SIC Code 357).

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters: None.

Sector AD – Nonclassified Facilities or Stormwater Discharges Designated by the Department as Requiring Permits

Sector AD is used to provide permit coverage for facilities designated by the department as needing a stormwater permit under the provisions of 9VAC25-31-120 A 1 c or under 9VAC25-31-120 A 7 a (1) or (2) of the VPDES Permit Regulation. Therefore, almost any type of stormwater discharge may be covered under this sector. Permittees shall be assigned to Sector AD by the department and may not choose Sector AD as the sector describing the facility's activities.

Effluent limitations, benchmark monitoring and reporting requirements: The department shall establish any additional monitoring requirements for your facility prior to before authorizing coverage under this permit.

Sector AE – Facilities with No Analytical Benchmark Monitoring Requirements

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities with SIC Codes 2611, 2621, 2652 2657, 2833 2836, 2851, 2861 2869, 2891 2899, 3952, 3211, 3221, 3229, 3231, 3241, 3281, 3291 3299, 3331 3339, 3398, 3399, 3341, 1311, 1321, 1381 1389, 2911, 4512-4581 (not subject to federal effluent guidelines), Treatment Works (TW), 2011 2015, 2032 2038, 2051 2053, 2061 2068, 2082 2087, 2091 2099, 2111 2141, 2211 2299, 2311 2399, 3131 3199, 2434, 2511 2599, 2711 2796, 3081 3089, 3931, 3942 3949, 3951 3955 (except 3952), 3961, 3965, 3991 3999, 3111, 3711 3799 (except 3731 and 3732 as identified in Sector Q), 3571 3579, 3612 3699, and 3812 3873.

No additional sector-specific requirements apply to this sector.

Sector AF – Facilities Limited to Total Suspended Solids Benchmark Monitoring

The requirements listed under this section apply to stormwater discharges associated with industrial activity from facilities with SIC Codes 4011, 4013, 4111, 4173, 4212 4231, 4311, and 5171.

Numeric Effluent Limitations: None.

Benchmark Monitoring Parameters:

SIC codes 4011, 4013, 4111 4173, 4212 4231, 4311, and 5171

The 2019 permit included a TSS benchmark which has been carried forward through the 2024 permit.

Part V – Chesapeake Bay Total Maximum Daily Load Compliance

1. Chesapeake Bay TMDL Compliance.

EPA's Chesapeake Bay TMDL (December 29, 2010) includes wasteload allocations for VPDES permitted industrial stormwater facilities as part of the regulated stormwater aggregate load. EPA used data submitted by Virginia with the Phase I Chesapeake Bay TMDL Watershed Implementation Plan, including the number of industrial stormwater permits per county and the number of urban acres regulated by industrial stormwater permits, as part of their development of the aggregate load. Aggregate loads for industrial stormwater facilities were appropriate because actual facility loading data were not available to develop individual facility wasteload allocations.

Virginia estimated the loadings from industrial stormwater facilities using actual and estimated facility acreage information, and TP, TN, and TSS loading values from the Northern Virginia Planning District Commission (NVPDC) *Guidebook for Screening Urban Nonpoint Pollution Management Strategies*, prepared for the Metropolitan Washington Council of Governments. Annandale, VA. November, 1979. The loading values used were as follows:

- TP - High (80%) imperviousness industrial; 1.5 lb/ac/yr
- TN - High (80%) imperviousness industrial; 12.3 lb/ac/yr
- TSS - High (80%) imperviousness industrial; 440 lb/ac/yr

Starting with the 2014 general permit, industrial stormwater facilities permitted within the Chesapeake Bay watershed have been required to provide actual facility area information and TP, TN and TSS monitoring data to quantify their nutrient and sediment loads in order to demonstrate compliance with the above Chesapeake Bay TMDL loading rates. In the event that a facility's calculated loads exceeded the TMDL loading rates, a Chesapeake Bay TMDL action plan was to be prepared indicating the means and methods (such as management practices and retrofit programs) that would be utilized to meet the required reductions and a schedule to achieve those reductions. These procedures were continued in the 2019 general permit and are continued in the 2024 general permit in a modified format in order to address the Chesapeake Bay TMDL compliance deadline of 2025.

Notably, the TSS loading rate requirements previously required under this section have been removed for the 2024 general permit. On August 12, 2019, the Chesapeake Bay Program Principals' Staff Committee (PSC) approved the process, timeline, and proposed Phase III WIP language for developing the Phase III WIP sediment targets. The Commonwealth of Virginia included the PSC-approved language in its final Phase III WIP on Page 29, Section 5.2 (Sediment Targets). This language states in part, "Sediment loads are managed in the Bay TMDL to specifically address the water clarity/submerged aquatic vegetation (SAV) water quality standards. Intuitively, it makes sense that the more sediment suspended in the water, the less makes it down to the SAV. Interestingly, research in the Chesapeake Bay has shown that the water clarity/SAV water quality standard is generally more responsive to nutrient load reductions than it is to reduction in sediment loads. This is because the algae that are fueled by the nutrients can block as much, or more, light from reaching the SAV as suspended sediments. *The sediment targets will not affect the BMPs called for in the WIP, and are not intended to be the driver for implementation moving forward.*"

Given that the Phase III WIP does not intend for sediment targets to be the driver for implementation moving forward, DEQ is reissuing this general permit without the TSS loading rate requirements. The reissued general permit will continue to include the required nutrient load reductions for nitrogen and phosphorous.

While the Commonwealth of Virginia has met the 2025 Sediment milestone target¹, it should be noted that the BMPs installed for the purposes of meeting the nutrient reductions will continue to provide additional sediment reductions as well, ensuring that the permit is consistent with the Chesapeake Bay TMDL.

The removal of the sediment reduction requirements for the Chesapeake Bay TMDL does not relieve permittees of their responsibility to comply with the requirements of a local TMDL or impaired water without an approved TMDL as addressed under Part I.A.1.c(3) and (4) of this permit, respectively. Additionally,

¹ Chesapeake Bay Program Communications Office Press Release, September 26, 2023:
<https://www.chesapeakebay.net/news/pressrelease/chesapeake-water-quality-sees-slight-decline>

benchmarks and numeric effluent limitations for TSS continue to be applied on a sector-specific basis under Part IV of this permit.

Anti-backsliding: The Clean Water Act, section 303(d)(4)(A) allows the establishment of a less stringent effluent limitation when the receiving water has been identified as not meeting applicable water quality standards (i.e., a nonattainment water) if the permittee meets two conditions: 1) the existing effluent limitation must have been based on a total maximum daily load (TMDL) or other wasteload allocation (WLA) established under CWA section 303, and 2) relaxation of the effluent limitation is only allowed if attainment of water quality standards will be ensured.

The removal of the TSS loading rate requirements meets both criteria: 1) the limitation was based on a TMDL established under CWA section 303 and 2) the water quality standard for clarity/SAV will still be attained, as noted above.

The remaining Chesapeake Bay TMDL compliance requirements are separated into three distinct categories depending on the status of a facility's demonstration of compliance, as described below.

a. Facilities that obtained coverage under the 2019 industrial stormwater general permit that demonstrated compliance with the Chesapeake Bay TMDL loading rates.

(1) Owners shall maintain documentation of their demonstration of compliance with the Chesapeake Bay TMDL loading rates with the SWPPP and shall continue implementing any BMPs that may have been developed as part of that demonstration. Documentation may include:

- (a) Calculations submitted to the department indicating that reductions were not necessary.
- (b) A completed TMDL Action Plan, including a description of the means and methods, such as management practices and retrofit programs that were utilized to meet the required reductions.
- (c) Other means accepted by the department indicating compliance with the Chesapeake Bay TMDL loading rates.

b. Facilities that obtained coverage under the 2019 industrial stormwater general permit that did *not* demonstrate compliance with the Chesapeake Bay TMDL loading rates shall submit a demonstration to the department.

(1) Owners of facilities that submitted a Chesapeake Bay TMDL action plan during the 2019 industrial stormwater general permit term that did not achieve reductions by the end of the 2019 permit term shall update and resubmit their action plan to the department for approval no later than 60 days following coverage under this general permit. Permittees shall achieve ten percent of the remaining reductions by December 31, 2024, and all remaining reductions by December 31, 2025. An annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the interim and final reductions. A final report to demonstrate compliance shall be submitted to the department no later than January 10, 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

NOTE: Facilities that fall into this category are considered out of compliance with the previous permit which required reductions to be completed by June 30, 2024. To address this, the above language enacts an enforcement mechanism with interim and final milestones. However, given that the enforcement mechanism language allows additional time to perform activities required to be completed by the end of the previous permit term, anti-backsliding needs to be addressed.

Anti-backsliding: The Clean Water Act, section 303(d)(4)(A) allows the establishment of a less stringent effluent limitation when the receiving water has been identified as not meeting applicable water quality standards (i.e., a nonattainment water) if the permittee meets two conditions: 1) the existing effluent limitation must have been based on a total maximum daily load (TMDL) or other wasteload allocation (WLA) established under CWA section 303, and 2) relaxation of the effluent limitation is only allowed if attainment of water quality standards will be ensured.

The enactment of the enforcement mechanism language meets both criteria: 1) the reduction requirements were based on a TMDL established under CWA section 303 and 2) the enforcement mechanism language will ensure the attainment of water quality standards.

- (2) Owners of facilities that completed four samples for each outfall for TN and TP during the 2019 industrial stormwater general permit term that did not submit calculations by the end of the 2019 permit term shall utilize the procedures in Part V D to calculate their facility stormwater loads. The permittee shall submit a copy of the calculations, and a Chesapeake Bay TMDL action plan if required under Part V E, no later than 60 days following coverage under this general permit to the DEQ regional office serving the area where the industrial facility is located on a form provided by the department. Reductions, if applicable, shall be achieved by December 31, 2025, and an annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the required reductions until such time that the demonstration is completed. The demonstration shall be submitted to the department no later than February 1, 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.
- (3) Owners of facilities registered prior to July 1, 2022, that did not complete four samples for each outfall for TN and TP by the end of the 2019 industrial stormwater general permit term shall monitor their discharges for TN and TP to characterize the contributions from their facility's specific industrial sector for these parameters. Total nitrogen is the sum of total Kjeldahl nitrogen (TKN) and nitrite + nitrate and shall be derived from the results of those tests. After the facility is granted coverage under the permit, samples shall be collected during each of the first four quarters of permit coverage. Samples shall be collected and analyzed in accordance with Part V B. Monitoring results shall be reported in accordance with Part V C and Part II C, and retained in accordance with Part II B. Calculations utilizing the procedures in Part V D, and a Chesapeake Bay TMDL action plan if required under Part V E, shall be submitted no later than 60 days following the completion of the fourth sample to the DEQ regional office serving the area where the industrial facility is located on a form provided by the department. Reductions, if applicable, shall be achieved by December 31, 2025, and an annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the required reductions until such time that the demonstration is completed. The demonstration shall be submitted to the department no later than February 1, 2026. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

Facilities may use the applicable sampling data collected during the 2019 industrial stormwater general permit term to satisfy all or part of the four monitoring periods requirements.

- (4) Owners of facilities registered after June 30, 2022, that did not complete four samples for each outfall for TN and TP by the end of the 2019 industrial stormwater general permit term shall monitor their discharges in accordance with Part V A 3 (section c. of this fact sheet section).

Facilities may use the applicable sampling data collected during the 2019 industrial stormwater general permit term to satisfy all or part of the four monitoring periods requirements.

- c. Facilities that obtain initial coverage under the 2024 industrial stormwater general permit, but are not newly constructed facilities as identified in 9VAC25-151-60 C 13.

- (1) Owners of facilities in the Chesapeake Bay watershed that obtain initial coverage under the 2024 industrial stormwater general permit shall monitor their discharges for TN and TP to characterize the contributions from their facility's specific industrial sector for these parameters. Total nitrogen is the sum of total Kjeldahl nitrogen (TKN) and nitrite + nitrate and shall be derived from the results of those tests. After the facility is granted coverage under the permit, samples shall be collected during each of the first four quarters of permit coverage. Samples shall be collected and analyzed in accordance with Part V B. Monitoring results shall be reported in accordance with Part V C and Part II C, and retained in accordance with Part II B. Calculations utilizing the procedures in Part V D, and a Chesapeake Bay TMDL action plan if required under Part V E, shall be submitted no later than 60 days following the completion of the fourth sample to the DEQ regional office serving the area where the industrial facility is located on a form provided by the department. Reductions, if applicable, shall be achieved by two years following the end of the fourth quarterly monitoring period and an annual report shall be submitted to the department by June 30 of each year describing the progress in meeting the required reductions until such time that the demonstration is completed. The demonstration shall be submitted to the department no later than the 10th of the

month directly following the two-year period. Documentation of compliance with the Chesapeake Bay TMDL loading rates shall be maintained with the SWPPP.

2. Monitoring Instructions and Reporting Monitoring Results.

These sections are identical to those listed under Part I of the general permit discussed previously, but are copied into this section and crafted specifically for Chesapeake Bay TMDL monitoring and reporting. Of note, monitoring periods are defined as quarterly (Jan-Mar, Apr-June, July-Sept, Oct-Dec) with monitoring results due the 10th of the month following each calendar quarter. Further, it is clarified that the representative outfalls provisions may be used for Chesapeake Bay TMDL monitoring.

3. Calculation of facility loads.

Permittees required to collect nutrient and sediment data in accordance with Part V A 2 or A 3 shall analyze the data collected to determine if pollution reductions are required. The permittee shall average the data collected at the facility for each of the pollutants of concern (POC) (e.g., TP and TN) and compare the results to the loading rates for TP and TN presented in Part V A 1.

The following formula may be used to determine the loading rate:

$$L = 0.226 \times P \times P_j \times (0.05 + (0.9 \times I_a)) \times C$$

where:

L = the POC loading rate (lb/acre/year)

P = the annual rainfall (inches/year) - The permittee may use either actual annual average rainfall data for the facility location (in inches/year), the Virginia annual average rainfall of 44.3 inches/year, or another method approved by the department.

P_j = the fraction of annual events that produce runoff - The permittee shall use 0.9 unless the department approves another rate.

I_a = the impervious fraction of the facility impervious area of industrial activity to the facility industrial activity area

C = the POC average concentration of all facility samples (mg/L) - Facilities with multiple outfalls shall calculate a weighted average concentration for each outfall using the drainage area of each outfall.

For total phosphorus, all daily concentration data below the quantitation level (QL) for the analytical method used shall be treated as half the QL. All daily concentration data equal to or above the QL for the analytical method used shall be treated as it is reported.

For total nitrogen, if none of the daily concentration data for the respective species (i.e., TKN, nitrate, or nitrite) are equal to or above the QL for the respective analytical methods used, the daily TN concentration value reported shall equal one half of the largest QL used for the respective species. If one of the data is equal to or above the QL, the daily TN concentration value shall be treated as that data point is reported. If more than one of the data is above the QL, the daily TN concentration value shall equal the sum of the data points as reported.

Calculations shall be submitted to the department within 60 days from the end of the last monitoring period that satisfies the monitoring requirements in Part V A 2 or Part V A 3. Calculations shall be submitted to the DEQ regional office serving the area where the industrial facility is located, on a form provided by the department, and maintained with the facility's SWPPP.

Alternative calculations may be proposed on a case-by-case basis to address facilities with outfalls that rarely discharge.

4. Chesapeake Bay TMDL action plan requirements.

For permittees required to submit calculations in accordance with Part V D, if the calculated facility loading rate for TP or TN is above the loading rates for TP or TN presented in Part V A, then the permittee shall develop and submit a Chesapeake Bay TMDL action plan to the department.

The Chesapeake Bay TMDL action plan shall be submitted on a form provided by the department to the regional office serving the area where the industrial facility is located within 60 days following the completion of the fourth sample. A copy of the current Chesapeake Bay TMDL action plan and all facility loading rate calculations shall be maintained with the facility's SWPPP. The Chesapeake Bay TMDL action plan shall include:

- a. A determination of the total pollutant load reductions for TP and TN (as appropriate) necessary to reduce the annual loads from industrial activities. This shall be determined by multiplying the industrial acreage times the difference between the TMDL loading rates listed in Part V A and the actual facility loading rates calculated in accordance with Part V D . The reduction applies to the total difference calculated for each pollutant of concern;
- b. The means and methods, such as management practices and retrofit programs that will be utilized to meet the required reductions determined in Part V E 1 and a schedule to achieve those reductions by the applicable deadline set in Part V A 2 or A 3.
 - (1) Pollutant reductions may be achieved using a combination of the following alternatives:
 - (a) Reductions provided by one or more of the BMPs from the Virginia Stormwater BMP Clearinghouse listed in 9VAC25-870-65, approved BMPs found on the Virginia Stormwater Clearinghouse website, or BMPs approved by the Chesapeake Bay Program. Any BMPs implemented to provide the required pollutant reductions shall be incorporated in the SWPPP and be permanently maintained by the permittee.
 - (b) Implementation of site-specific BMPs followed by a minimum of four stormwater samples collected in accordance with sampling requirements in Part I B 8 a that demonstrate pollutant loadings have been reduced below those calculated under Part I B 8 c. Any BMPs implemented to provide the required pollutant reductions shall be incorporated in the SWPPP and be permanently maintained by the permittee; or,
 - (c) Acquisition of nonpoint source credits certified by the board as perpetual in accordance with § 62.1-44.19:20 of the Code of Virginia.

Environmental Justice and Climate Change:

DEQ is in the process of addressing these concerns at a much higher level than specific permit requirements related to environmental justice and climate change. The Commonwealth of Virginia has proactively worked on the topics of environmental justice and climate resiliency within and outside the permitting process.

In 2020, the Commonwealth enacted the Virginia Environmental Justice Act (Act), codified at §§ 2.2-234 and 2.2-235 of the Code of Virginia, which states that it is Virginia’s policy “to promote environmental justice and ensure that it is carried out throughout the Commonwealth, with a focus on environmental justice and fence line communities.” Further, DEQ’s enabling statute, § 10.1-1183 of the Code of Virginia, was amended to include in its statement of policy that DEQ’s purpose, among others, is “[t]o ensure the fair treatment and meaningful involvement of all people regardless of race, color, national origin, faith, disability, or income with respect to the administration of environmental laws, regulations, and policies.” The policy statement was also amended to include a statement affirming that agency would “further environmental justice and enhance public participation in the regulatory and permitting processes.” A detailed overview of ongoing activities is available on DEQ’s Environmental Justice webpage. DEQ has recently released draft guidance, Environmental Justice in the Permitting Process for public comment. Once finalized in accordance with Virginia’s Administration Process Act, this guidance document will serve as the guidepost for ensuring environmental justice is included in the permitting process.

The Commonwealth of Virginia has established the Chief Resilience Officer as the primary coordinator of resilience and adaptation initiatives in Virginia pursuant to § 2.2-220.5 of the Code of Virginia. As such they are the primary point of contact regarding recurrent flooding, all flooding related pre-disaster hazard mitigation, and adaptation. The Secretary of Natural and Historic Resources, Travis A. Voyles, is the Chief Resilience Officer for the Commonwealth of Virginia, a Cabinet level position for the Commonwealth of Virginia. One of the primary responsibilities of the Chief Resilience Office is to create and oversee the implementation of a Virginia Flood Protection Master Plan and a Virginia Coastal Resilience Master Plan in accordance with § 10.1-602 of the Code of Virginia to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, health, the economy, and the environment. The Commonwealth of Virginia’s Chief Resilience Officer coordinates these activities through the Department of Conservation and Recreation, specifically the Department of Conservation and Recreation’s Office of Resilience Planning.

Office of Regulatory Management
Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-151
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Discharges of Stormwater Associated with Industrial Activity
Action title	Final 2024 Amendment and Reissuance of the VPDES Industrial Stormwater General Permit Regulation
Date this document prepared	September 20, 2023
Regulatory Stage (including Issuance of Guidance Documents)	Final

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

VPDES general permit regulations expire every 5 years and must be re-issued in order for permit coverage to be available to new permittees and existing permittees that do not submit a registration statement in a timely manner. If the general permit is not re-issued, the regulated community will need to obtain an individual permit to conduct the regulated activity. For this reason, the costs associated with obtaining an individual permit are compared with the costs associated with general permit coverage. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>Presently there are 1,235 regulated entities covered by this general permit. Reissuance of this general permit allows new entities to be able to obtain coverage for conducting this regulated activity.</p> <p>New requirements resulting from proposed regulatory changes are very limited and include:</p> <ul style="list-style-type: none"> • Clarified that primary airports are eligible for coverage under Sector AD of this permit and added an “Airport Deicing Operations” condition to address such operations. • Updated benchmark monitoring parameters (two removed) • Consolidated Chesapeake Bay TMDL compliance requirements <p>Direct Costs: No increase in direct economic cost to regulated entities expected due to the above changes.</p> <p>Indirect Costs: No increase in indirect costs to regulated entities expected due to the above changes.</p> <p>Direct Benefits: The re-issuance of this general permit provides the regulated community with a streamlined, less burdensome approach to obtaining coverage for conducting specific regulated activities. Primary airports, in particular, will benefit from eligibility for coverage. Further, there are potential cost savings (reduced monitoring/sampling costs) for regulated entities that were previously required to sample for the benchmarks that are proposed to be removed from the regulation. Regulating discharges of pollutants to state waters results in cleaner waters for public water supplies, fishing, and recreational uses.</p> <p>Indirect Benefits: The reissuance of the general permit may indirectly benefit economic development because it allows for the issuance of a general permit that is protective of human health and the environment that is less burdensome on the regulated community than an Individual VPDES permit. Regulating discharges into state waters benefits tourism and the seafood industry. Cleaner waters may also increase tourism related to recreational uses of state waters.</p>
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(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Unable to be quantified.	(b) Unable to be quantified.
(3) Net Monetized Benefit	Unknown	
(4) Other Costs & Benefits (Non-Monetized)	n/a	
(5) Information Sources		

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Available general cost and benefit data concerning permit fees is provided in Table 1.c. Given the general character of this data, it would also be applicable to the general permit under the status quo (i.e., no change to the regulation).</p> <p>In terms of industrial stormwater costs generally, EPA estimated the average annual cost of complying with the 2015 MSGP is around \$2,752 for new facilities and \$2,199 for existing facilities. EPA also found that the requirements of the 2015 MSGP are economically practicable under BPT criteria and economically achievable under BAT criteria. (U.S. Environmental Protection Agency 2015 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) – Fact Sheet, pages 20-21). General permits impose lower administrative costs on permittees compared with individual permits. (See, Table 1.c).</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) estimates direct costs based on EPA data range from \$2199 to \$2752. See information in table 1c concerning permit fees.	(b) Unable to be quantified. See information in table 1c concerning permit fees.
(3) Net Monetized Benefit	General permit coverage reduces permit fees to a permit holder by \$18,515 per 5-year permit term.	

(4) Other Costs & Benefits (Non-Monetized)	General permits reduce the administrative burden on the agency and the applicant by simplifying the permitting process for entities that conduct similar activities while still protecting human health and the environment.
(5) Information Sources	See table 1c U.S. Environmental Protection Agency 2015 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) – Fact Sheet https://www.epa.gov/sites/default/files/2015-10/documents/msgp2015_fs.pdf

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Point source discharges of pollutants and industrial stormwater from industrial activities must be authorized by a VPDES permit under the CWA and State Water Control Law. Thus, no non-regulatory options were determined to be available.</p> <p>Regulating activities through the issuance of general permit regulations is an alternative streamlined approach that is used to regulate entities that conduct similar activities. If the general permit regulation did not exist, individual permits would be required to be obtained for these regulated activities. A benefit of this general permit is its lower cost to permittees relative to the cost of obtaining an individual permit. The permit fee for operators to obtain coverage under this general permit is \$500. If this general permit were not available, these operators would be required to obtain an individual VPDES permit, and the initial application fee would be \$7,200 (assumes VPDES Industrial Stormwater). An annual permit maintenance fee of \$2,363 would also apply (total of \$11,815 per permittee/ 5-year permit term). This does not account for the longer lead time to obtain an individual permit and the increased burden on DEQ staff resources that would result.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) \$7,200 for initial Individual Permit coverage. \$2,363 annual maintenance fee. Total: \$19,015 per 5-year permit term.	(b) The registration fee for general permit coverage is \$500 for the 5-year permit term.
(3) Net Monetized Benefit	General permit coverage reduces permit fees to a permit holder by \$18,515 per 5-year permit term	

(4) Other Costs & Benefits (Non-Monetized)	General permits reduce the administrative burden on the agency and the applicant by simplifying the permitting process for entities that conduct similar activities while still protecting human health and the environment.
(5) Information Sources	<p>9VAC25-20-110. Fee schedules for individual VPDES and VPA new permit issuance, and individual VWP, SWW, and GWW new permit issuance and existing permit reissuance.</p> <p>9VAC25-20-130. Fees for filing registration statements or applications for general permits issued by the board.</p> <p>9VAC25-20-142. Permit maintenance fees.</p>

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	No costs or benefit impacts on local partners are expected due to the limited extent of changes being made to the general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, an individual permit would be required to conduct the regulated activity. Localities utilizing the general permit regulation incur the same costs and benefits as listed in table 1.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) n/a	(b) n/a
(3) Other Costs & Benefits (Non-Monetized)	n/a	
(4) Assistance	n/a	
(5) Information Sources	n/a	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	No costs or benefit impacts on families are expected due to the limited extent of change being made to the general permit regulation. Single family residences do not typically conduct an activity that would be regulated by this general permit.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) n/a	(b) n/a
(3) Other Costs & Benefits (Non-Monetized)	Families could potentially benefit from industry’s use of general permits. If this general permit did not exist, individual permits would be required for these activities, and the additional costs would likely be passed on to consumers, which would potentially include families.	
(4) Information Sources	<p>9VAC25-20-110. Fee schedules for individual VPDES and VPA new permit issuance, and individual VWP, SWW, and GWW new permit issuance and existing permit reissuance.</p> <p>9VAC25-20-130. Fees for filing registration statements or applications for general permits issued by the board.</p> <p>9VAC25-20-142. Permit maintenance fees.</p>	

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	No costs or benefit impacts on small businesses are expected due to the limited extent of change being made to the general permit regulation. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, an individual permit would be required to conduct the regulated activity. Small businesses utilizing the general permit regulation incur the same costs and benefits as listed in table 1.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) n/a	(b) n/a
(3) Other Costs & Benefits (Non-Monetized)	No costs or benefit impacts on small businesses are expected due to the limited extent of changes being made to the general permit regulation. If this general permit did not exist, individual permits and their associated fees and application process would be required for these activities,	
(4) Alternatives	n/a	
(5) Information Sources	n/a	

Changes to Number of Regulatory Requirements

For each individual VAC Chapter amended, repealed, or promulgated by this regulatory action, list (a) the initial requirement count, (b) the count of requirements that this regulatory package is adding, (c) the count of requirements that this regulatory package is reducing, (d) the net change in the number of requirements. This count should be based upon the text as written when this stage was presented for executive branch review. Five rows have been provided, add or delete rows as needed. In the last row, indicate the total number for each column.

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Net Change
9VAC25-151-60	Statutory:	5	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-70	Statutory:	137	0	17	-17
	Discretionary:	0	0	0	0
9VAC25-151-80	Statutory:	37	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-90	Statutory:	6	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-100	Statutory:	1	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-110	Statutory:	2	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-120	Statutory:	2	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-130	Statutory:	4	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-140	Statutory:	1	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-150	Statutory:	21	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-160	Statutory:	9	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-180	Statutory:	3	0	0	0
	Discretionary:	0	0	0	0
9VAC25-151-190	Statutory:	9	0	0	0
	Discretionary:	0	0	0	0
	Statutory:	9	0	0	0

9VAC25-151-200	Discretionary:	0	0	0	0	
9VAC25-151-210	Statutory:	24	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-151-220	Statutory:	26	0	1	-1	
	Discretionary:	0	0	0	0	
9VAC25-151-240	Statutory:	9	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-151-280	Statutory:	2	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-151-320	Statutory:	4	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-151-340	Statutory:	1	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-151-350	Statutory:	2	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-151-370	Statutory:	1	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-151-380	Statutory:	0	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-151-390	Statutory:	1	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-151-400	Statutory:	0	16 ¹	0	+16	
	Discretionary:	0	0	0	0	
					Total Net Change of Statutory Requirements:	-2
					Total Net Change of Discretionary Requirements:	0

¹ A condition with 16 requirements was removed from Section 9VAC25-151-70 and placed into a new Section 9VAC25-151-400.

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved*	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-151-entire chapter-see table 1c for further explanation	This is the reissuance of a general permit. If the general permit regulation did	\$11,815 per permittee/ 5-year permit term for an individual permit	\$500 for 5 year general permit coverage	Currently 1,235 regulated entities covered by this general permit. Cost savings of \$11,315 per

	not exist, individual permits would be required to be obtained for these regulated activities.			permittee covered by the general permit Cost savings to the regulated community- \$13,974,025 over 5 year permit term
9VAC25-151-entire chapter	Reissuance of the general permit reduces the time required to obtain permit coverage	Average amount of time to issue individual permit (FY2021 data*) - 322 days	Average amount of time to issue general permit coverage (FY2021 data*) - 79 days	Permittee obtains permit coverage on average 243 days sooner under the general permit.

*Processing time data obtained from General Assembly Report RD848 - Permit Fee Program Evaluation – January 2022

Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved*	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
NA		

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Length	New Length	Net Change in Length
NA			

*If the agency is modifying a guidance document that has regulatory requirements, it should report any change in requirements in the appropriate chart(s).

TAB F



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219

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(800) 592-5482

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Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

MEMORANDUM

TO: Members of the State Water Control Board

FROM: Elizabeth McKercher
Director, Water Planning Division

A handwritten signature in black ink that reads "Elizabeth McKercher".

DATE: 11/14/2023

SUBJECT: Final amendments to the Local and Regional Water Supply Planning Regulation (9VAC25-780)

At the November 30, 2023, meeting of the State Water Control Board (Board), the Board will consider the approval of final amendments to the Local and Regional Water Supply Planning Regulation (9VAC25-780). The amendments were developed in response to the directive created by Chapter 1105 of the 2020 Acts of Assembly (HB 542) that requires the Board to adopt regulations designating regional planning areas based primarily on river basin, identifying the particular regional planning area in which each locality shall participate, including which local stakeholder groups shall or may participate in coordinated water resource planning, and requiring the Department of Environmental Quality (Department) to ensure each regional planning area will identify water supply risks and strategies for addressing those risks. The amendments reflect changes in the statute due to Chapter 356 of the 2022 Acts of Assembly (SB 657) mandating revision of the term “board” to “department” where appropriate in the regulation. The amendments also address changes in the statute resulting from Chapter 331 of the 2022 Acts of Assembly (HB 1297), which requires the Board to provide a mechanism for localities to request a change in their regional planning area, and Chapters 36 and 37 of the 2023 Acts of Assembly (HB 2095 and SB 1149), which require designation of a distinct regional planning area for all localities sourcing water from the Potomac River, which is represented by the Northern Virginia Regional Planning Area in 9VAC25-780-45.

This regulatory action amends the existing local and regional water supply planning regulation to designate regional planning areas based primarily on river basin, identify the planning area in which locality shall participate, require that localities plan regionally and identify regional

planning areas for each locality, develop requirements for the identification of water supply risks and strategies to address those risks, and revise the water supply plan development, submission, and review procedures to align with the new requirements including clarifying the roles and responsibilities for localities, stakeholders, and the Department. This memorandum provides a brief background on the Local and Regional Water Supply Planning Regulation and the regulatory process to date.

BACKGROUND

The Local and Regional Water Supply Planning Regulation (9VAC25-780) was promulgated in 2005 in accordance with section 62.1-44.38:1 A of the Code of Virginia, which required the State Water Control Board (Board) to establish a comprehensive water supply planning process for the development of local, regional, and state water supply plans (Plan). This action was largely in response to the 2001-2002 drought during which many public water supplies within the Commonwealth experienced inadequate supply to meet demands. The regulation requires localities to develop plans that include local information on water sources, current and future demand, and assessments of whether current sources are sufficient to meet future demands. The Department then uses this information to develop statewide evaluations of current and future use and conducts cumulative impact analyses of water resources based on locally derived information as well as water use information collected through other reporting programs.

Under the current regulation, localities can choose to develop a plan independently (local plan) or may choose to plan regionally with other localities (regional plan). In total, 48 water supply plans were submitted in 2008, of which 10 were local plans and 38 were regional plans with the majority of those consisting of one county and one or more cities or incorporated towns located within the boundaries of the county. Planning regions were not specifically determined based on river basin or with respect to shared sources of water supply. In a 2016 report published in response to a directive by the General Assembly to evaluate Virginia's water resources management and planning programs, the Joint Legislative Audit and Review Commission concluded that plans developed under the existing regulation were not sufficiently regional and that as a result, localities may miss opportunities for collaboration that would improve access to water across the Commonwealth.

As noted above, this regulatory action was initiated in response to Chapter 1105 of the 2020 Acts of Assembly (HB 542), which required the Board to adopt regulations that addressed the new statutory requirements discussed in the above section.

The Notice of Intended Regulatory Action was published on June 7, 2021 and the associated public comment period ran through July 22, 2021. DEQ received five comments during the comment period which each nominated one or more individuals for agency consideration on the Regulatory Advisory Panel (RAP). No requests for a public hearing were received during the comment period. A summary of the comments and agency response is included in the agency background document (Attachment C). The Director appointed a Regulatory Advisory Panel (RAP) comprised of 25 individual members. The RAP met a total of six times before concluding business on April 6, 2022.

Meeting summaries can be found on the agency website [here](https://www.deq.virginia.gov/our-programs/water/water-quantity/water-supply-planning/hb542-regulatory-action) (https://www.deq.virginia.gov/our-programs/water/water-quantity/water-supply-planning/hb542-regulatory-action).

The proposed regulation was made available for public comment, May 22, 2023 – July 21, 2023. Ten comment letters were received. Comments and responses are summarized in the Town Hall Agency Background Document (Attachment B). Ten (10) comment response letters were received, in total containing 68 individual comments. Comments expressing support focused on progress toward a more comprehensive water supply planning process, facilitation of collaborative and productive regional water supply plans, a basin-wide approach, a consistent water supply planning process with enhanced public participation, and an increased focus on consideration of all beneficial uses. Comments expressing concern or suggestions for revision were most frequently on the topics of regional planning area composition, water supply risks, water availability, listed compliance items, exempt withdrawals, and beneficial uses.

The Office of the Attorney General will be sent the regulation for certification of authority to adopt the amendments.

A detailed summary of the final proposed amendments are included in Table 1 of the Agency Background Document (Attachment B). A brief summary of the amendments is provided below. Where section titles are amended, the amended title is provided below.

SUMMARY OF PROPOSED AMENDMENTS TO LOCAL AND REGIONAL WATER SUPPLY PLANNING REGULATION (9VAC25-780)

Title of Chapter

Section 10 – Application Requirements – Adjustments to language based on statutory requirement for all localities to participate in cross-jurisdictional, coordinated water resource planning, and to develop and submit, with the other local governments within a regional planning area, a single jointly produced regional water plan to the department. Other minor language changes to address the new regional planning requirement.

Section 20 – Purpose of Chapter – Addition of language from statute to match additions in the statute to define purpose of the regulation.

Section 30 – Definitions – Revised or removed several definitions related to programs, plans, and planning areas to accommodate new requirements for regional planning and elimination of local plans. Revised definition of beneficial use to refer to the definitions included in 9VAC25-210 and 9VAC25-610 (surface water and groundwater withdrawal permitting regulations). Revised definition of “State Water Control Board” to address Chapter 356 of the 2022 Acts of Assembly (Senate Bill 657). Added definitions for “Regional Planning Area”, “Stakeholder”, “State Water Resources and Supply Plan”, “Water Authority”, “Water Conservation”, and “Water Supply Risk.”

Section 40 – Program Development - Section repealed. Requirements now included in Section 50.

Section 45 – Designation of Regional Planning Areas - Addition of new section which identifies the regional planning areas and the members of those planning areas for purposes of this regulation, as well as the process for a locality to request a change in the planning area as required by Chapter 331 of the 2022 Acts of Assembly.

Section 50 – Preparation of local information and regional water supply plan; submission of requirements for a regional water supply plan – Changes in this section were to address the regional scope of planning and generally clarified existing requirements while adding several items required by the new statutory changes. Clarified which requirements within a water supply plan are the responsibility of local governments, identified requirement for regional plan to be submitted no later than five years after effective date of regulation, and outlined the plan development process, and clarified responsibilities for regional planning units and the Department. Added requirement for Department to convene kick-off meetings and maintain a list of current representatives except in cases where a regional planning unit notifies the Department that a planning district commission will manage these tasks in lieu of the Department. Added language to address participation of stakeholder groups in plan development as required by new statutory language. Revised language clarifying what kinds of information and sources of information are considered “readily available”, and thus should be utilized during plan development. Clarified public process and local ordinance adoption in order for a draft plan to be considered final, including adding language describing the process for when a local government fails to adopt the resolution and the regional planning unit may submit the plan without the local government’s authorization. Added language that plans should reflect consensus of local governments and that disagreements should be documented in the plan. Reordered requirements for appending support materials to the plan such as local ordinances adopting the plan and drought response plans, among other items. Since the proposed stage, those requirements have been clarified to be reference documents. Clarified the five-year plan review process, under what conditions a plan should be updated via a supplement, and that public notice of supplements are not required. Revision of numbering throughout section to accommodate revisions.

Section 55 – Public participation in regional water supply plans – Added new section to clarify existing requirements related to public participation and to meet new statutory requirements for increased participation in plan development of stakeholders and public.

Section 60 – State role in regional water supply plan preparation – Added new requirements for the Department as included in the new statutory language and added requirement related to regional plan kick-off meetings. Minor revisions to address change to regional plan requirement. Revised usage of Board to Department per Chapter 356 of the 2022 Acts of Assembly (Senate Bill 657).

Section 70 – Existing water source information – Revised section to clarify requirements to account for regional planning including defining local government responsibility to collect information within their jurisdiction and Department responsibility to provide information to be used by local governments, several minor clarifications to existing requirements for contractual agreements to transfer water between water systems, and removed a requirement to summarize findings of source water assessment or wellhead protection programs. Revised usage of Board to

Department per Chapter 356 of the 2022 Acts of Assembly (Senate Bill 657). Since the proposed stage, there was a minor editorial spelling correction.

Section 80 – Existing water use information – Revised section to clarify requirements to account for regional planning including defining responsibilities for local governments and the Department with respect to existing water use information.

Section 90 - Existing water resource information – Revised section to clarify local government responsibility for information requirements, clarified that information need only be derived from existing readily available sources or information provided by the Department. Since the proposed stage, revised language related to assessments of threats to water quantity and quality to instead address water availability based on instream flow necessary to support fish and wildlife resources and habitat.

Section 100 - Projected water demand information; Statement of need and alternatives – Revised section to clarify local government responsibilities with respect to projected demand information and standardize water demand estimate period of 30 years. Requirements related to statement of needs and alternatives previously included in section 130 (section repealed) were consolidated into this section with revisions to clarify local government responsibility and regional planning unit responsibilities in evaluating need and identifying alternatives. Since the proposed stage, there were two editorial corrections to regulation references, and based on public comment clarifications were made the terminology of practicable alternatives and consideration of information provided by the Department.

Section 110 - Water demand management information – Revised section to clarify local government responsibility in providing information related to water demand management and other minor revisions to address renumbering and language changes necessary to accommodate regional planning requirements.

Section 120 - Drought response and contingency plans – Revised section to clarify local government responsibility for developing a drought response and contingency plan, addition of language to address conflicts between drought plans and withdrawal permits, and addition of language allowing development of a regional drought plan if the regional planning unit chooses to do so. Since the proposed stage, this section has also been revised to incorporate the statutory changes in 2023 Virginia Acts of Assembly Chapter 36 (HB 2095) and Chapter 37 (SB1149) by recognizing localities that include any portion of the service area of a water supply utility in the Commonwealth that uses the Potomac River as a water supply source as a distinct regional planning area, and that such plans shall incorporate the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (2000).

Section 125 – Identification of water supply risks and proposed regional strategies – Addition of new section to address new statutory requirement for regional water supply plans to identify water supply risks and propose regional strategies to address them. Section requires regional water supply plans to identify water supply risks and to assess the likelihood and severity of the risk. The section requires consideration of specific risks identified in the proposed regulation as well as any other risks identified by local governments within the regional planning area. For each risk

identified, the language requires identifying and evaluating a reasonable range of potential regional strategies or projects to address the risks. Since the proposed stage, language has been added based on public comment to clarify that only relevant risks shall be identified.

Section 130 – Statement of need and alternatives – Section repealed, and requirements included in Section 100.

Section 140 - Review of regional water supply plans – Section revised to reflect the requirement for regional water supply plans and therefore elimination of references to local water supply plans and local programs. Addition of new plan requirements such as the identification of water supply risks and regional strategies to the list of elements that will be reviewed by the Board. Section was also revised to include a more detailed list of the contents of the State Water Resources and Supply Plan based on statutory requirements. The State Water Resources and Supply Plan is produced by the Department and made available for local governments for use in plan development. Revised usage of Board to Department per Chapter 356 of the 2022 Acts of Assembly (Senate Bill 657). Since the proposed stage, language has been updated to be consistent with statutory definition of beneficial uses.

Section 150 - Public notice and public comment period – Minor revisions in language to account for changes from local plans to regional plans and correction of agency name.

Section 160 – Public meetings - Minor revisions in language to account for changes from local plans to regional plans.

Section 180 – Enforcement – Addition of language clarifying that a local government shall not be liable if a local government or other entity within their regional planning unit fails to comply with any requirement within this chapter.

STAFF RECOMMENDATION

Staff recommend that the State Water Control Board adopt the amendments to the Local and Regional Water Supply Planning Regulation (9VAC25-780) as final regulations.

ATTACHMENTS

- A. Draft Amendments to the Local and Regional Water Supply Planning Regulation (9VAC25-780)
- B. Agency Background Document – TH-03
- C. Economic Review document
- D. General Assembly Mandates
 - Chapter 1105 (HB542) of the 2020 Acts of Assembly
 - Chapter 331 (HB1297) of the 2022 Acts of Assembly
 - Chapter 356 (SB657) of the 2022 Acts of Assembly
 - Chapter 36 (HB2095) of the 2023 Acts of Assembly

Chapter 37 (SB1149) of the 2023 Acts of Assembly

PRESENTER CONTACT INFORMATION

Name: Weedon Cloe, Office of Water Supply Manager

Phone: (804) 754-5457

Email: William.Cloe@deq.virginia.gov

VIRGINIA ACTS OF ASSEMBLY -- 2020 SESSION

CHAPTER 1105

An Act to amend and reenact §§ 62.1-44.36, 62.1-44.38, and 62.1-44.38:1 of the Code of Virginia, relating to water supply plans; state and local.

[H 542]

Approved April 10, 2020

Be it enacted by the General Assembly of Virginia:

1. That §§ 62.1-44.36, 62.1-44.38, and 62.1-44.38:1 of the Code of Virginia are amended and reenacted as follows:

§ 62.1-44.36. Responsibility of State Water Control Board; formulation of policy.

Being cognizant of the crucial importance of the Commonwealth's water resources to the health and welfare of the people of Virginia; and of the need of a water supply to assure further industrial growth and economic prosperity for the Commonwealth, and recognizing the necessity for continuous cooperative planning and effective state-level guidance in the use of water resources, the State Water Control Board is assigned the responsibility for planning the development, conservation and utilization of Virginia's water resources.

The Board shall continue the study of existing water resources of ~~this~~ *the* Commonwealth, means and methods of conserving and augmenting such water resources, and existing and contemplated uses and needs of water for all purposes. Based upon these studies and ~~such~~ policies as *that* have been initiated by the Division of Water Resources, and after an opportunity has been given to all concerned state agencies and political subdivisions to be heard, the Board shall formulate a coordinated policy for the use and control of all the water resources of the Commonwealth and issue a statement thereof. In formulating the Commonwealth's water resources policy, the Board shall, among other things, take into consideration ~~but not be limited to~~ the following principles and policies:

(1) 1. Existing water rights are to be protected and preserved subject to the principle that all of the state waters belong to the public for use by the people for beneficial purposes without waste;

(2) 2. Adequate and safe supplies ~~should~~ *shall* be preserved and protected for human consumption, while conserving maximum supplies for other beneficial uses. When proposed uses of water are in mutually exclusive conflict or when available supplies of water are insufficient for all who desire to use them, preference shall be given to human consumption purposes over all other uses;

(3) 3. It is in the public interest that integration and coordination of uses of water, *especially by localities with shared water supplies*, and augmentation of existing supplies for all beneficial purposes be achieved for the maximum economic development thereof for the benefit of the Commonwealth as a whole;

(4) 4. In considering the benefits to be derived from drainage, consideration shall also be given to possible harmful effects upon ground water supplies and protection of wildlife;

(5) 5. The maintenance of stream flows sufficient to support aquatic life and to minimize pollution shall be fostered and encouraged;

(6) 6. Watershed development policies shall be favored, whenever possible, for the preservation of balanced multiple uses, and project construction and planning with those ends in view shall be encouraged;

(7) 7. Due regard shall be given in the planning and development of water recreation facilities to safeguard against pollution.

The statement of water resource policy shall be revised from time to time whenever the Board ~~shall~~ *determine* ~~determines~~ it to be in the public interest.

The initial statement of state water resource policy and any subsequent revisions thereof shall be furnished by the Board to all state agencies and to all political subdivisions of the Commonwealth.

§ 62.1-44.38. Plans and programs; registration of certain data by water users; advisory committees; committee membership for federal, state, and local agencies; water supply planning assistance.

A. The Board shall prepare plans and programs for the management of the water resources of ~~this~~ *the* Commonwealth in such a manner as to encourage, promote, and secure the maximum beneficial use and control thereof. These plans and programs shall be prepared for each major river basin of ~~this~~ *the* Commonwealth, and appropriate subbasins therein, including specifically the Potomac-Shenandoah River Basin, the Rappahannock River Basin, the York River Basin, the James River Basin, the Chowan River Basin, the Roanoke River Basin, the New River Basin, *and* the Tennessee-Big Sandy River Basin, and for those areas in the Tidewater and elsewhere in the Commonwealth not within these major river basins. Reports for each basin shall be published by the Board.

B. 1. In preparing river basin plan and program reports enumerated in subsection A of ~~this section~~,

the Board shall (i) estimate current water withdrawals and use for agriculture, industry, domestic use, and other significant categories of water users; (ii) project water withdrawals and use by agriculture, industry, domestic water use, and other significant categories of water users; (iii) estimate, for each major river and stream, the minimum instream flows necessary during drought conditions to maintain water quality and avoid permanent damage to aquatic life in streams, bays, and estuaries; (iv) evaluate, to the extent practicable, the ability of existing subsurface and surface waters to meet current and future water uses, including minimum instream flows, during drought conditions; (v) evaluate, in cooperation with the Virginia Department of Health and local water supply managers, the current and future capability of public water systems to provide adequate quantity and quality of water; (vi) ~~identify water management problems and alternative water management plans to address such problems~~ *estimate, using a data-driven method that includes multiple reasonable assumptions about supply and demand over varying time frames, the risk that each locality and region will experience water supply shortfalls;* and (vii) evaluate hydrologic, environmental, economic, social, legal, jurisdictional, and other aspects of each alternative management strategy identified.

2. *The Board shall direct the Department of Environmental Quality (the Department) in its facilitation of regional water planning efforts. The Department shall (i) ensure that localities coordinate sufficiently in the development of regional water plans; (ii) provide planning, policy, and technical assistance to each regional planning area, differentiated according to each area's water supply challenges, existing resources, and other factors; and (iii) ensure that each regional plan clearly identifies the region's water supply risks and proposes strategies to address those risks.*

C. The Board may, by regulation, require each water user withdrawing surface or subsurface water or both during each year to register, by a date to be established by the Board, water withdrawal and use data for the previous year including the estimated average daily withdrawal, maximum daily withdrawal, sources of water withdrawn, and volume of wastewater discharge, provided that the withdrawal exceeds one million gallons in any single month for use for crop irrigation, or that the daily average during any single month exceeds 10,000 gallons per day for ~~any other users~~ *user*. Location data shall be provided by each user in a coordinate system specified by the Board.

D. The Board shall establish advisory committees to assist it in the formulation of such plans or programs and in formulating recommendations called for in subsection E ~~of this section~~. In this connection, the Board may include committee membership for branches or agencies of the federal government, branches or agencies of the Commonwealth, branches or agencies of the government of any state in a river basin located within that state and Virginia, the political subdivisions of the Commonwealth, and all persons and corporations interested in or directly affected by any proposed or existing plan or program.

E. The Board shall prepare plans or programs and shall include in reports prepared under subsection A ~~of this section~~ recommended actions to be considered by the General Assembly, the agencies of the Commonwealth and local political subdivisions, the agencies of the federal government, or any other persons that the Board may deem necessary or desirable for the accomplishment of plans or programs prepared under subsection B ~~of this section~~.

F. In addition to the preparation of plans called for in subsection A ~~of this section~~, the Board, upon written request of a political subdivision of the Commonwealth, shall provide water supply planning assistance to such political subdivision, ~~to include~~ *including* assistance in preparing drought management strategies, water conservation programs, evaluation of alternative water sources, state enabling legislation to facilitate a specific situation, applications for federal grants or permits, or other such planning activities to facilitate intergovernmental cooperation and coordination.

§ 62.1-44.38:1. Comprehensive water supply planning process; state, regional, and local water supply plans.

A. The Board, with ~~the~~ advice and guidance from the Commissioner of Health, local governments, public service authorities, and other interested parties, shall establish a comprehensive water supply planning process for the development of local, regional, and state water supply plans consistent with the provisions of this chapter. This process shall be designed to (i) ensure that adequate and safe drinking water is available to all citizens of the Commonwealth; (ii) encourage, promote, and protect all other beneficial uses of the Commonwealth's water resources; ~~and~~; (iii) encourage, promote, and develop incentives for alternative water sources, including ~~but not limited to~~ desalinization; *and (iv) encourage the development of cross-jurisdictional water supply projects.*

B. ~~Local or regional water supply plans shall be prepared and submitted to the Department of Environmental Quality in accordance with~~ *The Board shall adopt regulations designating regional planning areas based primarily on river basins. The Board may, as appropriate, designate multiple regional planning areas within a single river basin in order to enhance the manageability of planning within such basin. The regulations shall identify the particular regional planning area in which each locality shall participate and shall state which local stakeholder groups, including local governments, industrial and agricultural water users, public water suppliers, developers and economic development organizations, and conservation and environmental organizations, shall or may participate in coordinated water resource planning.*

C. 1. Each locality in a regional planning area shall participate in cross-jurisdictional, coordinated water resource planning. Such local coordination shall accommodate existing regional groups that have already developed water supply plans, including planning district commissions, and other regional planning entities as appropriate.

2. Each locality in a regional planning area shall develop and submit, with the other localities in that planning area, a single jointly produced regional water supply plan to the Department of Environmental Quality (the Department). Such regional water supply plan shall (i) clearly identify the region's water supply risks and (ii) propose regional strategies to address those water supply risks.

3. Each regional water supply plan also shall comply with applicable criteria and guidelines developed by the Board. Such criteria and guidelines shall take into account existing local and regional water supply planning efforts and requirements imposed under other state or federal laws. The criteria and guidelines established by the Board shall not prohibit a town from entering into a regional water supply plan with an adjacent county in the same regional planning area.

4. This section is intended to inform any regional water resource planning being done in the Commonwealth pursuant to interstate compacts.

D. The Board and the Department shall prioritize the allocation of planning funds and other funds to localities that sufficiently participate in regional planning.

E. In accordance with subdivision B 2 of § 62.1-44.38, the Department shall facilitate regional planning and provide assistance to each regional planning area as needed.

VIRGINIA ACTS OF ASSEMBLY -- 2022 SESSION

CHAPTER 331

An Act to amend and reenact § 62.1-44.38:1 of the Code of Virginia, relating to comprehensive water supply planning process.

[H 1297]

Approved April 11, 2022

Be it enacted by the General Assembly of Virginia:

1. That § 62.1-44.38:1 of the Code of Virginia is amended and reenacted as follows:

§ 62.1-44.38:1. Comprehensive water supply planning process; state, regional, and local water supply plans.

A. The Board, with advice and guidance from the Commissioner of Health, local governments, public service authorities, and other interested parties, shall establish a comprehensive water supply planning process for the development of local, regional, and state water supply plans consistent with the provisions of this chapter. This process shall be designed to (i) ensure that adequate and safe drinking water is available to all citizens of the Commonwealth; (ii) encourage, promote, and protect all other beneficial uses of the Commonwealth's water resources; (iii) encourage, promote, and develop incentives for alternative water sources, including desalinization; and (iv) encourage the development of cross-jurisdictional water supply projects.

B. The Board shall adopt regulations designating regional planning areas based primarily on river basins *as appropriate based on water supply sources. The Board shall consider existing interjurisdictional arrangements in designating regional planning areas.* The Board may, as appropriate, designate multiple regional planning areas within a single river basin in order to enhance the manageability of planning within such basin. The regulations shall identify the particular regional planning area in which each locality shall participate and shall state which local stakeholder groups, including local governments, industrial and agricultural water users, public water suppliers, developers and economic development organizations, and conservation and environmental organizations, shall or may participate in coordinated water resource planning. *The regulations shall further provide a mechanism for a locality to request a change of its designated regional planning area to an adjoining planning area that is based on water supply source, river basin, or existing or planned cross-jurisdictional relationship, which change shall be effective upon approval of the Department, notwithstanding the provisions of Article 2 (§ 2.2-4006 et seq.) of Chapter 40 of Title 2.2.*

C. 1. Each locality in a regional planning area shall participate in cross-jurisdictional, coordinated water resource planning. Such local coordination shall accommodate existing regional groups that have already developed water supply plans, including planning district commissions, and other regional planning entities as appropriate.

2. Each locality in a regional planning area shall develop and submit, with the other localities in that planning area, a single jointly produced regional water supply plan to the Department of Environmental Quality (the Department). Such regional water supply plan shall (i) clearly identify the region's water supply risks and (ii) propose regional strategies to address those water supply risks.

3. Each regional water supply plan also shall comply with applicable criteria and guidelines developed by the Board. Such criteria and guidelines shall take into account existing local and regional water supply planning efforts and requirements imposed under other state or federal laws. The criteria and guidelines established by the Board shall not prohibit a town from entering into a regional water supply plan with an adjacent county in the same regional planning area.

4. This section is intended to inform any regional water resource planning being done in the Commonwealth pursuant to interstate compacts.

D. The Board and the Department shall prioritize the allocation of planning funds and other funds to localities that sufficiently participate in regional planning.

E. In accordance with subdivision B 2 of § 62.1-44.38, the Department shall facilitate regional planning and provide assistance to each regional planning area as needed.

VIRGINIA ACTS OF ASSEMBLY -- 2022 SESSION

CHAPTER 356

An Act to amend and reenact §§ 3.2-401, 10.1-1186.3, 10.1-1306 through 10.1-1307.02, 10.1-1307.04, 10.1-1308.1 through 10.1-1314, 10.1-1315, 10.1-1316, 10.1-1318, 10.1-1320, 10.1-1320.1, 10.1-1322, 10.1-1322.4, 10.1-1333, 15.2-2403.3, as it may become effective, 15.2-5101, 28.2-1205.1, 46.2-1601, 62.1-44.3, as it is currently effective and as it may become effective, 62.1-44.14, 62.1-44.15:81, 62.1-44.15:83, 62.1-104, 62.1-242, and 62.1-255 of the Code of Virginia; to amend the Code of Virginia by adding in Article 1 of Chapter 3.1 of Title 62.1 a section numbered 62.1-44.6:1 and by adding sections numbered 62.1-248.2 and 62.1-263.1; and to repeal §§ 10.1-1322.01 and 62.1-44.15:02 of the Code of Virginia, relating to Air Pollution Control Board and State Water Control Board; authority of Department of Environmental Quality.

[S 657]

Approved April 11, 2022

Be it enacted by the General Assembly of Virginia:

1. That §§ 3.2-401, 10.1-1186.3, 10.1-1306 through 10.1-1307.02, 10.1-1307.04, 10.1-1308.1 through 10.1-1314, 10.1-1315, 10.1-1316, 10.1-1318, 10.1-1320, 10.1-1320.1, 10.1-1322, 10.1-1322.4, 10.1-1333, 15.2-2403.3, as it may become effective, 15.2-5101, 28.2-1205.1, 46.2-1601, 62.1-44.3, as it is currently effective and as it may become effective, 62.1-44.14, 62.1-44.15:81, 62.1-44.15:83, 62.1-104, 62.1-242, and 62.1-255 of the Code of Virginia are amended and reenacted and that the Code of Virginia is amended by adding in Article 1 of Chapter 3.1 of Title 62.1 a section numbered 62.1-44.6:1 and by adding sections numbered 62.1-248.2 and 62.1-263.1 as follows:

§ 3.2-401. Exclusions from chapter.

This chapter shall not apply to any agricultural activity to which: (i) Article 12 (§ 10.1-1181.1 et seq.) of Chapter 11 of Title 10.1; or (ii) a *water-related* permit issued by the ~~State Water Control Board,~~ *Department of Environmental Quality* applies.

§ 10.1-1186.3. Additional powers of Boards and the Department; mediation; alternative dispute resolution.

A. The State Air Pollution Control Board, the State Water Control Board, and the Virginia Waste Management Board, in their discretion, *or the Director, in his discretion*, may employ mediation as defined in § 8.01-581.21, or a dispute resolution proceeding as defined in § 8.01-576.4, in appropriate cases to resolve underlying issues, reach a consensus, or compromise on contested issues. An "appropriate case" means any process related to the development of a regulation *by the Board* or the issuance of a permit *by the Department* in which it is apparent that there are significant issues of disagreement among interested persons and for which the Board *or the Department* finds that the use of a mediation or dispute resolution proceeding is in the public interest. The Boards *or the Department* shall consider not using a mediation or dispute resolution proceeding if:

1. A definitive or authoritative resolution of the matter is required for precedential value, and such a proceeding is not likely to be accepted generally as an authoritative precedent;
2. The matter involves or may bear upon significant questions of state policy that require additional procedures before a final resolution may be made, and such a proceeding would not likely serve to develop a recommended policy for the ~~Board~~ *Department*;
3. Maintaining established policies is of special importance, so that variations among individual decisions are not increased and such a proceeding would not likely reach consistent results among individual decisions;
4. The matter significantly affects persons or organizations who are not parties to the proceeding;
5. A full public record of the proceeding is important, and a mediation or dispute resolution proceeding cannot provide such a record; and
6. The Board *or the Department* must maintain continuing jurisdiction over the matter with the authority to alter the disposition of the matter in light of changed circumstances, and a mediation or dispute resolution proceeding would interfere with the *Department or the Board's* fulfilling that requirement.

Mediation and alternative dispute resolution as authorized by this section are voluntary procedures which supplement rather than limit other dispute resolution techniques available to the Boards *or the Department*. Mediation or a dispute resolution proceeding may be employed in the issuance of a permit only with the consent and participation of the permit applicant and shall be terminated at the request of the permit applicant.

B. The decision to employ mediation or a dispute resolution proceeding is in a Board's *or the Department's* sole discretion and is not subject to judicial review.

C. The outcome of any mediation or dispute resolution proceeding shall not be binding upon a Board

or the Department, but may be considered by a Board the Department in issuing a permit or by a Board in promulgating a regulation.

D. Each Board and the Department shall adopt rules and regulations, in accordance with the Administrative Process Act, for the implementation of this section. Such rules and regulations shall include: (i) standards and procedures for the conduct of mediation and dispute resolution, including an opportunity for interested persons identified by the Board Department to participate in the proceeding; (ii) the appointment and function of a neutral, as defined in § 8.01-576.4, to encourage and assist parties to voluntarily compromise or settle contested issues; and (iii) procedures to protect the confidentiality of papers, work product or other materials.

E. The provisions of § 8.01-576.10 concerning the confidentiality of a mediation or dispute resolution proceeding shall govern all such proceedings held pursuant to this section except where the Department or a Board uses or relies on information obtained in the course of such proceeding in issuing a permit or promulgating a regulation, respectively.

Nothing in this section shall create or alter any right, action or cause of action, or be interpreted or applied in a manner inconsistent with the Administrative Process Act (§ 2.2-4000 et seq.), with applicable federal law or with any applicable requirement for the Commonwealth to obtain or maintain federal delegation or approval of any regulatory program.

§ 10.1-1306. Inspections, investigations, etc.

The Board Department shall make, or cause to be made, such investigations and inspections and do such other things as are reasonably necessary to carry out the provisions of this chapter, within the limits of the appropriations, study grants, funds, or personnel which are available for the purposes of this chapter, including the achievement and maintenance of such levels of air quality as will protect human health, welfare and safety and to the greatest degree practicable prevent injury to plant and animal life and property and which will foster the comfort and convenience of the people of the Commonwealth and their enjoyment of life and property and which will promote the economic and social development of the Commonwealth and facilitate enjoyment of its attractions.

§ 10.1-1307. Further powers and duties of Board and Department.

A. The Board shall have the power to control and regulate its internal affairs; *The Department shall have the power to* initiate and supervise research programs to determine the causes, effects, and hazards of air pollution; initiate and supervise statewide programs of air pollution control education; cooperate with and receive money from the federal government or any county or municipal government, and receive money from any other source, whether public or private; develop a comprehensive program for the study, abatement, and control of all sources of air pollution in the Commonwealth; and advise, consult, and cooperate with agencies of the United States and all agencies of the Commonwealth, political subdivisions, private industries, and any other affected groups in furtherance of the purposes of this chapter.

B. The Board may adopt by regulation emissions standards controlling the release into the atmosphere of air pollutants from motor vehicles, only as provided in § 10.1-1307.05 and Article 22 (§ 46.2-1176 et seq.) of Chapter 10 of Title 46.2.

C. After any regulation has been adopted by the Board pursuant to § 10.1-1308, ~~it~~ *the Department* may ~~in its discretion~~ grant local variances therefrom, if it finds after an investigation and hearing that local conditions warrant; *except that no local variances shall be granted from regulations adopted by the Board pursuant to § 10.1-1308 related to the requirements of subsection E of §10.1-1308 or Article 4 (§ 10.1-1329 et seq.).* If local variances are permitted, the Board Department shall issue an order to this effect. Such order shall be subject to revocation or amendment at any time if the Board Department, after a hearing, determines that the amendment or revocation is warranted. Variances and amendments to variances shall be adopted only after a public hearing has been conducted pursuant to the public advertisement of the subject, date, time, and place of the hearing at least 30 days prior to the scheduled hearing. The hearing shall be conducted to give the public an opportunity to comment on the variance.

D. After the Board has adopted the regulations provided for in § 10.1-1308, ~~it~~ *the Department* shall have the power to: (i) initiate and receive complaints as to air pollution; (ii) hold or cause to be held hearings and enter orders diminishing or abating the causes of air pollution and orders to enforce ~~its~~ *the Board's* regulations pursuant to § 10.1-1309; and (iii) institute legal proceedings, including suits for injunctions for the enforcement of ~~its~~ orders, regulations, and the abatement and control of air pollution and for the enforcement of penalties.

E. The Board in making regulations ~~and~~; *the Department* in approving variances, control programs, or permits; and the courts in granting injunctive relief under the provisions of this chapter, shall consider facts and circumstances relevant to the reasonableness of the activity involved and the regulations proposed to control it, including:

1. The character and degree of injury to, or interference with, safety, health, or the reasonable use of property which is caused or threatened to be caused;
2. The social and economic value of the activity involved;
3. The suitability of the activity to the area in which it is located, *except that consideration of this factor shall be satisfied if the local governing body of a locality in which a facility or activity is*

proposed has resolved that the location and operation of the proposed facility or activity is suitable to the area in which it is located; and

4. The scientific and economic practicality of reducing or eliminating the discharge resulting from such activity.

F. ~~The Board may designate one of its members, the Director, or a staff assistant to Department shall~~ conduct the hearings provided for in this chapter. ~~A record of the hearing shall be made and furnished to the Board for its use in arriving at its decision.~~

G. The Board shall not:

1. Adopt any regulation limiting emissions from wood heaters; or
2. Enforce against a manufacturer, distributor, or consumer any federal regulation limiting emissions from wood heaters adopted after May 1, 2014.

H. ~~The Board~~ Department shall submit an annual report to the Governor and General Assembly on or before October 1 of each year on matters relating to the Commonwealth's air pollution control policies and on the status of the Commonwealth's air quality.

I. In granting a permit pursuant to this section, the Department shall provide in writing a clear and concise statement of the legal basis, scientific rationale, and justification for the decision reached. When the decision of the Department is to deny a permit, pursuant to this section, the Department shall, in consultation with legal counsel, provide a clear and concise statement explaining the reason for the denial, the scientific justification for the same, and how the Department's decision is in compliance with applicable laws and regulations. Copies of the decision, certified by the Director, shall be mailed by certified mail to the permittee or applicant.

§ 10.1-1307.01. Further duties of Board and Department; localities particularly affected.

A. ~~Before The Board, before~~ promulgating a regulation under consideration, ~~or the Department, before~~ granting a variance to an existing regulation, or issuing a permit for the construction of a new major source or for a major modification to an existing source, ~~if the Board finds it is found~~ that there is a locality particularly affected by the regulation, variance, or permit, ~~the Board shall, respectively:~~

1. Publish, or require the applicant to publish, a notice in a local paper of general circulation in each locality affected at least 30 days prior to the close of any public comment period. Such notice shall contain a statement of the estimated local impact of the proposed action, which at a minimum shall provide information regarding specific pollutants and the total quantity of each that may be emitted and shall list the type and quantity of any fuels to be used.

2. Mail the notice to the chief elected official and chief administrative officer of and the planning district commission for such locality.

Written comments shall be accepted by the Board for at least 15 days after any hearing on the regulation, ~~variance, or permit,~~ unless the Board votes to shorten the period. *Written comments shall be accepted by the Department for at least 15 days after any hearing on the variance or permit.*

B. ~~Before~~ *If the Department finds, before* granting any variance to an existing regulation or issuing any permit for (i) a new fossil fuel-fired generating facility with a capacity of 500 megawatts or more, (ii) a major modification to an existing source that is a fossil fuel-fired generating facility with a capacity of 500 megawatts or more, (iii) a new fossil fuel-fired compressor station facility used to transport natural gas, or (iv) a major modification to an existing source that is a fossil fuel-fired compressor station facility used to transport natural gas, ~~if the Board finds that there is a locality particularly affected by such variance or permit, the Board~~ Department shall:

1. Require the applicant to publish a notice in at least one local paper of general circulation in any locality particularly affected at least 60 days prior to the close of any public comment period. Such notice shall (i) contain a statement of the estimated local impact of the proposed action; (ii) provide information regarding specific pollutants and the total quantity of each that may be emitted; (iii) list the type, quantity, and source of any fuel to be used; (iv) advise the public ~~how to request Board consideration or as to the date and location of~~ a public hearing; and (v) advise the public where to obtain information regarding the proposed action. The Department shall post such notice on the Department website and on a Department social media account.

2. Require the applicant to mail the notice to (i) the chief elected official of, chief administrative officer of, and planning district commission for each locality particularly affected; (ii) every public library and public school located within five miles of such facility; and (iii) the owner of each parcel of real property that is depicted as adjacent to the facility on the current real estate tax assessment maps of the locality.

Written comments shall be accepted by the ~~Board~~ Department for at least 30 days after any hearing on such variance or permit, unless the ~~Board votes~~ Director elects to shorten the period.

C. For the purposes of this section, the term "locality particularly affected" means any locality that bears any identified disproportionate material air quality impact that would not be experienced by other localities.

§ 10.1-1307.02. Permit for generation of electricity during ISO-declared emergency.

A. As used in this section:

"Emergency generation source" means a stationary internal combustion engine that operates according

to the procedures in the ISO's emergency operations manual during an ISO-declared emergency.

"ISO-declared emergency" means a condition that exists when the independent system operator, as defined in § 56-576, notifies electric utilities that an emergency exists or may occur and that complies with the definition of "emergency" adopted by the Board pursuant to subsection B.

"Retail customer" has the same meaning ascribed thereto in § 56-576.

B. The Board shall adopt a general permit ~~or permits regulation~~ for the use of back-up generation to authorize the construction, installation, reconstruction, modification, and operation of emergency generation sources during ISO-declared emergencies. Such general permit ~~or permits regulation~~ shall include a definition of "emergency" that is compatible with the ISO's emergency operations manual. After adoption of such general permit ~~or permits regulation~~, any amendments to the Board's regulations necessary to carry out the provisions of this section shall be exempt from Article 2 (§ 2.2-4006 et seq.) of the Administrative Process Act.

§ 10.1-1307.04. Greenhouse gas emissions inventory.

A. The Department shall conduct a comprehensive statewide baseline and projection inventory of all greenhouse gas (GHG) emissions and shall update such inventory every four years. The Board may adopt regulations necessary to collect from all source sectors data needed by the Department to conduct, update, and maintain such inventory.

B. The ~~Board~~ Department shall include the inventory in the report required pursuant to subsection H of § 10.1-1307, beginning with the report issued prior to October 1, 2022, and every four years thereafter. The Department shall publish such inventory on its website, showing changes in GHG emissions relative to an estimated GHG emissions baseline case for calendar year 2010.

C. Any information, except emissions data, that is reported to or otherwise obtained by the Department pursuant to this section and that contains or might reveal proprietary information shall be confidential and shall be exempt from the mandatory disclosure requirements of the Virginia Freedom of Information Act (§ 2.2-3700 et seq.). Each owner shall notify the Director or his representative of the existence of proprietary information if he desires the protection provided pursuant to this subsection.

§ 10.1-1308.1. Streamlined permitting process for qualified energy generators.

A. As used in this section:

"Biomass" means organic material that is available on a renewable or recurring basis, including:

1. Forest-related materials, including mill residues, logging residues, forest thinnings, slash, brush, low-commercial value materials or undesirable species, and woody material harvested for the purpose of forest fire fuel reduction or forest health and watershed improvement;
2. Agricultural-related materials, including orchard trees, vineyard, grain or crop residues, including straws, aquatic plants and agricultural processed co-products and waste products, including fats, oils, greases, whey, and lactose;
3. Animal waste, including manure and slaughterhouse and other processing waste;
4. Solid woody waste materials, including landscape trimmings, waste pallets, crates and manufacturing, construction, and demolition wood wastes, excluding pressure-treated, chemically treated or painted wood wastes and wood contaminated with plastic;
5. Crops and trees planted for the purpose of being used to produce energy;
6. Landfill gas, wastewater treatment gas, and biosolids, including organic waste byproducts generated during the wastewater treatment process; and
7. Municipal solid waste, excluding tires and medical and hazardous waste.

"Expedited process" means a process that (i) requires the applicant to pay fees to the Commonwealth in connection with the issuance and processing of the permit application that do not exceed \$50 and (ii) has a duration, from receipt of a complete permit application until final action by the ~~Board~~ Department on the application, not longer than 60 days.

"Qualified energy generator" means a commercial facility located in the Commonwealth with the capacity annually to generate no more than five megawatts of electricity, or produce the equivalent amount of energy in the form of fuel, steam, or other energy product, that is generated or produced from biomass, and that is sold to an unrelated person or used in a manufacturing process.

B. The ~~Board~~ Department shall develop an expedited process for issuing any permit that the ~~Board~~ it is required to issue for the construction or operation of a qualified energy generator. The development of the expedited permitting process shall be in accordance with subdivision A 8 of § 2.2-4006; however, if the construction or operation of a qualified energy generator is subject to a major new source review program required by § 110(a)(2)(C) of the federal Clean Air Act, this section shall not apply.

§ 10.1-1309. Issuance of special orders; civil penalties.

A. The ~~Board~~ Department shall have the power to issue special orders to:

- (i) owners who are permitting or causing air pollution as defined by § 10.1-1300, to cease and desist from such pollution;
- (ii) owners who have failed to construct facilities in accordance with or have failed to comply with plans for the control of air pollution submitted by them to and approved by the ~~Board~~ Department, to construct such facilities in accordance with or otherwise comply with, such approved plans;
- (iii) owners who have violated or failed to comply with the terms and provisions of any ~~Board~~

Department order or directive to comply with such terms and provisions;

(iv) owners who have contravened duly adopted and promulgated air quality standards and policies, to cease such contravention and to comply with air quality standards and policies;

(v) require any owner to comply with the provisions of this chapter and any ~~Board~~ *Department* decision; and

(vi) require any person to pay civil penalties of up to \$32,500 for each violation, not to exceed \$100,000 per order, if (a) the person has been issued at least two written notices of alleged violation by the Department for the same or substantially related violations at the same site, (b) such violations have not been resolved by demonstration that there was no violation, by an order issued by ~~the Board~~ or the Director, or by other means, (c) at least 130 days have passed since the issuance of the first notice of alleged violation, and (d) there is a finding that such violations have occurred after a hearing conducted in accordance with subsection B. The actual amount of any penalty assessed shall be based upon the severity of the violations, the extent of any potential or actual environmental harm, the compliance history of the facility or person, any economic benefit realized from the noncompliance, and the ability of the person to pay the penalty. The ~~Board~~ *Department* shall provide the person with the calculation for the proposed penalty prior to any hearing conducted for the issuance of an order that assesses penalties pursuant to this subsection. Penalties shall be paid to the state treasury and deposited by the State Treasurer into the Virginia Environmental Emergency Response Fund (§ 10.1-2500 et seq.). The issuance of a notice of alleged violation by the Department shall not be considered a case decision as defined in § 2.2-4001. Any notice of alleged violation shall include a description of each violation, the specific provision of law violated, and information on the process for obtaining a final decision or fact finding from the Department on whether or not a violation has occurred, and nothing in this section shall preclude an owner from seeking such a determination.

B. Such special orders are to be issued only after a hearing before a hearing officer appointed by the Supreme Court in accordance with § 2.2-4020 with reasonable notice to the affected owners of the time, place and purpose thereof, and they shall become effective not less than five days after service as provided in subsection C below. Should the ~~Board~~ *Department* find that any such owner is unreasonably affecting the public health, safety or welfare, or the health of animal or plant life, or property, after a reasonable attempt to give notice, it shall declare a state of emergency and may issue without hearing an emergency special order directing the owner to cease such pollution immediately, and shall within 10 days hold a hearing, after reasonable notice as to the time and place thereof to the owner, to affirm, modify, amend or cancel such emergency special order. If the ~~Board~~ *Department* finds that an owner who has been issued a special order or an emergency special order is not complying with the terms thereof, it may proceed in accordance with § 10.1-1316 or 10.1-1320.

C. Any special order issued under the provisions of this section need not be filed with the Secretary of the Commonwealth, but the owner to whom such special order is directed shall be notified by certified mail, return receipt requested, sent to the last known address of such owner, or by personal delivery by an agent of the ~~Board~~ *Department*, and the time limits specified shall be counted from the date of receipt.

D. Nothing in this section or in § 10.1-1307 shall limit the ~~Board's~~ *Department's* authority to proceed against such owner directly under § 10.1-1316 or 10.1-1320 without the prior issuance of an order, special or otherwise.

§ 10.1-1309.1. Special orders; penalties.

The ~~Board~~ *Department* is authorized to issue special orders in compliance with the Administrative Process Act (§ 2.2-4000 et seq.) requiring that an owner file with the ~~Board~~ *Department* a plan to abate, control, prevent, remove, or contain any substantial and imminent threat to public health or the environment that is reasonably likely to occur if such source ceases operations. Such plan shall also include a demonstration of financial capability to implement the plan. Financial capability may be demonstrated by the establishment of an escrow account, the creation of a trust fund to be maintained within the Department, submission of a bond, corporate guarantee based on audited financial statements, or such other instruments as the ~~Board~~ *Department* may deem appropriate. The ~~Board~~ *Department* may require that such plan and instruments be updated as appropriate. The ~~Board~~ *Department* shall give due consideration to any plan submitted by the owner in accordance with §§ 10.1-1410, 10.1-1428, and 62.1-44.15:1.1, in determining the necessity for and suitability of any plan submitted under this section.

For the purposes of this section, "ceases operation" means to cease conducting the normal operation of a source which is regulated under this chapter under circumstances where it would be reasonable to expect that such operation will not be resumed by the owner at the source. The term shall not include the sale or transfer of a source in the ordinary course of business or a permit transfer in accordance with Board regulations.

Any person who ceases operations and who knowingly and willfully fails to implement a closure plan or to provide adequate funds for implementation of such plan shall, if such failure results in a significant harm or an imminent and substantial threat of significant harm to human health or the environment, be liable to the Commonwealth and any political subdivision thereof for the costs incurred in abating, controlling, preventing, removing, or containing such harm or threat.

Any person who ceases operations and who knowingly and willfully fails to implement a closure plan or to provide adequate funds for implementation of such plan shall, if such failure results in a significant harm or an imminent and substantial threat of significant harm to human health or the environment, be guilty of a Class 4 felony.

§ 10.1-1310. Decision of Department pursuant to hearing.

Any decision by the ~~Board~~ *Department* rendered pursuant to hearings under § 10.1-1309 shall be reduced to writing and shall contain the explicit findings of fact and conclusions of law upon which the ~~Board's~~ *Department's* decision is based. Certified copies of the written decision shall be delivered or mailed by certified mail to the parties affected by it. Failure to comply with the provisions of this section shall render such decision invalid.

§ 10.1-1310.1. Notification of local government.

Upon determining that there has been a violation of this chapter or any regulation promulgated under this chapter or order of the ~~Board~~ *Department*, and such violation poses an imminent threat to the health, safety or welfare of the public, the Director shall immediately notify the chief administrative officer of any potentially affected local government. Neither the Director, the Commonwealth, nor any employee of the Commonwealth shall be liable for a failure to provide, or a delay in providing, the notification required by this section.

§ 10.1-1311. Penalties for noncompliance; judicial review.

A. The Board is authorized to promulgate regulations providing for the determination of a formula for the basis of the amount of any noncompliance penalty to be assessed by a court pursuant to subsection B hereof, in conformance with the requirements of Section 120 of the federal Clean Air Act, as amended, and any regulations promulgated thereunder. Any regulations promulgated pursuant to this section shall be in accordance with the provisions of the Administrative Process Act (§ 2.2-4000 et seq.).

B. Upon a determination of the amount by the ~~Board~~ *Department*, the ~~Board~~ *Department* shall petition the circuit court of the county or city wherein the owner subject to such noncompliance assessment resides, regularly or systematically conducts affairs or business activities, or where such owner's property affected by the administrative action is located for an order requiring payment of a noncompliance penalty in a sum the court deems appropriate.

C. Any order issued by a court pursuant to this section may be enforced as a judgment of the court. All sums collected, less the assessment and collection costs, shall be paid into the state treasury and deposited by the State Treasurer into the Virginia Environmental Emergency Response Fund pursuant to Chapter 25 (§ 10.1-2500 et seq.) of this title.

D. Any penalty assessed under this section shall be in addition to permits, fees, orders, payments, sanctions, or other requirements under this chapter, and shall in no way affect any civil or criminal enforcement proceedings brought under other provisions of this chapter.

§ 10.1-1312. Air pollution control districts.

A. The ~~Board~~ *Department* may create, within any area of the Commonwealth, local air pollution control districts comprising a city or county or a part or parts of each, or two or more cities or counties, or any combination or parts thereof. Such local districts may be established by the ~~Board~~ *Department* on its own motion or upon request of the governing body or bodies of the area involved.

B. In each district there shall be a local air pollution control committee, the members of which shall be appointed by the ~~Board~~ *Department* from lists of recommended nominees submitted by the respective governing bodies of each locality, all or a portion of which are included in the district. The number of members on each committee shall be in the discretion of the ~~Board~~ *Department*. When a district includes two or more localities or portions thereof, the ~~Board~~ *Department* shall apportion the membership of the committee among the localities, provided that each locality shall have at least one representative on the committee. The members shall not be compensated out of state funds, but may be reimbursed for expenses out of state funds. Localities may provide for the payment of compensation and reimbursement of expenses to the members and may appropriate funds therefore. The portion of such payment to be borne by each locality shall be prescribed by agreement.

C. The local committee is empowered to observe compliance with the regulations of the Board and report instances of noncompliance to the ~~Board~~ *Department*, to conduct educational programs relating to air pollution and its effects, to assist the Department in its air monitoring programs, to initiate and make studies relating to air pollution and its effects, and to make recommendations to the ~~Board~~ *Department*.

D. The governing body of any locality, wholly or partially included within any such district, may appropriate funds for use by the local committee in air pollution control and studies.

§ 10.1-1313. State Advisory Board on Air Pollution.

The ~~Board~~ *Department* is authorized to name qualified persons to a State Advisory Board on Air Pollution.

§ 10.1-1314. Owners to furnish plans, specifications and information.

Every owner which the ~~Board~~ *Department* has reason to believe is causing, or may be about to cause, an air pollution problem shall on request of the ~~Board~~ *Department* furnish such plans, specifications and information as may be required by the ~~Board~~ *Department* in the discharge of its duties under this chapter. Any information, except emission data, as to secret processes, formulae or

methods of manufacture or production shall not be disclosed in public hearing and shall be kept confidential. If samples are taken for analysis, a duplicate of the analytical report shall be furnished promptly to the person from whom such sample is requested.

§ 10.1-1315. Right of entry.

Whenever it is necessary for the purposes of this chapter, the ~~Board~~ *Department* or any member, agent or employee thereof, when duly authorized by the ~~Board~~ *Director*, may at reasonable times enter any establishment or upon any property, public or private, to obtain information or conduct surveys or investigations.

§ 10.1-1316. Enforcement and civil penalties.

A. Any owner violating or failing, neglecting or refusing to obey any provision of this chapter, any Board regulation or *Department* order, or any permit condition may be compelled to comply by injunction, mandamus or other appropriate remedy.

B. Without limiting the remedies which may be obtained under subsection A, any owner violating or failing, neglecting or refusing to obey any Board regulation or *Department* order, any provision of this chapter, or any permit condition shall be subject, in the discretion of the court, to a civil penalty not to exceed \$32,500 for each violation. Each day of violation shall constitute a separate offense. In determining the amount of any civil penalty to be assessed pursuant to this subsection, the court shall consider, in addition to such other factors as it may deem appropriate, the size of the owner's business, the severity of the economic impact of the penalty on the business, and the seriousness of the violation. Such civil penalties shall be paid into the state treasury and deposited by the State Treasurer into the Virginia Environmental Emergency Response Fund pursuant to Chapter 25 (§ 10.1-2500 et seq.) of this title. Such civil penalties may, in the discretion of the court assessing them, be directed to be paid into the treasury of the county, city or town in which the violation occurred, to be used to abate environmental pollution in such manner as the court may, by order, direct, except that where the owner in violation is the county, city or town itself, or its agent, the court shall direct the penalty to be paid into the state treasury and deposited by the State Treasurer into the Virginia Environmental Emergency Response Fund pursuant to Chapter 25 of this title.

C. With the consent of an owner who has violated or failed, neglected or refused to obey any Board regulation or *Department* order, or any provision of this chapter, or any permit condition, the ~~Board~~ *Department* may provide, in any order issued by the ~~Board~~ *Department* against the owner, for the payment of civil charges in specific sums, not to exceed the limit of subsection B. Such civil charges shall be in lieu of any civil penalty which could be imposed under subsection B. Such civil charges shall be paid into the state treasury and deposited by the State Treasurer into the Virginia Environmental Emergency Response Fund pursuant to Chapter 25 of this title.

D. The ~~Board~~ *Department* shall develop and provide an opportunity for public comment on guidelines and procedures that contain specific criteria for calculating the appropriate penalty for each violation based upon the severity of the violations, the extent of any potential or actual environmental harm, the compliance history of the facility or person, any economic benefit realized from the noncompliance, and the ability of the person to pay the penalty.

§ 10.1-1318. Appeal from decision of Department.

A. Any owner aggrieved by a final decision of the ~~Board~~ *Department* under § 10.1-1309, § 10.1-1322 or subsection D of § 10.1-1307 is entitled to judicial review thereof in accordance with the provisions of the Administrative Process Act (§ 2.2-4000 et seq.).

B. Any person who has participated, in person or by submittal of written comments, in the public comment process related to a final decision of the ~~Board~~ *Department* under § 10.1-1322 and who has exhausted all available administrative remedies for review of the ~~Board's~~ *Department's* decision, shall be entitled to judicial review of the ~~Board's~~ *Department's* decision in accordance with the provisions of the Administrative Process Act (§ 2.2-4000 et seq.) if such person meets the standard for obtaining judicial review of a case or controversy pursuant to Article III of the United States Constitution. A person shall be deemed to meet such standard if (i) such person has suffered an actual or imminent injury which is an invasion of a legally protected interest and which is concrete and particularized; (ii) such injury is fairly traceable to the decision of the Board and not the result of the independent action of some third party not before the court; and (iii) such injury will likely be redressed by a favorable decision by the court.

§ 10.1-1320. Penalties; chapter not to affect right to relief or to maintain action.

Any owner knowingly violating any provision of this chapter, Board regulation, or *Department* order, or any permit condition shall upon conviction be guilty of a misdemeanor and shall be subject to a fine of not more than \$10,000 for each violation within the discretion of the court. Each day of violation shall constitute a separate offense.

Nothing in this chapter shall be construed to abridge, limit, impair, create, enlarge or otherwise affect substantively or procedurally the right of any person to damages or other relief on account of injury to persons or property.

§ 10.1-1320.1. Duty of attorney for the Commonwealth.

It shall be the duty of every attorney for the Commonwealth to whom the Director or his authorized

representative has reported any violation of (i) this chapter or, (ii) any regulation of the Board, or (iii) order of the Board Department, to cause proceedings to be prosecuted without delay for the fines and penalties in such cases.

§ 10.1-1322. Permits.

A. Pursuant to regulations adopted by the Board and subject to § 10.1-1322.04, permits may be issued, amended, revoked or terminated and reissued by the Department and may be enforced under the provisions of this chapter in the same manner as regulations and orders. Failure to comply with any condition of a permit shall be considered a violation of this chapter and investigations and enforcement actions may be pursued in the same manner as is done with regulations of the Board and orders of the Board Department under the provisions of this chapter. To the extent allowed by federal law, any person holding a permit who is intending to upgrade the permitted facility by installing technology, control equipment, or other apparatus that the permittee demonstrates to the satisfaction of the Director will result in improved energy efficiency, will reduce the emissions of regulated air pollutants, and meets the requirements of Best Available Control Technology shall not be required to obtain a new, modified, or amended permit. The permit holder shall provide the demonstration anticipated by this subsection to the Department no later than 30 days prior to commencing construction.

B. The Board by regulation may prescribe and provide for the payment and collection of annual permit program fees for air pollution sources. Annual permit program fees shall not be collected until (i) the federal Environmental Protection Agency approves the Board's operating permit program established pursuant to Title V of the federal Clean Air Act or (ii) the Governor determines that such fees are needed earlier to maintain primacy over the program. The annual fees shall be based on the actual emissions (as calculated or estimated) of each regulated pollutant, as defined in § 502 of the federal Clean Air Act, in tons per year, not to exceed 4,000 tons per year of each pollutant for each source. The annual permit program fees shall not exceed a base year amount of \$25 per ton using 1990 as the base year, and shall be adjusted annually by the Consumer Price Index as described in § 502 of the federal Clean Air Act. Permit program fees for air pollution sources who receive state operating permits in lieu of Title V operating permits shall be paid in the first year and thereafter shall be paid biennially. The fees shall approximate the direct and indirect costs of administering and enforcing the permit program, and of administering the small business stationary source technical and environmental compliance assistance program as required by the federal Clean Air Act. The Board shall also collect promulgate regulations establishing permit application fee amounts not to exceed \$30,000 from applicants for a permit for a new major stationary source. The permit application fee amount paid shall be credited towards the amount of annual fees owed pursuant to this section during the first two years of the source's operation. The fees shall be exempt from statewide indirect costs charged and collected by the Department of Accounts.

C. When adopting regulations for permit program fees for air pollution sources, the Board shall take into account the permit fees charged in neighboring states and the importance of not placing existing or prospective industry in the Commonwealth at a competitive disadvantage.

D. On or before January 1 of every even-numbered year, the Department shall make an evaluation of the implementation of the permit fee program and provide this evaluation in writing to the Senate Committee on Agriculture, Conservation and Natural Resources, the Senate Committee on Finance and Appropriations, the House Committee on Appropriations, the House Committee on Agriculture, Chesapeake and Natural Resources, and the House Committee on Finance. This evaluation shall include a report on the total fees collected, the amount of general funds allocated to the Department, the Department's use of the fees and the general funds, the number of permit applications received, the number of permits issued, the progress in eliminating permit backlogs, and the timeliness of permit processing.

E. To the extent allowed by federal law and regulations, priority for utilization of permit fees shall be given to cover the costs of processing permit applications in order to more efficiently issue permits.

F. Fees collected pursuant to this section shall not supplant or reduce in any way the general fund appropriation to the Department.

G. The permit fees shall apply to permit programs in existence on July 1, 1992, any additional permit programs that may be required by the federal government and administered by the Board Department, or any new permit program required by the Code of Virginia.

H. The permit program fee regulations promulgated pursuant to this section shall not become effective until July 1, 1993.

I. [Expired.]

§ 10.1-1322.4. Permit modifications for alternative fuels or raw materials.

Unless required by federal law or regulation, no additional permit or permit modifications shall be required by the Board for the use, by any source, of an alternative fuel or raw material, if the owner demonstrates to the Board that as a result of trial burns at his facility or other facilities or other sufficient data that the emissions resulting from the use of the alternative fuel or raw material supply are decreased. To the extent allowed by federal law or regulation, no demonstration shall be required for the use of processed animal fat, processed fish oil, processed vegetable oil, distillate oil, or any mixture

thereof in place of the same quantity of residual oil to fire industrial boilers.

§ 10.1-1333. Permitting process for clean coal projects.

To the extent authorized by federal law, the ~~Board~~ *Department of Environmental Quality* shall implement permit processes that facilitate the construction of clean coal projects in the Commonwealth by, among such other actions as it deems appropriate, giving priority to processing permit applications for clean coal projects.

§ 15.2-2403.3. (For contingent effective date, see Acts 2016, cc. 68 and 758, as amended by Acts 2017, c. 345) Stormwater service districts; allocation of revenues.

Any town located within a stormwater service district created pursuant to this chapter shall be entitled to any revenues collected within the town pursuant to subdivision 6 of § 15.2-2403, subject to the limitations set forth therein, so long as the town maintains its own municipal separate storm sewer system (MS4) permit issued by the ~~State Water Control Board~~ *Department of Environmental Quality* or maintains its own stormwater service district.

§ 15.2-5101. Definitions.

As used in this chapter, unless the context requires a different meaning:

"Authority" means an authority created under the provisions of § 15.2-5102 or Article 6 (§ 15.2-5152 et seq.) of this chapter or, if any such authority has been abolished, the entity succeeding to the principal functions thereof.

"Bonds" and "revenue bonds" include notes, bonds, bond anticipation notes, and other obligations of an authority for the payment of money.

"Cost," as applied to a system, includes the purchase price of the system or the cost of acquiring all of the capital stock of the corporation owning such system and the amount to be paid to discharge all of its obligations in order to vest title to the system or any part thereof in the authority; the cost of improvements; the cost of all land, properties, rights, easements, franchises and permits acquired; the cost of all labor, machinery and equipment; financing and credit enhancement charges; interest prior to and during construction and for one year after completion of construction; any deposit to any bond interest and principal reserve account, start-up costs and reserves and expenditures for operating capital; cost of engineering and legal services, plans, specifications, surveys, estimates of costs and revenues; other expenses necessary or incident to the determining of the feasibility or practicability of any such acquisition, improvement, or construction; administrative expenses and such other expenses as may be necessary or incident to the financing authorized in this chapter and to the acquisition, improvement, or construction of any such system and the placing of the system in operation by the authority. Any obligation or expense incurred by an authority in connection with any of the foregoing items of cost and any obligation or expense incurred by the authority prior to the issuance of revenue bonds under the provisions of this chapter for engineering studies, for estimates of cost and revenues, and for other technical or professional services which may be utilized in the acquisition, improvement or construction of such system is a part of the cost of such system.

"Cost of improvements" means the cost of constructing improvements and includes the cost of all labor and material; the cost of all land, property, rights, easements, franchises, and permits acquired which are deemed necessary for such construction; interest during any period of disuse during such construction; the cost of all machinery and equipment; financing charges; cost of engineering and legal expenses, plans, specifications; and such other expenses as may be necessary or incident to such construction.

"Federal agency" means the United States of America or any department, agency, instrumentality, or bureau thereof.

"Green roof" means a roof or partially covered roof consisting of plants, soil, or another lightweight growing medium that is installed on top of a waterproof membrane and designed in accordance with the Virginia Stormwater Management Program's standards and specifications for green roofs, as set forth in the Virginia BMP Clearinghouse.

"Improvements" means such repairs, replacements, additions, extensions and betterments of and to a system as an authority deems necessary to place or maintain the system in proper condition for the safe, efficient and economical operation thereof or to provide service in areas not currently receiving such service.

"Owner" includes persons, federal agencies, and units of the Commonwealth having any title or interest in any system, or the services or facilities to be rendered thereby.

"Political subdivision" means a locality or any institution or commission of the Commonwealth of Virginia.

"Refuse" means solid waste, including sludge and other discarded material, such as solid, liquid, semi-solid or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations or from community activities or residences. "Refuse" does not include (i) solid and dissolved materials in domestic sewage, (ii) solid or dissolved material in irrigation return flows or in industrial discharges which are sources subject to a permit from the ~~State Water Control Board~~ *Department of Environmental Quality*, or (iii) source, special nuclear, or by-product material as defined by the Federal Atomic Energy Act of 1954 (42 U.S.C. § 2011, et seq.), as amended.

"Refuse collection and disposal system" means a system, plant or facility designed to collect, manage, dispose of, or recover and use energy from refuse and the land, structures, vehicles and equipment for use in connection therewith.

"Sewage" means the water-carried wastes created in and carried, or to be carried, away from residences, hotels, schools, hospitals, industrial establishments, commercial establishments or any other private or public buildings, together with such surface or ground water and household and industrial wastes as may be present.

"Sewage disposal system" means any system, plant, disposal field, lagoon, pumping station, constructed drainage ditch or surface water intercepting ditch, incinerator, area devoted to sanitary landfills, or other works, installed for the purpose of treating, neutralizing, stabilizing or disposing of sewage, industrial waste or other wastes.

"Sewer system" or "sewage system" means pipelines or conduits, pumping stations, and force mains, and all other constructions, devices, and appliances appurtenant thereto, used for conducting sewage, industrial wastes or other wastes to a plant of ultimate disposal.

"Stormwater control system" means a structural system of any type that is designed to manage the runoff from land development projects or natural systems designated for such purposes, including, without limitation, retention basins, ponds, wetlands, sewers, conduits, pipelines, pumping and ventilating stations, and other plants, structures, and real and personal property used for support of the system.

"System" means any sewage disposal system, sewer system, stormwater control system, water or waste system, and for authorities created under Article 6 (§ 15.2-5152 et seq.) of this chapter, such facilities as may be provided by the authority under § 15.2-5158.

"Unit" means any department, institution or commission of the Commonwealth; any public corporate instrumentality thereof; any district; or any locality.

"Water or waste system" means any water system, sewer system, sewage disposal system, or refuse collection and disposal system, or any combination of such systems. "Water system" means all plants, systems, facilities or properties used or useful or having the present capacity for future use in connection with the supply or distribution of water, or facilities incident thereto, and any integral part thereof, including water supply systems, water distribution systems, dams and facilities for the generation or transmission of hydroelectric power, reservoirs, wells, intakes, mains, laterals, pumping stations, standpipes, filtration plants, purification plants, hydrants, meters, valves and equipment, appurtenances, and all properties, rights, easements and franchises relating thereto and deemed necessary or convenient by the authority for the operation thereof but not including dams or facilities for the generation or transmission of hydroelectric power that are not incident to plants, systems, facilities or properties used or useful or having the present capacity for future use in connection with the supply or distribution of water.

§ 28.2-1205.1. Coordinated review of water resources projects.

A. Applications for water resources projects that require a Virginia Marine Resources permit and an individual Virginia Water Protection Permit under § 62.1-44.15:20 shall be submitted and processed through a joint application and review process.

B. The Commissioner and the Director of the Department of Environmental Quality, in consultation with the Virginia Institute of Marine Science, the Department of Wildlife Resources, the Department of Historic Resources, the Department of Health, the Department of Conservation and Recreation, the Virginia Department of Agriculture and Consumer Services, and any other appropriate or interested state agency, shall coordinate the joint review process to ensure the orderly evaluation of projects requiring both permits.

C. The joint review process shall include, but not be limited to, provisions to ensure that: (i) the initial application for the project shall be advertised simultaneously by the Commission and the Department of Environmental Quality; (ii) project reviews shall be completed by all state agencies that have been asked to review and provide comments, within 45 days of project notification by the Commission and the Department of Environmental Quality; (iii) the Commission and the ~~State Water Control Board~~ *Department of Environmental Quality* shall coordinate permit issuance and, to the extent practicable, shall take action on the permit application no later than one year after the agencies have received complete applications; (iv) to the extent practicable, the Commission and the ~~State Water Control Board~~ *Department of Environmental Quality* shall take action concurrently, but no more than six months apart; and (v) upon taking its final action on each permit, the Commission and the ~~State Water Control Board~~ *Department of Environmental Quality* shall provide each other with notification of its action and any and all supporting information, including any background materials or exhibits used in the application.

§ 46.2-1601. Licensing of dealers of salvage vehicles; fees.

A. It shall be unlawful for any person to engage in business in the Commonwealth as an auto recycler, salvage pool, or vehicle removal operator without first acquiring a license issued by the Commissioner for each such business at each location. The fee for the first such license issued or renewed under this chapter shall be \$100 per license year or part thereof. The fee for each additional license issued or renewed under this chapter for the same location shall be \$25 per license year or part

thereof. However, no fee shall be charged for supplemental locations of a business located within 500 yards of the licensed location.

B. No license shall be issued or renewed for any person unless (i) the licensed business contains at least 600 square feet of enclosed space, (ii) the licensed business is shown to be in compliance with all applicable zoning ordinances, and (iii) the applicant may (a) certify to the Commissioner that the licensed business is permitted under a Virginia Pollutant Discharge Elimination System individual or general permit issued by the ~~State Water Control Board~~ *Department of Environmental Quality* for discharges of storm water associated with industrial activity and provides the permit number(s) from such permit(s) or (b) certify to the Commissioner that the licensed business is otherwise exempt from such permitting requirements. Nothing in this section shall authorize any person to act as a motor vehicle dealer or salesperson without being licensed under Chapter 15 (§ 46.2-1500 et seq.) and meeting all requirements imposed by such chapter.

C. Licenses issued under this section shall be deemed not to have expired if the renewal application and required fees as set forth in subsection A are received by the Commissioner or postmarked not more than 30 days after the expiration date of such license. Whenever the renewal application is received by the Commissioner or postmarked not more than 30 days after the expiration date of such license, the license fees shall be 150 percent of the fees provided for in subsection A.

D. The Commissioner may offer an optional multiyear license for any license set forth in this section. When such option is offered and chosen by the licensee, all fees due at the time of licensing shall be multiplied by the number of years for which the license will be issued.

§ 62.1-44.3. (For expiration date, see Acts 2016, cc. 68 and 758, as amended by Acts 2017, c. 345) Definitions.

Unless a different meaning is required by the context, the following terms as used in this chapter shall have the meanings hereinafter respectively ascribed to them:

"Beneficial use" means both instream and offstream uses. Instream beneficial uses include, but are not limited to, the protection of fish and wildlife resources and habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. The preservation of instream flows for purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural and aesthetic values is an instream beneficial use of Virginia's waters. Offstream beneficial uses include, but are not limited to, domestic (including public water supply), agricultural uses, electric power generation, commercial, and industrial uses.

"Board" means the State Water Control Board. *However, when used outside the context of the promulgation of regulations, including regulations to establish general permits, pursuant to this chapter, "Board" means the Department of Environmental Quality.*

"Certificate" means any certificate issued by the ~~Board~~ *Department*.

"Department" means the Department of Environmental Quality.

"Director" means the Director of the Department of Environmental Quality.

"Establishment" means any industrial establishment, mill, factory, tannery, paper or pulp mill, mine, coal mine, colliery, breaker or coal-processing operations, quarry, oil refinery, boat, vessel, and every other industry or plant or works the operation of which produces industrial wastes or other wastes or which may otherwise alter the physical, chemical or biological properties of any state waters.

"Excavate" or "excavation" means ditching, dredging, or mechanized removal of earth, soil or rock.

"Industrial wastes" means liquid or other wastes resulting from any process of industry, manufacture, trade, or business or from the development of any natural resources.

"The law" or "this law" means the law contained in this chapter as now existing or hereafter amended.

"Member" means a member of the Board.

"Normal agricultural activities" means those activities defined as an agricultural operation in § 3.2-300 and any activity that is conducted as part of or in furtherance of such agricultural operation but shall not include any activity for which a permit would have been required as of January 1, 1997, under 33 U.S.C. § 1344 or any regulations promulgated pursuant thereto.

"Normal silvicultural activities" means any silvicultural activity as defined in § 10.1-1181.1 and any activity that is conducted as part of or in furtherance of such silvicultural activity but shall not include any activity for which a permit would have been required as of January 1, 1997, under 33 U.S.C. § 1344 or any regulations promulgated pursuant thereto.

"Other wastes" means decayed wood, sawdust, shavings, bark, lime, garbage, refuse, ashes, offal, tar, oil, chemicals, and all other substances except industrial wastes and sewage which may cause pollution in any state waters.

"Owner" means the Commonwealth or any of its political subdivisions, including but not limited to sanitation district commissions and authorities and any public or private institution, corporation, association, firm, or company organized or existing under the laws of this or any other state or country, or any officer or agency of the United States, or any person or group of persons acting individually or as a group that owns, operates, charters, rents, or otherwise exercises control over or is responsible for

any actual or potential discharge of sewage, industrial wastes, or other wastes to state waters, or any facility or operation that has the capability to alter the physical, chemical, or biological properties of state waters in contravention of § 62.1-44.5.

"Person" means an individual, corporation, partnership, association, governmental body, municipal corporation, or any other legal entity.

"Policies" means policies established under subdivisions (3a) and (3b) of § 62.1-44.15.

"Pollution" means such alteration of the physical, chemical, or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety, or welfare or to the health of animals, fish, or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses, provided that (i) an alteration of the physical, chemical, or biological property of state waters or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not sufficient to cause pollution but which, in combination with such alteration of or discharge or deposit to state waters by other owners, is sufficient to cause pollution; (ii) the discharge of untreated sewage by any owner into state waters; and (iii) contributing to the contravention of standards of water quality duly established by the Board, are "pollution" for the terms and purposes of this chapter.

"Pretreatment requirements" means any requirements arising under the Board's pretreatment regulations including the duty to allow or carry out inspections, entry, or monitoring activities; any rules, regulations, or orders issued by the owner of a publicly owned treatment works; or any reporting requirements imposed by the owner of a publicly owned treatment works or by the regulations of the Board.

"Pretreatment standards" means any standards of performance or other requirements imposed by regulation of the Board upon an industrial user of a publicly owned treatment works.

"Reclaimed water" means water resulting from the treatment of domestic, municipal, or industrial wastewater that is suitable for a direct beneficial or controlled use that would not otherwise occur. Specifically excluded from this definition is "gray water."

"Reclamation" means the treatment of domestic, municipal, or industrial wastewater or sewage to produce reclaimed water for a direct beneficial or controlled use that would not otherwise occur.

"Regulation" means a regulation issued under § 62.1-44.15 (10).

"Reuse" means the use of reclaimed water for a direct beneficial use or a controlled use that is in accordance with the requirements of the Board.

"Rule" means a rule adopted by the Board to regulate the procedure of the Board pursuant to § 62.1-44.15 (7).

"Ruling" means a ruling issued under § 62.1-44.15 (9).

"Sewage" means the water-carried human wastes from residences, buildings, industrial establishments or other places together with such industrial wastes and underground, surface, storm, or other water as may be present.

"Sewage treatment works" or "treatment works" means any device or system used in the storage, treatment, disposal, or reclamation of sewage or combinations of sewage and industrial wastes, including but not limited to pumping, power, and other equipment, and appurtenances, and any works, including land, that are or will be (i) an integral part of the treatment process or (ii) used for the ultimate disposal of residues or effluent resulting from such treatment. These terms shall not include onsite sewage systems or alternative discharging sewage systems.

"Sewerage system" means pipelines or conduits, pumping stations, and force mains, and all other construction, devices, and appliances appurtenant thereto, used for conducting sewage or industrial wastes or other wastes to a point of ultimate disposal.

"Special order" means a special order issued under subdivisions (8a), (8b), and (8c) of § 62.1-44.15.

"Standards" means standards established under subdivisions (3a) and (3b) of § 62.1-44.15.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

§ 62.1-44.3. (For effective date, see Acts 2016, cc. 68 and 758, as amended by Acts 2017, c. 345) Definitions.

Unless a different meaning is required by the context, the following terms as used in this chapter shall have the meanings hereinafter respectively ascribed to them:

"Beneficial use" means both instream and offstream uses. Instream beneficial uses include, but are not limited to, the protection of fish and wildlife resources and habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. The preservation of instream flows for purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural and aesthetic values is an instream

beneficial use of Virginia's waters. Offstream beneficial uses include, but are not limited to, domestic (including public water supply), agricultural uses, electric power generation, commercial, and industrial uses.

"Board" means the State Water Control Board. *However, when used outside the context of the promulgation of regulations, including regulations to establish general permits, pursuant to this chapter, "Board" means the Department of Environmental Quality.*

"Certificate" means any certificate or permit issued by the ~~Board~~ Department.

"Department" means the Department of Environmental Quality.

"Director" means the Director of the Department of Environmental Quality.

"Establishment" means any industrial establishment, mill, factory, tannery, paper or pulp mill, mine, coal mine, colliery, breaker or coal-processing operations, quarry, oil refinery, boat, vessel, and every other industry or plant or works the operation of which produces industrial wastes or other wastes or which may otherwise alter the physical, chemical or biological properties of any state waters.

"Excavate" or "excavation" means ditching, dredging, or mechanized removal of earth, soil or rock.

"Industrial wastes" means liquid or other wastes resulting from any process of industry, manufacture, trade, or business or from the development of any natural resources.

"Land-disturbance approval" means an approval allowing a land-disturbing activity to commence issued by (i) a Virginia Erosion and Stormwater Management Program authority after the requirements of § 62.1-44.15:34 have been met or (ii) a Virginia Erosion and Sediment Control Program authority after the requirements of § 62.1-44.15:55 have been met.

"The law" or "this law" means the law contained in this chapter as now existing or hereafter amended.

"Member" means a member of the Board.

"Municipal separate storm sewer" means a conveyance or system of conveyances otherwise known as a municipal separate storm sewer system or "MS4," including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains, that is:

1. Owned or operated by a federal entity, state, city, town, county, district, association, or other public body, created by or pursuant to state law, having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including a special district under state law such as a sewer district, flood control district, drainage district or similar entity, or a designated and approved management agency under § 208 of the federal Clean Water Act (33 U.S.C. § 1251 et seq.) that discharges to surface waters;

2. Designed or used for collecting or conveying stormwater;

3. Not a combined sewer; and

4. Not part of a publicly owned treatment works.

"Normal agricultural activities" means those activities defined as an agricultural operation in § 3.2-300 and any activity that is conducted as part of or in furtherance of such agricultural operation but shall not include any activity for which a permit would have been required as of January 1, 1997, under 33 U.S.C. § 1344 or any regulations promulgated pursuant thereto.

"Normal silvicultural activities" means any silvicultural activity as defined in § 10.1-1181.1 and any activity that is conducted as part of or in furtherance of such silvicultural activity but shall not include any activity for which a permit would have been required as of January 1, 1997, under 33 U.S.C. § 1344 or any regulations promulgated pursuant thereto.

"Other wastes" means decayed wood, sawdust, shavings, bark, lime, garbage, refuse, ashes, offal, tar, oil, chemicals, and all other substances except industrial wastes and sewage which may cause pollution in any state waters.

"Owner" means the Commonwealth or any of its political subdivisions, including but not limited to sanitation district commissions and authorities and any public or private institution, corporation, association, firm, or company organized or existing under the laws of this or any other state or country, or any officer or agency of the United States, or any person or group of persons acting individually or as a group that owns, operates, charters, rents, or otherwise exercises control over or is responsible for any actual or potential discharge of sewage, industrial wastes, or other wastes to state waters, or any facility or operation that has the capability to alter the physical, chemical, or biological properties of state waters in contravention of § 62.1-44.5.

"Person" means an individual, corporation, partnership, association, governmental body, municipal corporation, or any other legal entity.

"Policies" means policies established under subdivisions (3a) and (3b) of § 62.1-44.15.

"Pollution" means such alteration of the physical, chemical, or biological properties of any state waters as will or is likely to create a nuisance or render such waters (a) harmful or detrimental or injurious to the public health, safety, or welfare or to the health of animals, fish, or aquatic life; (b) unsuitable with reasonable treatment for use as present or possible future sources of public water supply; or (c) unsuitable for recreational, commercial, industrial, agricultural, or other reasonable uses, provided that (i) an alteration of the physical, chemical, or biological property of state waters or a discharge or deposit of sewage, industrial wastes or other wastes to state waters by any owner which by itself is not

sufficient to cause pollution but which, in combination with such alteration of or discharge or deposit to state waters by other owners, is sufficient to cause pollution; (ii) the discharge of untreated sewage by any owner into state waters; and (iii) contributing to the contravention of standards of water quality duly established by the Board, are "pollution" for the terms and purposes of this chapter.

"Pretreatment requirements" means any requirements arising under the Board's pretreatment regulations including the duty to allow or carry out inspections, entry, or monitoring activities; any rules, regulations, or orders issued by the owner of a publicly owned treatment works; or any reporting requirements imposed by the owner of a publicly owned treatment works or by the regulations of the Board.

"Pretreatment standards" means any standards of performance or other requirements imposed by regulation of the Board upon an industrial user of a publicly owned treatment works.

"Reclaimed water" means water resulting from the treatment of domestic, municipal, or industrial wastewater that is suitable for a direct beneficial or controlled use that would not otherwise occur. Specifically excluded from this definition is "gray water."

"Reclamation" means the treatment of domestic, municipal, or industrial wastewater or sewage to produce reclaimed water for a direct beneficial or controlled use that would not otherwise occur.

"Regulation" means a regulation issued under subdivision (10) of § 62.1-44.15.

"Reuse" means the use of reclaimed water for a direct beneficial use or a controlled use that is in accordance with the requirements of the Board.

"Rule" means a rule adopted by the Board to regulate the procedure of the Board pursuant to subdivision (7) of § 62.1-44.15.

"Ruling" means a ruling issued under subdivision (9) of § 62.1-44.15.

"Sewage" means the water-carried human wastes from residences, buildings, industrial establishments or other places together with such industrial wastes and underground, surface, storm, or other water as may be present.

"Sewage treatment works" or "treatment works" means any device or system used in the storage, treatment, disposal, or reclamation of sewage or combinations of sewage and industrial wastes, including but not limited to pumping, power, and other equipment, and appurtenances, and any works, including land, that are or will be (i) an integral part of the treatment process or (ii) used for the ultimate disposal of residues or effluent resulting from such treatment. These terms shall not include onsite sewage systems or alternative discharging sewage systems.

"Sewerage system" means pipelines or conduits, pumping stations, and force mains, and all other construction, devices, and appliances appurtenant thereto, used for conducting sewage or industrial wastes or other wastes to a point of ultimate disposal.

"Special order" means a special order issued under subdivisions (8a), (8b), and (8c) of § 62.1-44.15.

"Standards" means standards established under subdivisions (3a) and (3b) of § 62.1-44.15.

"State waters" means all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas.

§ 62.1-44.6:1. Permit rationale.

In granting a permit pursuant to this chapter, the Department shall provide in writing a clear and concise statement of the legal basis, scientific rationale, and justification for the decision reached. When the decision of the Department is to deny a permit pursuant to this chapter, the Department shall, in consultation with legal counsel, provide a clear and concise statement explaining the reason for the denial, the scientific justification for the same, and how the Department's decision is in compliance with applicable laws and regulations. Copies of the decision, certified by the Director, shall be mailed by certified mail to the permittee or applicant.

§ 62.1-44.14. Chairman; Executive Director; employment of personnel; supervision; budget preparation.

The Board shall elect its chairman, and the Executive Director shall be appointed as set forth in § 2.2-106. The Executive Director shall serve as executive officer and devote his whole time to the performance of his duties, and he shall have such administrative powers as are conferred upon him by the Board; and, further, the Board may delegate to its Executive Director any of the powers and duties invested in it by this chapter except the adoption and promulgation of standards, rules and regulations; and the revocation of certificates. The Executive Director is authorized to issue, modify or revoke orders in cases of emergency as described in §§ 62.1-44.15 (8b) and 62.1-44.34:20 of this chapter. The Executive Director is further authorized to employ such consultants and full-time technical and clerical workers as are necessary and within the available funds to carry out the purposes of this chapter.

It shall be the duty of the Executive Director to exercise general supervision and control over the quality and management of all state waters and to administer and enforce this chapter, and all certificates, standards, policies, rules, regulations, rulings and special orders promulgated by the Board.

The Executive Director shall prepare, approve, and submit all requests for appropriations and be responsible for all expenditures pursuant to appropriations. The Executive Director shall be vested with all the authority of the Board when it is not in session, except for the Board's authority to ~~consider permits pursuant to § 62.1-44.15:02~~ and to issue special orders pursuant to subdivisions (8a) and (8b) of § 62.1-44.15 and subject to such regulations as may be prescribed by the Board. In no event shall the Executive Director have the authority to adopt or promulgate any regulation.

§ 62.1-44.15:81. Application and preparation of draft certification conditions.

A. Any applicant for a federal license or permit for a natural gas transmission pipeline greater than 36 inches inside diameter subject to § 7c of the federal Natural Gas Act (15 U.S.C. § 717f(c)) shall submit a separate application, at the same time the Joint Permit Application is submitted, to the Department containing a description of all activities that will occur in upland areas, including activities in or related to (i) slopes with a grade greater than 15 percent; (ii) karst geology features, including sinkholes and underground springs; (iii) proximity to sensitive streams and wetlands identified by the Department of Conservation and Recreation or the Department of Wildlife Resources; (iv) seasonally high water tables; (v) water impoundment structures and reservoirs; and (vi) areas with highly erodible soils, low pH, and acid sulfate soils. Concurrently with the Joint Permit Application, the applicant shall also submit a detailed erosion and sediment control plan and stormwater management plan subject to Department review and approval.

B. After receipt of an application in accordance with subsection A, the Department shall issue a request for information about how the erosion and sediment control plan and stormwater management plan will address activities in or related to the upland areas identified in subsection A. The response to such request shall include the specific strategies and best management practices that will be utilized by the applicant to address challenges associated with each area type and an explanation of how such strategies and best management practices will ensure compliance with water quality standards.

C. At any time during the review of the application, but prior to issuing a certification pursuant to this article, the Department may issue an information request to the applicant for any relevant additional information necessary to determine (i) if any activities related to the applicant's project in upland areas are likely to result in a discharge to state waters and (ii) how the applicant proposes to minimize water quality impacts to the maximum extent practicable to protect water quality. The information request shall provide a reasonable amount of time for the applicant to respond.

D. The Department shall review the information contained in the application, the response to the information request in subsection B, and any additional information obtained through any information requests issued pursuant to subsection C to determine if any activities described in the application or in any additional information requests (i) are likely to result in a discharge to state waters with the potential to adversely impact water quality and (ii) will not be addressed by the Virginia Water Protection Permit issued for the activity pursuant to Article 2.2 (§ 62.1-44.15:20 et seq.). The Department of Wildlife Resources, the Department of Conservation and Recreation, the Department of Health, and the Department of Agriculture and Consumer Services shall consult with the Department during the review of the application and any additional information obtained through any information requests issued pursuant to subsection B or C. Following the conclusion of its review, the Department shall develop a draft certification or denial. A draft certification, including (i) any additional conditions for activities in upland areas necessary to protect water quality and (ii) a condition that the applicant shall not commence land-disturbing activity prior to approval by the Department of the erosion and sediment control plan and stormwater management plan required pursuant to subsection E, shall be noticed for public comment and potential issuance by the Department ~~or the Board pursuant to § 62.1-44.15:02~~. The Department shall make the information contained in the application and any additional information obtained through any information requests issued pursuant to subsection B or C available to the public.

E. Notwithstanding any applicable annual standards and specifications for erosion and sediment control or stormwater management pursuant to Article 2.3 (§ 62.1-44.15:24 et seq.) or 2.4 (§ 62.1-44.15:51 et seq.), the applicant shall not commence land-disturbing activity prior to resolution of any unresolved issues identified in subsection B to the satisfaction of the Department and approval by the Department of an erosion and sediment control plan and stormwater management plan in accordance with applicable regulations. The Department shall act on any plan submittal within 60 days after initial submittal of a completed plan to the Department. The Department may issue either approval or disapproval and shall provide written rationale for its decision. The Department shall act on any plan that has been previously disapproved within 30 days after the plan has been revised and resubmitted for approval.

F. No action by either the Department or the Board on a certification pursuant to this article shall alter the siting determination made through Federal Energy Regulatory Commission or State Corporation Commission approval.

G. The Department shall assess an administrative charge to the applicant to cover the direct costs of services rendered associated with its responsibilities pursuant to this section.

H. Neither the Department nor the Board shall expressly waive certification of a natural gas

transmission pipeline of greater than 36 inches inside diameter under § 401 of the federal Clean Water Act (33 U.S.C. § 1341). The Department or the Board shall act on any certification request within a reasonable period of time pursuant to federal law. Nothing in this section shall be construed to prohibit the Department or the Board from taking action to deny a certification in accordance with the provisions of § 401 of the federal Clean Water Act (33 U.S.C. § 1341).

§ 62.1-44.15:83. Requests for public hearing, hearings, and final decisions procedures.

A. The issuance of a certification pursuant to this article shall be a permit action for purposes of § 62.1-44.15:02.

B. The Department shall assess an administrative charge to the applicant to cover the direct costs of services rendered associated with its responsibilities pursuant to this section.

§ 62.1-104. Definitions.

(1) Except as modified below, the definitions contained in Title 1 shall apply in this chapter.

(2) "Board" means the State Water Control Board. *However, when used outside the context of the promulgation of regulations, including regulations to establish general permits, pursuant to this chapter, "Board" means the Department of Environmental Quality.*

(3) "Impounding structure" means a man-made device, whether a dam across a watercourse or other structure outside a watercourse, used or to be used for the authorized storage of flood waters for subsequent beneficial use.

(4) "Watercourse" means a natural channel having a well-defined bed and banks and in which water flows when it normally does flow. For the purposes hereof they shall be limited to rivers, creeks, streams, branches, and other watercourses which are nonnavigable in fact and which are wholly within the jurisdiction of the Commonwealth.

(5) "Riparian land" is land which is contiguous to and touches a watercourse. It does not include land outside the watershed of the watercourse. Real property under common ownership and which is not separated from riparian land by land of any other ownership shall likewise be deemed riparian land, notwithstanding that such real property is divided into tracts and parcels which may not bound upon the watercourse.

(6) "Riparian owner" is an owner of riparian land.

(7) "Average flow" means the average discharge of a stream at a particular point and normally is expressed in cubic feet per second. It may be determined from actual measurements or computed from the most accurate information available.

(8) "Diffused surface waters" are those which, resulting from precipitation, flow down across the surface of the land until they reach a watercourse, after which they become parts of streams.

(9) "Floodwaters" means water in a stream which is over and above the average flow.

(10) "Court" means the circuit court of the county or city in which an impoundment is located or proposed to be located.

§ 62.1-242. Definitions.

As used in this chapter, unless the context requires otherwise:

"Beneficial use" means both instream and offstream uses. Instream beneficial uses include but are not limited to protection of fish and wildlife habitat, maintenance of waste assimilation, recreation, navigation, and cultural and aesthetic values. Offstream beneficial uses include but are not limited to domestic (including public water supply), agricultural, electric power generation, commercial, and industrial uses. Domestic and other existing beneficial uses shall be considered the highest priority beneficial uses.

"Board" means the State Water Control Board. *However, when used outside the context of the promulgation of regulations, including regulations to establish general permits, pursuant to this chapter, "Board" means the Department of Environmental Quality.*

"Nonconsumptive use" means the use of water withdrawn from a stream in such a manner that it is returned to the stream without substantial diminution in quantity at or near the point from which it was taken and would not result in or exacerbate low flow conditions.

"Surface water withdrawal permit" means a document issued by the Board evidencing the right to withdraw surface water.

"Surface water management area" means a geographically defined surface water area in which the Board has deemed the levels or supply of surface water to be potentially adverse to public welfare, health and safety.

"Surface water" means any water in the Commonwealth, except ground water, as defined in § 62.1-255.

§ 62.1-248.2. Permit rationale.

In granting a permit pursuant to this chapter, the Department shall provide in writing a clear and concise statement of the legal basis, scientific rationale, and justification for the decision reached. When the decision of the Department is to deny a permit pursuant to this chapter, the Department shall, in consultation with legal counsel, provide a clear and concise statement explaining the reason for the denial, the scientific justification for the same, and how the Department's decision is in compliance with applicable laws and regulations. Copies of the decision, certified by the Director, shall be mailed by

certified mail to the permittee or applicant.

§ 62.1-255. Definitions.

As used in this chapter, unless the context requires otherwise:

"Agricultural irrigation" means irrigation that is used to support any operation devoted to the bona fide production of crops, animals, or fowl, including the production of fruits and vegetables of any kind; meat, dairy, and poultry products; nuts, tobacco, nursery, and floral products; and the production and harvest of products from silvicultural activity.

"Beneficial use" includes domestic (including public water supply), agricultural, commercial, and industrial uses.

"Board" means the State Water Control Board. *However, when used outside the context of the promulgation of regulations, including regulations to establish general permits, pursuant to this chapter, "Board" means the Department of Environmental Quality.*

"Department" means the Department of Environmental Quality.

"Eastern Shore Groundwater Management Area" means the ground water management area declared by the Board encompassing the Counties of Accomack and Northampton.

"Ground water" means any water, except capillary moisture, beneath the land surface in the zone of saturation or beneath the bed of any stream, lake, reservoir or other body of surface water wholly or partially within the boundaries of the Commonwealth, whatever the subsurface geologic structure in which such water stands, flows, percolates or otherwise occurs.

"Ground water withdrawal permit" means a certificate issued by the Board permitting the withdrawal of a specified quantity of ground water in a ground water management area.

"Irrigation" means the controlled application of water through man-made systems to supply water requirements not satisfied by rainfall to assist in the growing or maintenance of vegetative growth.

"Nonagricultural irrigation" means all irrigation other than agricultural irrigation.

"Person" means any and all persons, including individuals, firms, partnerships, associations, public or private institutions, municipalities or political subdivisions, governmental agencies, or private or public corporations organized under the laws of the Commonwealth or any other state or country.

"Surficial aquifer" means the upper surface of a zone of saturation, where the body of ground water is not confined by an overlying impermeable zone.

§ 62.1-263.1. Permit rationale.

In granting a permit pursuant to this chapter, the Department shall provide in writing a clear and concise statement of the legal basis, scientific rationale, and justification for the decision reached. When the decision of the Department is to deny a permit pursuant to this chapter, the Department shall, in consultation with legal counsel, provide a clear and concise statement explaining the reason for the denial, the scientific justification for the same, and how the Department's decision is in compliance with applicable laws and regulations. Copies of the decision, certified by the Director, shall be mailed by certified mail to the permittee or applicant.

2. That §§ 10.1-1322.01 and 62.1-44.15:02 of the Code of Virginia are repealed.

3. That any permits or orders issued by the Air Pollution Control Board or the State Water Control Board prior to the effective date of this act shall continue in full force and are enforceable by the Department of Environmental Quality.

4. That nothing in this act shall be construed to limit or impact § 3.2-301 or 15.2-2288.6 of the Code of Virginia.

5. That at each regular meeting of the Air Pollution Control Board and the State Water Control Board (the Boards), the Department of Environmental Quality (the Department) shall provide an overview and update regarding any controversial permits pending before the Department that are relevant to each board. Immediately after such presentation by the Department, the Boards shall have an opportunity to respond to the Department's presentation and provide commentary regarding such pending permits. Before rendering a final decision on a controversial permit, the Department shall publish a summary of public comments received during the applicable public comment period and public hearing. After such publication, the Department shall publish responses to the public comment summary and hold a public hearing to provide an opportunity for individuals who previously commented, either at a public hearing or in writing during the applicable public comment period, to respond to the Department's public comment summary and response. No new information will be accepted at that time.

For purposes of this enactment, "controversial permit" means an air or water permitting action for which a public hearing has been granted pursuant to the provisions of the sixth enactment of this act. "Controversial permit" also means an air permitting action where a public hearing is required for (i) the construction of a new major source or for a major modification to an existing source, (ii) a new fossil fuel-fired generating facility with a capacity of 500 megawatts or more, (iii) a major modification to an existing source that is a fossil fuel-fired generating facility with a capacity of 500 megawatts or more, (iv) a new fossil fuel-fired compressor station facility used to transport natural gas, or (v) a major modification to an existing source that is a fossil fuel-fired compressor station facility used to transport natural gas.

6. That any changes to regulations necessary to implement the provisions of this act shall include the following criteria for requesting and granting a public hearing on a permit action during a public comment period in those instances where a public hearing is not mandatory under state or federal law or regulation. During the public comment period on permit action, interested persons may request a public hearing to contest such action or the terms and conditions thereof. Requests for a public hearing shall contain the following information: (i) the name and postal mailing or email address of the requester; (ii) the names and addresses of all persons for whom the requester is acting as a representative (for the purposes of this requirement, "person" includes an unincorporated association); (iii) the reason for the request for a public hearing; (iv) a brief, informal statement setting forth the factual nature and the extent of the interest of the requester or of the persons for whom the requester is acting as representative in the application or tentative determination, including an explanation of how and to what extent such interest would be directly and adversely affected by the issuance, denial, modification, or revocation of the permit in question; and (v) where possible, specific references to the terms and conditions of the permit in question, together with suggested revisions and alterations of those terms and conditions that the requester considers are needed to conform the permit to the intent and provisions of the basic laws of the State Air Pollution Control Board or the State Water Control Board, as applicable. Upon completion of the public comment period on a permit action, the Director of the Department of Environmental Quality shall review all timely requests for public hearing filed during the public comment period on the permit action and within 30 calendar days following the expiration of the time period for the submission of requests shall grant a public hearing, unless the permittee or applicant agrees to a later date, if the Director finds the following: (a) that there is a significant public interest in the issuance, denial, modification, or revocation of the permit in question as evidenced by receipt of a minimum of 25 individual requests for a public hearing; (b) that the requesters raise substantial, disputed issues relevant to the issuance, denial, modification, or revocation of the permit in question; and (c) that the action requested by the interested party is not on its face inconsistent with, or in violation of, the basic laws of the State Air Pollution Control Board if the permit action is an air permit action, or the basic laws of the State Water Control Board if the permit action is a water permit action, federal law, or any regulation promulgated thereunder. The Director of the Department of Environmental Quality shall, forthwith, notify by email or mail at his last known address (1) each requester and (2) the applicant or permittee of the decision to grant or deny a public hearing. If the request for a public hearing is granted, the Director shall schedule the hearing at a time between 45 and 75 days after emailing or mailing of the notice of the decision to grant the public hearing. The Director shall cause, or require the applicant to publish, notice of a public hearing to be published once, in a newspaper of general circulation in the city or county where the facility or operation that is the subject of the permit or permit application is located, at least 30 days before the hearing date. In making its decision, the Department shall consider (A) the verbal and written comments received during the public comment period and public hearing made part of the record, (B) any commentary of the Board, and (C) the agency files. The public comment period shall remain open for 15 days after the close of the public hearing if required by § 10.1-1307.01 of the Code of Virginia, as amended by this act, or § 62.1-44.15:01 of the Code of Virginia. In addition, the Director may, in his discretion, convene a public hearing on a permit action.

VIRGINIA ACTS OF ASSEMBLY -- 2023 SESSION

CHAPTER 36

An Act to amend and reenact §§ 62.1-44.38 and 62.1-44.38:1 of the Code of Virginia, relating to plans and programs; drought evaluation and response plans; Potomac River.

[H 2095]

Approved March 17, 2023

Be it enacted by the General Assembly of Virginia:

1. That §§ 62.1-44.38 and 62.1-44.38:1 of the Code of Virginia are amended and reenacted as follows:

§ 62.1-44.38. Plans and programs; registration of certain data by water users; advisory committees; committee membership for federal, state, and local agencies; water supply planning assistance.

A. The Board shall prepare plans and programs for the management of the water resources of the Commonwealth in such a manner as to encourage, promote, and secure the maximum beneficial use and control thereof. These plans and programs shall be prepared for each major river basin of the Commonwealth, and appropriate subbasins therein, including specifically the Potomac-Shenandoah River Basin, the Rappahannock River Basin, the York River Basin, the James River Basin, the Chowan River Basin, the Roanoke River Basin, the New River Basin, and the Tennessee-Big Sandy River Basin, and for those areas in the Tidewater and elsewhere in the Commonwealth not within these major river basins. Reports for each basin shall be published by the Board.

B. 1. In preparing river basin plan and program reports enumerated in subsection A, the Board shall (i) estimate current water withdrawals and use for agriculture, industry, domestic use, and other significant categories of water users; (ii) project water withdrawals and use by agriculture, industry, domestic use, and other significant categories of water users; (iii) estimate, for each major river and stream, the minimum instream flows necessary during drought conditions to maintain water quality and avoid permanent damage to aquatic life in streams, bays, and estuaries; (iv) evaluate, to the extent practicable, the ability of existing subsurface and surface waters to meet current and future water uses, including minimum instream flows, during drought conditions; (v) evaluate, in cooperation with the Virginia Department of Health and local water supply managers, the current and future capability of public water systems to provide adequate quantity and quality of water; (vi) estimate, using a data-driven method that includes multiple reasonable assumptions about supply and demand over varying time frames, the risk that each locality and region will experience water supply shortfalls; and (vii) evaluate hydrologic, environmental, economic, social, legal, jurisdictional, and other aspects of each alternative management strategy identified.

2. The Board shall direct the Department of Environmental Quality (the Department) in its facilitation of regional water planning efforts. The Department shall (i) ensure that localities coordinate sufficiently in the development of regional water plans; (ii) provide planning, policy, and technical assistance to each regional planning area, differentiated according to each area's water supply challenges, existing resources, and other factors; and (iii) ensure that each regional plan clearly identifies the region's water supply risks and proposes strategies to address those risks.

3. *When preparing drought evaluation and response plans pursuant to subdivision 1, the Board shall recognize the localities that include any portion of the service area of a water supply utility in the Commonwealth that uses the Potomac River as a water supply source as a distinct drought evaluation region. Such plans shall incorporate the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (2000), including provisions related to triggers, actions, and messages for the Potomac River drought evaluation region. Nothing in this subdivision regarding the incorporation of such provisions shall be construed to limit the authority of the Governor during a declared drought emergency.*

C. The Board may, by regulation, require each water user withdrawing surface or subsurface water or both during each year to register, by a date to be established by the Board, water withdrawal and use data for the previous year including the estimated average daily withdrawal, maximum daily withdrawal, sources of water withdrawn, and volume of wastewater discharge, provided that the withdrawal exceeds one million gallons in any single month for use for crop irrigation, or that the daily average during any single month exceeds 10,000 gallons per day for any other user. Location data shall be provided by each user in a coordinate system specified by the Board.

D. The Board shall establish advisory committees to assist it in the formulation of such plans or programs and in formulating recommendations called for in subsection E. In this connection, the Board may include committee membership for branches or agencies of the federal government, branches or agencies of the Commonwealth, branches or agencies of the government of any state in a river basin

located within that state and Virginia, the political subdivisions of the Commonwealth, and all persons and corporations interested in or directly affected by any proposed or existing plan or program.

E. The Board shall prepare plans or programs and shall include in reports prepared under subsection A recommended actions to be considered by the General Assembly, the agencies of the Commonwealth and local political subdivisions, the agencies of the federal government, or any other persons that the Board may deem necessary or desirable for the accomplishment of plans or programs prepared under subsection B.

F. In addition to the preparation of plans called for in subsection A, the Board, upon written request of a political subdivision of the Commonwealth, shall provide water supply planning assistance to such political subdivision, including assistance in preparing drought management strategies, water conservation programs, evaluation of alternative water sources, state enabling legislation to facilitate a specific situation, applications for federal grants or permits, or other such planning activities to facilitate intergovernmental cooperation and coordination.

§ 62.1-44.38:1. Comprehensive water supply planning process; state, regional, and local water supply plans.

A. The Board, with advice and guidance from the Commissioner of Health, local governments, public service authorities, and other interested parties, shall establish a comprehensive water supply planning process for the development of local, regional, and state water supply plans consistent with the provisions of this chapter. This process shall be designed to (i) ensure that adequate and safe drinking water is available to all citizens of the Commonwealth; (ii) encourage, promote, and protect all other beneficial uses of the Commonwealth's water resources; (iii) encourage, promote, and develop incentives for alternative water sources, including desalinization; and (iv) encourage the development of cross-jurisdictional water supply projects.

B. The Board shall adopt regulations designating regional planning areas based primarily on river basins as appropriate based on water supply sources. The Board shall consider existing interjurisdictional arrangements in designating regional planning areas. The Board may, as appropriate, designate multiple regional planning areas within a single river basin in order to enhance the manageability of planning within such basin. The regulations shall identify the particular regional planning area in which each locality shall participate and shall state which local stakeholder groups, including local governments, industrial and agricultural water users, public water suppliers, developers and economic development organizations, and conservation and environmental organizations, shall or may participate in coordinated water resource planning. The regulations shall ~~further~~ provide a mechanism for a locality to request a change of its designated regional planning area to an adjoining planning area that is based on water supply source, river basin, or existing or planned cross-jurisdictional relationship, which change shall be effective upon approval of the Department, notwithstanding the provisions of Article 2 (§ 2.2-4006 et seq.) of Chapter 40 of Title 2.2. *The regulations shall further recognize the localities that include any portion of the service area of a water supply utility in the Commonwealth that uses the Potomac River as a water supply source as a distinct regional planning area. Such plan shall incorporate the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (2000), including provisions related to triggers, actions, and messages for the Potomac River drought evaluation region. Nothing in this subsection regarding the incorporation of such provisions shall be construed to limit the authority of the Governor during a declared drought emergency.*

C. 1. Each locality in a regional planning area shall participate in cross-jurisdictional, coordinated water resource planning. Such local coordination shall accommodate existing regional groups that have already developed water supply plans, including planning district commissions, and other regional planning entities as appropriate.

2. Each locality in a regional planning area shall develop and submit, with the other localities in that planning area, a single jointly produced regional water supply plan to the Department of Environmental Quality (the Department). Such regional water supply plan shall (i) clearly identify the region's water supply risks and (ii) propose regional strategies to address those water supply risks.

3. Each regional water supply plan also shall comply with applicable criteria and guidelines developed by the Board. Such criteria and guidelines shall take into account existing local and regional water supply planning efforts and requirements imposed under other state or federal laws. The criteria and guidelines established by the Board shall not prohibit a town from entering into a regional water supply plan with an adjacent county in the same regional planning area.

4. This section is intended to inform any regional water resource planning being done in the Commonwealth pursuant to interstate compacts.

D. The Board and the Department shall prioritize the allocation of planning funds and other funds to localities that sufficiently participate in regional planning.

E. In accordance with subdivision B 2 of § 62.1-44.38, the Department shall facilitate regional planning and provide assistance to each regional planning area as needed.

VIRGINIA ACTS OF ASSEMBLY -- 2023 SESSION

CHAPTER 37

An Act to amend and reenact §§ 62.1-44.38 and 62.1-44.38:1 of the Code of Virginia, relating to plans and programs; drought evaluation and response plans; Potomac River.

[S 1149]

Approved March 17, 2023

Be it enacted by the General Assembly of Virginia:

1. That §§ 62.1-44.38 and 62.1-44.38:1 of the Code of Virginia are amended and reenacted as follows:

§ 62.1-44.38. Plans and programs; registration of certain data by water users; advisory committees; committee membership for federal, state, and local agencies; water supply planning assistance.

A. The Board shall prepare plans and programs for the management of the water resources of the Commonwealth in such a manner as to encourage, promote, and secure the maximum beneficial use and control thereof. These plans and programs shall be prepared for each major river basin of the Commonwealth, and appropriate subbasins therein, including specifically the Potomac-Shenandoah River Basin, the Rappahannock River Basin, the York River Basin, the James River Basin, the Chowan River Basin, the Roanoke River Basin, the New River Basin, and the Tennessee-Big Sandy River Basin, and for those areas in the Tidewater and elsewhere in the Commonwealth not within these major river basins. Reports for each basin shall be published by the Board.

B. 1. In preparing river basin plan and program reports enumerated in subsection A, the Board shall (i) estimate current water withdrawals and use for agriculture, industry, domestic use, and other significant categories of water users; (ii) project water withdrawals and use by agriculture, industry, domestic use, and other significant categories of water users; (iii) estimate, for each major river and stream, the minimum instream flows necessary during drought conditions to maintain water quality and avoid permanent damage to aquatic life in streams, bays, and estuaries; (iv) evaluate, to the extent practicable, the ability of existing subsurface and surface waters to meet current and future water uses, including minimum instream flows, during drought conditions; (v) evaluate, in cooperation with the Virginia Department of Health and local water supply managers, the current and future capability of public water systems to provide adequate quantity and quality of water; (vi) estimate, using a data-driven method that includes multiple reasonable assumptions about supply and demand over varying time frames, the risk that each locality and region will experience water supply shortfalls; and (vii) evaluate hydrologic, environmental, economic, social, legal, jurisdictional, and other aspects of each alternative management strategy identified.

2. The Board shall direct the Department of Environmental Quality (the Department) in its facilitation of regional water planning efforts. The Department shall (i) ensure that localities coordinate sufficiently in the development of regional water plans; (ii) provide planning, policy, and technical assistance to each regional planning area, differentiated according to each area's water supply challenges, existing resources, and other factors; and (iii) ensure that each regional plan clearly identifies the region's water supply risks and proposes strategies to address those risks.

3. *When preparing drought evaluation and response plans pursuant to subdivision 1, the Board shall recognize the localities that include any portion of the service area of a water supply utility in the Commonwealth that uses the Potomac River as a water supply source as a distinct drought evaluation region. Such plans shall incorporate the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (2000), including provisions related to triggers, actions, and messages for the Potomac River drought evaluation region. Nothing in this subdivision regarding the incorporation of such provisions shall be construed to limit the authority of the Governor during a declared drought emergency.*

C. The Board may, by regulation, require each water user withdrawing surface or subsurface water or both during each year to register, by a date to be established by the Board, water withdrawal and use data for the previous year including the estimated average daily withdrawal, maximum daily withdrawal, sources of water withdrawn, and volume of wastewater discharge, provided that the withdrawal exceeds one million gallons in any single month for use for crop irrigation, or that the daily average during any single month exceeds 10,000 gallons per day for any other user. Location data shall be provided by each user in a coordinate system specified by the Board.

D. The Board shall establish advisory committees to assist it in the formulation of such plans or programs and in formulating recommendations called for in subsection E. In this connection, the Board may include committee membership for branches or agencies of the federal government, branches or agencies of the Commonwealth, branches or agencies of the government of any state in a river basin

located within that state and Virginia, the political subdivisions of the Commonwealth, and all persons and corporations interested in or directly affected by any proposed or existing plan or program.

E. The Board shall prepare plans or programs and shall include in reports prepared under subsection A recommended actions to be considered by the General Assembly, the agencies of the Commonwealth and local political subdivisions, the agencies of the federal government, or any other persons that the Board may deem necessary or desirable for the accomplishment of plans or programs prepared under subsection B.

F. In addition to the preparation of plans called for in subsection A, the Board, upon written request of a political subdivision of the Commonwealth, shall provide water supply planning assistance to such political subdivision, including assistance in preparing drought management strategies, water conservation programs, evaluation of alternative water sources, state enabling legislation to facilitate a specific situation, applications for federal grants or permits, or other such planning activities to facilitate intergovernmental cooperation and coordination.

§ 62.1-44.38:1. Comprehensive water supply planning process; state, regional, and local water supply plans.

A. The Board, with advice and guidance from the Commissioner of Health, local governments, public service authorities, and other interested parties, shall establish a comprehensive water supply planning process for the development of local, regional, and state water supply plans consistent with the provisions of this chapter. This process shall be designed to (i) ensure that adequate and safe drinking water is available to all citizens of the Commonwealth; (ii) encourage, promote, and protect all other beneficial uses of the Commonwealth's water resources; (iii) encourage, promote, and develop incentives for alternative water sources, including desalinization; and (iv) encourage the development of cross-jurisdictional water supply projects.

B. The Board shall adopt regulations designating regional planning areas based primarily on river basins as appropriate based on water supply sources. The Board shall consider existing interjurisdictional arrangements in designating regional planning areas. The Board may, as appropriate, designate multiple regional planning areas within a single river basin in order to enhance the manageability of planning within such basin. The regulations shall identify the particular regional planning area in which each locality shall participate and shall state which local stakeholder groups, including local governments, industrial and agricultural water users, public water suppliers, developers and economic development organizations, and conservation and environmental organizations, shall or may participate in coordinated water resource planning. The regulations shall ~~further~~ provide a mechanism for a locality to request a change of its designated regional planning area to an adjoining planning area that is based on water supply source, river basin, or existing or planned cross-jurisdictional relationship, which change shall be effective upon approval of the Department, notwithstanding the provisions of Article 2 (§ 2.2-4006 et seq.) of Chapter 40 of Title 2.2. *The regulations shall further recognize the localities that include any portion of the service area of a water supply utility in the Commonwealth that uses the Potomac River as a water supply source as a distinct regional planning area. Such plan shall incorporate the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (2000), including provisions related to triggers, actions, and messages for the Potomac River drought evaluation region. Nothing in this subsection regarding the incorporation of such provisions shall be construed to limit the authority of the Governor during a declared drought emergency.*

C. 1. Each locality in a regional planning area shall participate in cross-jurisdictional, coordinated water resource planning. Such local coordination shall accommodate existing regional groups that have already developed water supply plans, including planning district commissions, and other regional planning entities as appropriate.

2. Each locality in a regional planning area shall develop and submit, with the other localities in that planning area, a single jointly produced regional water supply plan to the Department of Environmental Quality (the Department). Such regional water supply plan shall (i) clearly identify the region's water supply risks and (ii) propose regional strategies to address those water supply risks.

3. Each regional water supply plan also shall comply with applicable criteria and guidelines developed by the Board. Such criteria and guidelines shall take into account existing local and regional water supply planning efforts and requirements imposed under other state or federal laws. The criteria and guidelines established by the Board shall not prohibit a town from entering into a regional water supply plan with an adjacent county in the same regional planning area.

4. This section is intended to inform any regional water resource planning being done in the Commonwealth pursuant to interstate compacts.

D. The Board and the Department shall prioritize the allocation of planning funds and other funds to localities that sufficiently participate in regional planning.

E. In accordance with subdivision B 2 of § 62.1-44.38, the Department shall facilitate regional planning and provide assistance to each regional planning area as needed.



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Final Regulation Agency Background Document

Agency name	Department of Environmental Quality
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC25-780
VAC Chapter title(s)	Local and Regional Water Supply Planning
Action title	Amendments pursuant to Chapter 1105 of the 2020 Acts of Assembly
Date this document prepared	October 4, 2023

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19, the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The Local and Regional Water Supply Regulation (9VAC25-780) was promulgated in 2005 in accordance with section 62.1-44.38:1. A of the Code of Virginia, which required the State Water Control Board (Board) to establish a comprehensive water supply planning process for the development of local, regional and state water supply plans (plan). This legislative action and subsequent regulation were in response to the 2001-2002 drought during which many water supplies within the Commonwealth experienced inadequate supply to meet demands.

Under the current regulation, localities could choose to develop a plan independently (local plan) or to plan regionally with other localities (regional plan). In total, 48 water supply plans were submitted in 2008, of which 10 were local plans and 38 were regional plans. The majority

of the regional plans consisted of one county and one or more cities or incorporated towns located within the boundaries of the county. Planning regions were not specifically determined based on river basin or with respect to shared sources of water supply.

Amendments to §§ 62.1-44.36, 62.1-44.38, and 62.1-44.38:1 of the Code of Virginia pursuant to Chapter 1105 of the 2020 Acts of Assembly (HB 542) requires localities to plan regionally with other localities (regional plans) and directs the Board to encourage the development of cross-jurisdictional water supply projects and to adopt regulations designating regional planning areas based primarily on river basin. The amendments mandate that each locality in a particular regional planning area shall participate in cross-jurisdictional, coordinated water resource planning, and all localities in each area shall together develop and submit a single regional plan. As amended, § 62.1-44.38 directs the Department of Environmental Quality (Department) to facilitate the creation of regional water plans by ensuring sufficient coordination among localities, providing planning and other assistance, and ensuring that each regional plan identifies risks and proposes cost-effective strategies to address those risks. Further amendments to § 62.1-44.38:1 pursuant to Chapter 331 of the 2022 Acts of Assembly (HB 1297), now require the regulation to provide a mechanism for localities to request a change of its designated regional planning area to an adjoining planning area that is based on water supply source, river basin, or existing or planned cross-jurisdictional relationship. In addition, Chapter 356 of the 2022 Acts of Assembly (SB 657) mandated revision of the term “board” to “department” where appropriate in the regulation. Additional amendments were made to § 62.1-44.38 pursuant to Chapter 36 of the 2023 Acts of Assembly (HB 2095) and Chapter 37 of the 2023 Acts of Assembly (SB 1149) to require the recognition of localities using the Potomac River as a water supply source as a distinct drought evaluation region to incorporate the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (Metropolitan Washington Council of Governments, 2000).

This regulatory proposal is required to amend the existing Local and Regional Water Supply Plan Regulation to reflect the amendments made to the Code of Virginia and to conform the existing regulation to changes in Code.

Acronyms and Definitions

Define all acronyms used in this form, and any technical terms that are not also defined in the “Definitions” section of the regulation.

- Board – State Water Control Board
- Department – Department of Environmental Quality
- NOIRA – Notice of Intended Regulatory Action
- PDC – Planning District Commission
- PFAS – Per- and polyfluoroalkyl Substances
- Plan – Regional Water Supply Plan
- RAP- Regulatory Advisory Panel

Statement of Final Agency Action

Provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

On November 30, 2023, the State Water Control Board approved the amendments to the Local and Regional Water Supply Regulation (9VAC25-780) as final regulations.

Mandate and Impetus

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding the mandate for this regulatory change, and any other impetus that specifically prompted its initiation. If there are no changes to previously reported information, include a specific statement to that effect.

There is no change to the information previously reported. This regulatory action is in response to the directives created by Chapter 1105 of the 2020 Acts of Assembly (HB 542), Chapter 331 of the 2022 Acts of Assembly (HB 1297), and Chapters 36 and 37 of the 2023 Acts of Assembly (HB 2095 & SB 1149) that requires the Board to adopt regulations designating regional planning areas based primarily on river basin; provide a mechanism for localities to request a change in regional planning areas; and recognize localities using the Potomac River as a water supply source as a distinct drought evaluation region respectively. In addition, changes have been made to the regulation in response to Chapter 356 of the 2022 Acts of Assembly (SB 657), revising the term “board” to “department” where appropriate in the regulation.

Legal Basis

Identify (1) the promulgating agency, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia and Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating agency to regulate this specific subject or program, as well as a reference to the agency’s overall regulatory authority.

Amendments to section 62.1-44.38:1 of the Code of Virginia (Chapter 1105 of the 2020 Acts of Assembly) direct the Board to adopt regulations designating regional planning areas based primarily on river basins, and state that the regulations shall identify the particular regional planning area in which each locality shall participate, and which local stakeholder groups shall or may participate in coordinated water resource planning. The amendments also require each locality to participate in cross-jurisdictional, coordinated water resources planning, and that each regional planning area submit a singly jointly produced regional water supply plan, which shall clearly identify the region’s water supply risks, propose cost-effective regional strategies to address these risks, and comply with all other applicable criteria and guidelines developed by the Board. Amendments to section 62.1-44.38 direct the Board to predict the risk that each locality and region will experience water supply shortfalls and require the Board to direct the Department in its facilitation of regional planning efforts.

Amendments to § 62.1-44.38:1 (Chapter 331 of the 2022 Acts of Assembly) require the regulation to provide a mechanism for localities to request a change of its designated regional planning area to an adjoining planning area that is based on water supply source, river basin, or existing or planned cross-jurisdictional relationship.

Amendments to § 62.1-44.38 and § 62.1 -44.38:1 (Chapters 36 and 37 of the 2023 Acts of Assembly) requires the regulation to recognize localities that use the Potomac River as a water supply source as a distinct drought evaluation region. Plans for those areas are required to incorporate the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (2000).

Purpose

Explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety, or welfare of citizens, and (3) the goals of the regulatory change and the problems it is intended to solve.

The purpose of the proposed amendments is to designate regional planning areas based primarily on river basins and to provide a framework to facilitate improved cross-jurisdictional regional planning as directed by Chapter 1105 of the 2020 Acts of Assembly. Under the current regulation, localities can choose to develop a water supply plan independently (local plan) or may choose to plan regionally with other localities (regional plans). Regional planning enables localities and other water users to assess water sources in the context of their shared use with others in their watershed or region. This approach will promote a more accurate assessment of water sources to meet demands into the future and promotes cost-effective regional projects and strategies to address water supply shortfalls and risks to water supply, such as drought, while also improving the capability of localities to more efficiently pursue new economic development opportunities that often require significant water capacity.

Additionally, the statute requires localities to invite stakeholders including economic development organizations, industrial, commercial, and agricultural water users, among others to participate in plan development. While the previous regulation required a public involvement process, the proposed regulation will allow interested parties to participate more directly.

The goals of the proposed amendments are to require identification of river-basin based regional planning areas within which localities plan regionally, facilitate a process for localities to request a change in planning area, require identification of water supply risks and regional strategies to address those risks, and revision of water supply plan development, submission, and review procedures to align with the new requirements including clarifying the roles and responsibilities for localities, stakeholders, and the Department.

Substance

Briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the “Detail of Changes” section below.

The proposed regulation establishes regional planning areas, identifies the particular regional planning area in which each locality shall participate, identifies a procedure for localities to

request a change to its planning area, and requires localities to invite stakeholder groups to participate in coordinated resource planning. The amendments also incorporate language to address new statutory requirements that the Department facilitate regional water planning efforts, ensure localities coordinate in the development of water supply plans, prioritize allocation of funding to localities that participate in regional planning. The amendments also require that each regional water supply plan clearly identify the regional planning area’s water supply risks and propose regional strategies to address those risks. The proposed amendments also revise the existing water supply plan development, submission, and review procedures to accommodate regional plans and other new requirements discussed above, and clarifies the roles of localities, stakeholders, and the Department in the regional planning process. The amendments also revise the term “board” to “department” where appropriate in response to Chapter 356 of the 2022 Acts of Assembly.

Issues

Identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

Advantages from the proposed regulatory change for the public, including private citizens and businesses include a regional water supply plan scope that addresses sources within a basin that cross jurisdictional boundaries, increased opportunities to participate in the water supply planning process, the potential for more resilient and efficient water supply systems that include regional projects in any evaluation of future infrastructure development, and more consideration of potential risks to water supply beyond deficits. Planning that includes coordinated evaluation of common regional water sources at the regional scale allows for improved optimization of the use of these resources and may increase water availability for future water needs.

Advantages for the agency and Commonwealth include the potential for water supply systems to be more resilient to drought and other water supply risks, requiring fewer emergency related permit modifications or variances. Planning that considers cumulative demands, water supply risks, and promotes regional strategies to addressing water supply deficits and risks establishes local certainty, allowing faster response to economic development opportunities. Effects of this could include smoother and more efficient permit application processes for water supply projects, fewer variances or emergency actions due to drought or other acute conditions, and more efficient and cost-effective use of state and local resources with respect to water supply infrastructure. The proposed amendments will reduce the number of plan submittals from 48 under the current framework to 26, potentially reducing the staff time required for certain administrative tasks related to plan development and review.

Advantages to the regulated community including local governments, water authorities, self-supplied water users, and other stakeholders that elect to participate in the planning process, include a more robust water supply plan that addresses shared water resources that cross local government boundaries, that considers water supply risks and strategies. Clarifications to the plan development, submittal, and review process will address areas of concern or confusion identified during implementation of the existing regulation. Stakeholders that choose to

participate in the plan development have more opportunities to ensure their needs and concerns are considered. Planning regionally may also assist localities in identifying or strengthening regional partnerships to better manage new water use demands associated with growth or unexpected increases in water use demand from new economic development opportunities. Potential disadvantages to this group include eliminating the ability to plan locally for localities that prefer that approach and the potential for additional administrative complexity in plan development as a result of planning with a greater number of localities and stakeholders.

Requirements More Restrictive than Federal

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any requirement of the regulatory change which is more restrictive than applicable federal requirements. If there are no changes to previously reported information, include a specific statement to that effect.

There are no changes to previously reported information. There is no federal statute or regulation for water supply planning and therefore the proposed regulation does not introduce requirements more restrictive than federal requirements. Federal law reserves water supply planning and allocation decisions to the states.

Agencies, Localities, and Other Entities Particularly Affected

List all changes to the information reported on the Agency Background Document submitted for the previous stage regarding any other state agencies, localities, or other entities that are particularly affected by the regulatory change. If there are no changes to previously reported information, include a specific statement to that effect.

There are no changes to previously reported information.

Other State Agencies Particularly Affected

No state agencies are expected to be particularly affected.

Localities Particularly Affected

All counties, cities, and incorporated towns will be affected by this regulatory change but none are expected to be particularly affected.

Other Entities Particularly Affected

No other entities particularly affected.

For purposes of "Locality Particularly Affected" under the Board's statutes

There is no locality particularly affected under the Board's statutes.

Periodic Review and Small Business Impact Review Report of Findings

If you are using this form to report the result of a periodic review/small business impact review that is being conducted as part of this regulatory action, and was announced during the NOIRA stage, indicate

whether the regulatory change meets the criteria set out in EO 19 and the ORM procedures, e.g., is necessary for the protection of public health, safety, and welfare; minimizes the economic impact on small businesses consistent with the stated objectives of applicable law; and is clearly written and easily understandable. In addition, as required by § 2.2-4007.1 E and F of the Code of Virginia, discuss the agency’s consideration of: (1) the continued need for the regulation; (2) the nature of complaints or comments received concerning the regulation; (3) the complexity of the regulation; (4) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (5) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation. Also, discuss why the agency’s decision, consistent with applicable law, will minimize the economic impact of regulations on small businesses.

No periodic review was announced during the NOIRA.

Public Comment

Summarize all comments received during the public comment period following the publication of the previous stage, and provide the agency’s response. Include all comments submitted: including those received on Town Hall, in a public hearing, or submitted directly to the agency. If no comment was received, enter a specific statement to that effect.

Ten comment letters were received during the public comment period held May 22 – July 21, 2023. One comment was submitted through the Town Hall portal and nine were submitted directly to the department. Commenting organizations represented local governments, member associations, nonprofit organizations, and other stakeholder groups. Comments were received from the following organizations: (1) Friends of the North Fork of the Shenandoah River (FNFSR) – David H. Kaeuper & David V. Brotman; (2) Mission H2O – Andrea W. Wortzel; (3) The City of Norfolk – Robert Carteris; (4) Fairfax Water – Jamie Bain Hedges; (5) Virginia Municipal Drinking Water Association (VMDWA) – Tim Mitchell; (6) Shenandoah Riverkeeper – Mark J. Frondorf; (7) James River Association (JRA) – James Riverkeeper – Tom Dunlap; (8) Virginia Manufacturers Association (VMA) – Andrea W. Wortzel; (9) City of Richmond – Robert Steidel; (10) Friends of the Rappahannock (FOR) – Brent Hunsinger. The Public Comment Summaries and the Agency Responses have been grouped by subject area in the table provided below and the commenters are noted by commenter numbers listed above.

9VAC25-780: Exceeds Directive in Statute
Comment Summaries
The scope of the Proposed Regulation exceeds the directive in statute and many of the changes have significant policy implications that were not thoroughly vetted during the Regulatory Advisory Panel (RAP) process. (2) (9)
Concerned that some of the proposed amendments go beyond the scope of the statutory directive and the scope of the Notice of Intended Regulatory Action (NOIRA). (3)
Concerned that the proposed language is overly prescriptive, particularly the language requiring consistency with the State Water Resources and Supply Plan. In a few instances, the proposed regulation extends well-beyond the changes advertised in the Notice of Intended Regulatory Action (NOIRA). (4)
Agency Response
The scope of the mandate HB542/Chapter 1105 (2020 General Assembly) and NOIRA were discussed within the RAP. The proposed amendments are necessary to fully meet the

directives under HB542, which are to ensure local coordination in development of a regional water supply plan, provide technical assistance, ensure the identification of water supply risks and propose strategies to address those risks. Where commenters identified specific areas thought to exceed statutory directives, the Department addresses those directly in the following comment responses.

9VAC25-780: Guidance

Comment Summaries

During the RAP process, DEQ noted that the plans need only “consider” the risks listed in 9VAC25-780 125 B, and that it would develop guidance to further explain how these items were to be addressed. Also, uncomfortable having the regulation finalized before such guidance is available for review and comment. (2) (9)

Additional guidance from the department would be very useful as we commence the process of preparing new regional water supply plans. (5)

Agency Response

Any guidance published by the Department will follow all established public review processes. DEQ will seek feedback from stakeholders for any guidance developed to aid in development of water supply plans.

9VAC25-780: Resources/Funding

Comment Summaries

Concerned over possible funding limitations for DEQ, Local Governments, and PDCs participating in the Regional Water Supply Planning Process. (7)

The fiscal capacity of DEQ, local governments and Planning Districts are already strained. Additional funding should be authorized and allocated to help cover facilitation costs for the development of these plans and to combine plans into a comprehensive dynamic basin wide plan. (10)

Agency Response

The department acknowledges the fiscal capacity of the agency, local governments, and Planning Districts are limited. A total of \$462,000 in funding has been budgeted for planning activities associated with the regionalization of the 26 regional planning areas upon final adoption of the regulation.

9VAC25-780: Support for the Process and the Proposed Amendments

Comment Summaries

Support for the vital need for a comprehensive water supply planning process, and for local, regional, and state water supply plans to begin employing the river basin approach. Regional plans must be consistent with Virginia’s goals and proposed regulations. (1)

Support for the changes related to administration of the water supply planning process (formation of regional planning areas, submission of the plans, assistance for smaller localities, and the approval process for plans). (2) (9)

Supports revising the Regulation to update the water supply planning process in accordance with the statutory directive to DEQ pursuant to Chapter 1105 of the 2020 Acts of Assembly (HB542). (3)

Support for the Department’s efforts to facilitate collaborative and productive regional water supply planning among localities and other stakeholders. Overall, the proposed planning

regulation represents a significant improvement over the version that is presently codified. Expressed general support for the proposed regulation. (5)

Support moving to a river basin approach in developing a comprehensive water supply planning process. (6)

Supports the goal of basin-wide water supply planning. This transition from a single county/locality planning framework to one of regional water supply planning areas will better assist the state in identifying and preparing for water supply issues at a scale more reflective of a river system and connected watershed. (7)

These amendments are a positive step towards comprehensive water supply planning. We are glad to see that public participation will be encouraged in the development of these plans. It is imperative that we take into account all beneficial uses, including aquatic habitat, when planning for water supply needs. (10)

Agency Response

The department acknowledges the comments and the statements of support for the progress toward a more comprehensive water supply planning process, facilitation of collaborative and productive regional water supply plans, a basin-wide approach, and a consistent water supply planning process with enhanced public participation, and an increased focus on consideration of all beneficial uses.

The department also acknowledges support for implementation of the statutory requirements pursuant to Chapter 1105 of the 2020 Virginia Acts of Assembly.

9VAC25-780-45: Regional Water Supply Plan Areas/Units Designation

Comment Summaries

Concerned that designating two (in lieu of one) regional water supply planning areas in 9VAC25-780-45 for the North Fork of the Shenandoah River (and for the South Fork) may not be appropriate, efficient, or pragmatic, and does not take advantage of the available science, nor recognize the opportunities to leverage resources across current jurisdictions – and therefore falls short in securing the public interest. Also concerned about the resources required to coordinate between regional planning areas. (1)

Divvying up the Shenandoah watershed into two distinct regional planning areas (9VAC25-780-45) based upon political boundaries runs counter to developing a comprehensive plan. The Shenandoah watershed is considered a single hydrological unit in other water resources planning. Developing two separate planning documents could lead to duplicative efforts and increased financial burden. A more unified approach may produce a better planning document for fewer dollars and reduced impact upon staff. Separating the planning for the Shenandoah watershed creates the risk that planning approaches may not be properly coordinated and integrated. If the department moves forward with its proposal to divide the watershed into two parts, we request that DEQ allow the Shenandoah Riverkeeper to join both stakeholder groups responsible for developing the local and regional water supply plans for the Shenandoah watershed. (6)

Concerned with amendments subdividing the James River watershed into 7 regional water supply planning areas (9VAC25-780-45). This dissection of the watershed ignores the natural continuity of the James River system and leaves high potential for incongruency in planning deliverables, such as emphasis on beneficial uses like aquatic habitat or considerations for

anadromous fish species that call the James home. Questions remain as to how the resultant plans for sister regional water supply planning areas in the James River watershed will address water demand projections, water conservation initiatives, and supply projects, which do not resolve neatly at county lines and district boundaries. (7)

Strongly objects to Louisa County’s inclusion in the 9VAC25-780-45 B 6 “Middle James River 1 planning area” or in any James River Basin regional planning area. Louisa County is almost wholly within the York River Basin. Louisa County and Fluvanna County formed the James River Water Authority (JRWA) which proposed an interbasin transfer project to divert water from a point on the James River in Fluvanna County to serve Louisa County and address its projected water supply shortfalls. It is easy to foresee conflicts between the City’s water rights, the proposed interbasin transfer, and Middle James River instream flows. Including Louisa County in any James River regional planning area to enable the proposed interbasin transfer is contrary to law and sound regional water supply planning. (9)

Concerned that the amendments divide the Rappahannock Basin (9VAC25-780-45) into 5 regional water supply planning areas. This ignores the fact that river basins are interconnected systems where decisions made in one region can have a profound effect on other regions. A whole basin approach would be beneficial to ensure that future water needs are accounted for. The regional water supply plans should be combined into a dynamic plan that is adjusted as conditions in the watershed change. (10)

Agency Response

The proposed delineation of regional water supply planning areas was created based on existing drought management areas and presented to the Regulatory Advisory Panel (RAP) members for discussion. The regions were then identified by the RAP to optimize the coordination among localities and to create manageable sized planning areas, and to enhance the manageability of planning within the basins.

In addition to scale, and shared water sources, manageability included consideration of existing political, economic, historic, water planning, or other relationships across localities. Planning areas were thereby designed to maximize planning around shared sources and risks, while minimizing the impact of planning area changes on localities.

The department acknowledges the concerns and realizes that there may need to be coordination and collaboration across the proposed delineated areas to develop a working water supply plan for an area.

As included in 9VAC25-780-50 B, regional planning units shall develop a process for other stakeholder participation in the preparation of a regional water supply plan. Stakeholders are defined in 9VAC25-780-30 as industrial and agricultural water users, public water authorities, private water suppliers, developers and economic development organizations, and conservation and environmental organizations.

9VAC25-780-45 C provides a mechanism for a local government to request that the department change its designated regional planning area, upon review and approval. The allowance for a request was mandated directly by HB1297/Chapter 331 (2022 General Assembly).

No changes are being made to the regulation in response to these comments.

9VAC25-780-45 C: Regional Planning Area Redesignation

Comment Summaries
The Board should revise 9VAC25-780-45 C to provide more transparency for administrative DEQ regional planning area redesignation. Administrative redesignations should only be approved after DEQ provides notice and opportunity to comment to other regional planning areas adjoining the “two affected planning areas”. Request for notice and an opportunity to comment if Louisa County seeks to be administratively redesignated into a James River Basin planning area. Also respectfully requests that downstream localities in adjoining regional planning area should be provided notice and opportunity to comment on proposed administrative redesignation. (9)
Agency Response
9VAC25-780-45 C provides a mechanism for a local government to request that the department change its designated regional planning area, upon review and approval. The allowance for a request was mandated directly by HB1297/Chapter 331 (2022 General Assembly). No changes are being made to the regulation in response to this comment.
9VAC25-780-50: Innovative Projects
Comment Summaries
The proposed regulation should encourage the exchange of information regarding innovative water resource management projects such as the Hampton Roads Sanitation District’s Sustainable Water Initiative for Tomorrow (SWIFT). (8)
Agency Response
The department acknowledges the comment and supports the inclusion of local project specific information in the regional water supply plan. No changes are being made to the regulation in response to this comment.
9VAC25-780-50 H: Supporting Documents
Comment Summaries
Concerned about language in 9VAC25-780-50 H 1 requiring supporting documents which requires “A copy of supporting documents including any revisions to comprehensive plans, water supply plans, water and sewer plans, and other local ordinances necessary to implement the regional water supply plan.” (4) 9VAC25-780-50 H provides a list of “documents and supporting materials” that must be appended to regional water supply plans. Subsection 50 H 2 through 50 H 5 refer to documents or information that are reflected in other sections of the proposed regulation as substantive or procedural requirements of the plans. 9VAC25-780-50 H 1 requires the submission of a broad category of “supporting documents” with a list of examples, including comprehensive plans, sewer plans, and local ordinances. The examples referenced in the subsection are all public documents. There is no objection to providing supporting information and documents with regional water supply plans for reference purposes. It is foreseeable that the proposed regulation, as written, could be misconstrued as subjecting these “supporting documents” to the same manner of review and approval as the substantive elements of regional water supply plans. Requests that “supporting documents” referenced in this subsection do not become subject to review and approval by the Department or Board by virtue of the fact that they are appended to a regional water supply plan. (5)
Agency Response
The proposed language was developed as part of the RAP process.

The balance of the documents identified in this section are all representative of substantive or procedural requirements of the plans. The items identified in 50 H 1 are “supporting” materials to further document the local process and procedures to implement the regional water supply plans.

The regulatory language has been revised to clarify that the document to be submitted are reference documents appended to and submitted with the plan and are not approved by the board but are used to verify compliance with the plan content and are for reference only.

Proposed change to regulation in response to this comment:

9VAC25-780-50 H. The following documents and supporting materials shall be appended to and submitted with the regional water supply plan [for reference].

9VAC25-780-60 8: Beneficial Use and Water Use Conflicts

Comment Summaries

9VAC25-780-60 8 as proposed includes a reference to “beneficial use” conflicts. The existing regulatory provision speaks to conflicts between water supply uses, consistent with the intent of § 62.1-44.37, which address the Board’s role in resolving conflicts between water uses, whereas the proposed language would open the door to consideration of additional uses, which change is inconsistent with such statutory intent and fails to consider the statutory preference for human consumptive use. Suggest removing language related to beneficial uses and reverting to the original regulatory language. (3)

9VAC25-780-60 8 adds the term “beneficial use” to modify conflicts and adds a reference to the State Water Resources and Supply Plan (Plan). These changes do not address any particular directive of the changes required by HB542. This should be removed, and item #8 remain as it is currently in the regulation. (4)

9VAC25-780-60 lists actions the Department will take to assist local governments in developing regional water supply plans. In the existing version of the regulation Section 60 7 states that the Department will provide local governments with “any information regarding known conflicts relating to the development of alternatives.” The proposed revision modifies this subsection by adding additional qualifying language, as follows: “any information regarding known beneficial use conflicts relating to the development of alternatives as identified in the most recent State Water Resources and Supply Plan.” Also recommends that the current regulatory text be reinstated. By amending the text to include “conflicts” with all potential: beneficial uses”, the proposed revision materially alters the meaning of the subsection and departs from the intent of the statute. (5)

Agency Response

DEQ is mandated by § 62.1-44.38:1 to establish a comprehensive water supply planning process that is designed to ensure that adequate and safe drinking water is available to all citizens of the Commonwealth, and encourage, promote, and protect all other beneficial uses of the Commonwealth’s water resources. Section 62.1-44.3 defines “Beneficial Use” as meaning both instream and off stream uses. Instream beneficial uses include but are not limited to, the protection of fish and wildlife resources and habitat, maintenance of waste assimilation, recreation, navigation, and critical and aesthetic values. The preservation of instream flows for purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural and aesthetic values is an instream beneficial use of Virginia’s waters. Off stream beneficial uses include, but are not

limited to, domestic (including public water supply), agricultural uses, electric power generation, commercial and industrial uses.

Inclusion of the term “beneficial use” defines the scope of “conflicts” to be considered as they are previously defined in 9VAC25-780-60 8.

No changes are being made to the regulation in response to these comments.

9VAC25-780-70: Design Capacity versus Designed

Comment Summaries

9VAC25-780-70 as proposed changes the term “design capacity” to “designed”. Why was this term changed? (3)

9VAC25-780-70 describes existing water source information to be included in regional water supply plans. Throughout the section, the term “design capacity” was replaced by “designed” in the proposed regulation. Request that the Department confirm this understanding, as discussed during the RAP, of the term “designed” is intended only to clarify and not alter longstanding meaning of this section. (5)

Agency Response

The department confirms that the change in the term from “design capacity” to “designed” is a stylistic change that is not intended to alter the meaning. During the development of the proposed regulation, DEQ received feedback stating that the original language was unclear.

No changes are being made to the regulation in response to these comments.

9VAC25-780-70: Self-Supplied Users

Comment Summaries

The way 9 VAC 25-780-70 is drafted, localities provide the information about their own water sources, but information for industrial and agricultural self-supplied users is provided by DEQ. Localities are to review this information and provide information regarding any withdrawals not included in the DEQ dataset. However, the regulation does not recognize the need for localities to confirm the information with the self-supplied users within their jurisdiction. This is critical to ensure that accurate information is used, and that input from municipal and agricultural water users is included in the planning process. (2) (9)

Concerned about the uncertainty in the identification and accounting of unpermitted self-supplied users of more than 300,000 gallons of water in any month, including the agricultural community. (7)

Concerned about how water usage by manufactures will be documented and protected in the water supply planning process. Pursuant to 9VAC25-780-70 E of the proposed regulation, localities will receive information from DEQ regarding “self-supplied users of more than 300,000 gallons of surface water in any one month”. Localities are to add any additional known self-supplied users. The provision does not require the locality to confirm DEQ’s information with the identified self-supplied users. It is important that the water usage information is verified with the specific industrial users. (8)

Agency Response

The DEQ dataset includes water users who report through existing permitting or annual water withdrawal reporting regulation requirements, including industrial and agricultural self-supplied users as required by statute. The DEQ dataset described in 9VAC25-780-70 also includes data

collected through water supply plan submission. Local government’s review of the values provided in the DEQ dataset is provided for by 9VAC25-780-70 F. Localities, regions, and other water users are encouraged to provide updated information to DEQ to confirm accuracy of data.

To assist the development of regional water supply plans, each local government shall review data provided by the department for self-supplied users of more than 300,000 gallons in one month. Local governments shall review and provide information for any locally known withdrawals of more than 300,000 gallons in any one month not identified in the dataset provided as per 9VAC25-780-70.

No changes are being made to the regulation in response to these comments.

9VAC25-780-70 & 9VAC25-780-90: Exempt Withdrawals

Comment Summaries

Section 9VAC25-780-70 requires the identification of “existing water source information.” Additionally, 9VAC25-780-90 outlines the information to be provided for “existing water resource information.” Grandfathered withdrawals should be included in one of these sections. Documentation of such grandfathered withdrawals is important to ensure that existing water withdrawals are preserved and protected, that the planning process adequately accounts for these protected water withdrawal amounts, and to aid localities and DEQ in assessing the viability of proposed alternative sources of water or future water withdrawal requests in light of these protected withdrawals. The Proposed Regulation should specifically recognize the inclusion of such information in the regional plans, including both the current volume of withdrawals and the maximum intake capacity associated with the withdrawal, which is the amount protected by Va. Code § 62.1-44.38:22. B (2) (9)

Include a reference to grandfathered withdrawals either in 9VAC25-780-70 or 9VAC25-780-90. The Regulation should call for the inclusion in regional plans of information pertaining to the location of grandfathered withdrawals, and the current volume and maximum intake capacity of such withdrawals. Without the inclusion of information on grandfathered withdrawals, the water supply planning process will be incomplete, and the resulting regional plans will be inaccurate, as they will not adequately account for such withdrawal rights. (3)

The provision does not address the fact that many self-supplied manufacturers are grandfathered from the DEQ water withdrawal permitting process. Documentation of such grandfathered withdrawals is important to ensure that existing water rights are preserved and protected, that the planning process adequately accounts for these protected water withdrawal amounts, and to aid localities and DEQ in assessing the viability of proposed alternative sources of water or future water withdrawal requests in light of these protected water withdrawal amounts. The Proposed Regulation should specifically recognize the inclusion of such information in the regional plans. (8)

Agency Response

The purpose of 9VAC25-780 is to establish a comprehensive water supply planning process for the collection of certain data by localities and the development of regional and state water supply plans. The process does not and is not intended to validate or invalidate any specific exempt claim amount or other water rights claims exempt from Virginia Water Protection (VWP) permit requirements as defined within Va. Code § 62.1-44.15:22 B, and 9VAC25-210-310. A.

<p>DEQ acknowledged this concern within the RAP, stating that exempt amounts or demands would be a form of information reporting requirements and not any sort of claim or adjudication.</p> <p>DEQ believes that information collected and developed as part of the water supply planning process, including but not limited to, 9VAC25-780-70, 9VAC25-780-80 and 9VAC25-780-100 offers an opportunity for local governments and water users to provide relevant information on existing water source capacity, future water withdrawals and exempt withdrawals.</p> <p>No changes are being made to the regulation in response to these comments.</p>
<p>9VAC25-780-70: Land Uses</p>
<p>Comment Summaries</p>
<p>Regional water supply plans need to take into account new land uses and industries that will use large amounts of water. (10)</p>
<p>Agency Response</p>
<p>Existing and proposed water uses are incorporated into water supply plans through 9VAC25-780-70, 9VAC25-780-80 and 9VAC25-780-100.</p> <p>No changes are being made to the regulation in response to this comment.</p>
<p>9VAC25-780-90: Water Availability</p>
<p>Comment Summaries</p>
<p>References to “water availability” determinations in regional water supply plans and the State Water Resources and Supply Plan should be removed. The Proposed Regulation outlines the list of “existing water resource information” that localities must include in their regional plans. 9 VAC 25-780-90. Subsection 11 of this provision references “water availability based on in-stream flow necessary to support aquatic life provided by the department as identified in the most recent version of the State Water Resources and Supply Plan.” This provision should be struck from the regulation. Use of such information is entirely inappropriate. The State Water Resources and Supply Plan itself acknowledges that this information is not sufficiently developed to be used in the water supply planning context. Accordingly, the requirement to use this information in regional water supply plans is not appropriate and should be stricken from the Proposed Regulation. (2) (9)</p> <p>The language proposed in 9VAC25-780-90 B is inappropriate and should be removed. It requires inclusion of information on “water availability” based on in-stream flow necessary to support “aquatic life” from the State Water Resources and Supply Plan that was first included in the 2020 version of the Plan (finalized in 2022) and has not been vetted or substantiated. (3)</p> <p>9VAC25-780-90 B 11, regarding in-stream flow to support aquatic life as identified in the most recent State Water Resources and Supply Plan should be removed. This introduces a new term, “water availability”, reducing the clarity of the regulations for those entities subject to the regulation. The term “water availability” is not defined in the regulation and interpretation of these requirements could be problematic. The quantity of water “available” in the context of regional water supply planning must be made in consideration of, among other things, the statutory priorities for “human consumption” (62.1-44.36(2)) and “domestic and other existing beneficial uses” (62.1-44.15:22(A)), as well as the existence of withdrawals that are not subject to VWP permitting (62.1-44.15:22(B)).(4)</p>

9VAC25-780-90 B provides a list of informational elements required to be included in the “existing water resource” sections of regional water supply plans. The first ten elements of the list pertain to existing factual information, such as the presence of sensitive species and the locations of point source discharges. 9VAC25-780-90 B 11 is unlike the first ten elements, however. This subsection requires a discussion of “water availability based on in-stream flow necessary to support aquatic life...” The quantity of water “available” for use by localities is a regulatory determination that must be made in consideration of, among other things, the statutory priorities for “human consumption” and “domestic and other existing beneficial uses” as well as the existence of withdrawals that are not subject to VWP permitting and existing water rights. Suggest deleting 9VAC25-780-90 B 11. (5)

Agency Response

DEQ is mandated by § 62.1-44.38:1 to establish a comprehensive water supply planning process that is designed to ensure that adequate and safe drinking water is available to all citizens of the Commonwealth, and encourage, promote, and protect all other beneficial uses of the Commonwealth’s water resources. Section 62.1-44.3 defines “Beneficial Use” as meaning both instream and off stream uses. Instream beneficial uses include but are not limited to, the protection of fish and wildlife resources and habitat, maintenance of waste assimilation, recreation, navigation, and critical and aesthetic values. The preservation of instream flows for purposes of the protection of navigation, maintenance of waste assimilation capacity, the protection of fish and wildlife resources and habitat, recreation, cultural and aesthetic values is an instream beneficial use of Virginia’s waters. Off stream beneficial uses include, but are not limited to, domestic (including public water supply), agricultural uses, electric power generation, commercial and industrial uses.

Data related to instream flow to support aquatic life provided within the State Water Resources and Supply Plan have been peer-reviewed and published. Publications include Kleiner et al. (2020) which can be accessed at <https://doi.org/10.1111/1752-1688.12876>, Rapp et al. (2020) which can be accessed at <https://doi.org/10.1111/1752-1688.12877>, and other supporting information from the Department of Wildlife Resources can be found here <https://dwr.virginia.gov/wp-content/uploads/media/Surface-Water-Intake-Design-Operation-Standards.pdf>. Use of this information is to inform water supply plan development and adds to the State’s role within 9VAC25-780-60 to provide planning, policy, and technical assistance to each regional planning area.

Water availability, as included in the State Water Resources and Supply Plan, includes consideration of human consumption, domestic and other beneficial uses, and the existence of withdrawals not subject to VWP surface water withdrawal permitting.

In response to this comment the language within 9VAC25-780-90 is being revised from “aquatic life” to read “fish and wildlife resources and habitat” to be consistent with the definition of instream beneficial use at § 62.1-44.3. In addition, the department will provide regional planning units with information related to fish and wildlife and habitat included within the most recent State Water Resources and Supply Plan as required by 9VAC25-780-60, for consideration by local governments.

Proposed change in regulation in response to this comment:

9VAC25-780-90 B 11: ~~Potential threats to the existing water quantity and quality, other than those from above~~ Water availability based on in-stream flow necessary to support ~~aquatic life~~

provided by the department as identified in the most recent version of the State Water Resources and Supply Plan fish and wildlife resources and habitat].
9VAC25-780-90: Water Availability - Tidal Tributaries and Estuarine Systems
Comment Summaries
Concerned about the use of water availability as identified in the State Water Resources and Supply Plan for attributing in-stream flow levels necessary to support aquatic life for tidal tributaries and estuarine systems. (7)
Agency Response
The department acknowledges the comment and concern. The most recent State Water Resources Plan does not include modeling of in-stream flows in tidal tributaries or estuaries. Additionally, language referencing the State Water Resources Plan has been removed from Section 90 B 11, as outlined in the comment response above for 9VAC25-780-90: Water Availability.
9VAC25-780-100 A: References
Comment Summaries
Reinsert the reference to the American Water Works Association (AWWA) manual in 9VAC25-780-100. While additional methodologies may be appropriate, without a reference to an industry-recognized and accepted publication as an example of an acceptable methodology, the Regulation lacks clarity that local governments need to ensure that they can prepare demand projections in compliance with the requirements of this regulatory provision. (3)
9VAC25-780-100 A of the proposed regulation states that regional water supply plans should incorporate 30-year demand projections using “methodologies outlined by the department consistent with 9VAC25-780-60.” Section 100 A of the existing regulation states that demand projections should be consistent with the methodology developed by the American Water Works Association (AWWA). The AWWA’s demand projections guidance remains useful, authoritative, and appropriate. Suggestion that the reference be retained in the revised regulation. (5)
Agency Response
The department acknowledges the comment and concern. This revision was discussed during the RAP process and the department has removed the reference to allow for other methodologies, as approved by the department. The American Water Works Association (AWWA) manual continues to be an available methodology.
No changes are being made to the regulation in response to these comments.
9VAC25-780-100 I 3: Alternatives Analysis – Water Availability
Comment Summaries
Recommend that 9VAC25-780-100 I 3 be deleted. Water availability is a regulatory determination governed by other regulations and is not appropriately included in regional water supply plans or the Regulation governing same. (3)
The new language added to 9VAC25-780-100 in I 3 related to alternatives should be removed. This language includes requirements to include “water availability” and a more detailed assessment of alternatives. (4)

9VAC25-780-100 I 3 can be deleted to eliminate the problematic reference to water “availability” without undermining the intent of the alternative analysis process. The preceding subsection (100 I 2) provides that the alternatives analysis should evaluate options that “may satisfy” the shortfall, including an estimated quantity of water that could be derived from each. That provision renders subsection 100 I 3 unnecessary. (5)

Agency Response

Water availability, as included in the State Water Resources and Supply Plan, includes consideration of human consumption, domestic and other beneficial uses, and the existence of withdrawals not subject to VWP surface water withdrawal permitting.

Water availability as discussed in 9VAC25-780-100 I 3 is relevant to the practicability of an alternative, and the capacity of a water source to meet current or projected demands.

No changes are being made to the regulation in response to these comments.

9VAC25-780-100 I 4: Available Alternative

Comment Summaries

Requests department confirm understanding of 9VAC25-780-100 I 4 (i). Understanding includes that the reference to an “available” alternative in 9VAC25-780-100 I 4 (i) refers to whether an alternative is available. (5)

Additionally, because “availability” and “practicability” are closely related concepts commonly used in other alternative analysis regulations (e.g., 9VAC25-210-360 3 c), a minor change to the structure of the subsection would be useful to clarify its meaning. (5)

Suggested revision: *“An assessment of whether the identified alternatives are (i) available and practicable in terms of cost, logistics, and existing technology; (ii) avoid and minimize the need for water to the extent practicable; and (iii) are sufficient to satisfy the need alone or in combination with other short-term or long-term alternatives.”* (5)

Agency Response

The department agrees and has revised the regulation to clarify the language included in this section.

Proposed change in regulation in response to this comment:

9VAC25-780-100 I 4: An assessment of whether the identified alternatives are (i) available [~~;~~(ii) and] practicable in terms of cost, logistics, and existing technology; [(iii) (ii)] avoid and minimize the need for water to the extent practicable; and [(iv) (iii)] are sufficient to satisfy the need alone or in combination with other short-term or long-term alternatives.

9VAC25-780-100 J: Projected Water Demand – Cumulative Demand

Comment Summaries

Delete the word “address” in 9VAC25-780-100 J and replace with either “include a discussion of” or “discuss”. The proposed word “address” is ambiguous and could be construed to require that regional plans be prepared assuming the veracity of, and in reliance upon, the information provided by DEQ. (3)

9VAC25-780-100 J requires that regional water supply plans “address”, if available, any cumulative demand, use conflict, on in-stream flow information identified by the board in the most recent review of the regional water supply plan or most recent version of the State Water Resources and Supply Plan. This is problematic because it extends well-beyond “identifying”

<p>conflicts, to potentially requiring the regional planning entity to accept the DEQ Staff developed information on conflicts when such a conflict is disputable. (4)</p> <p>9VAC25-780-100 J requires that regional water supply plans “address”, if available, any cumulative demand, use conflict, or in-stream flow information identified by the board in the most recent review of the regional water supply plan or most recent version of the State Water Resources and Supply Plan...”. The verb “address” is ambiguous in this context. To preserve the autonomy and judgement of regional planning units, this section should be clarified by changing “address” to “discuss”. (5)</p>
<p>Agency Response</p>
<p>This revision was discussed during the RAP process. DEQ notes that the term “consider” is used in similar requirements in the regulation and is replacing the term “address” with the term “consider”.</p> <p>Proposed change in regulation in response to this comment:</p> <p>9VAC25-780-100 J: A <u>regional water supply plan shall include [address consider], if available, any cumulative demand, use conflict, or in-stream flow information developed identified by the board in the most recent review of the regional water supply plan or most recent version of the State Water Resources and Supply Plan pursuant to 9VAC25-780-140 G.</u></p>
<p>9VAC25-780-110: Water Demand Management Strategies</p>
<p>Comment Summaries</p>
<p>Water reclamation and reuse is an important means of conserving water sources and should be recognized in 9VAC25-780-110 of the proposed regulation as one of the water demand management strategies that should be assessed in the planning process. (8)</p>
<p>Agency Response</p>
<p>Water reclamation and reuse is a recognized means of conserving water and is a water demand management strategy. 9VAC25-780-110 C addresses water conservation practices, techniques and technologies but does not go into detail of what those entail. Specific water conservation practices were not included in the RAP discussions.</p> <p>No changes are being made to the regulation in response to this comment.</p>
<p>9VAC25-780-125: Exempt Withdrawals</p>
<p>Comment Summaries</p>
<p>The risk assessment required in 9VAC25-780-125 has the effect of requiring reviews of existing water sources, all of which should either be permitted (and thus previously subject to these criteria already) or are grandfathered pursuant to VA Code § 62.1-44.15:22 B and thus exempt from that regulatory review. These changes suggest that the analysis required could call into question these existing water resources rather than focusing on future alternative water sources. (2) (9)</p>
<p>Agency Response</p>
<p>The purpose of 9VAC25-780 is to establish a comprehensive water supply planning process for the collection of certain data by localities and the development of regional and state water supply plans. The process does not and is not intended to validate or invalidate any specific exempt claim amount or other water rights claims exempt from VWP surface water withdrawal requirements as defined within Va. Code § 62.1-44.15:22 B, and 9VAC25-210-310. A.</p>

DEQ acknowledged this concern within the RAP, stating that exempt amounts or demands would be a form of information reporting requirements and not any sort of claim or adjudication.

DEQ believes that information collected and developed as part of the water supply planning process, including but not limited to, 9VAC25-780-70, 9VAC25-780-80 and 9VAC25-780-100 offers an opportunity for local governments and water users to provide relevant information on existing water source capacity, future water withdrawals and exempt withdrawals.

No changes are being made to the regulation in response to these comments.

9VAC25-780-125: Water Supply Risks

Comment Summaries

The focus of HB 542 (2020 General Assembly) was ensuring that there were consistent methodologies used to calculate supply and demand. It was based on a recommendation to improve the accuracy of predicted supplies and demands to assess the risk of shortage; it was not focused on the creation of new criteria for determining risks (9VAC25-780-125). (2) (9)

The provision contained in 9VAC25-780-125 B outlines “potential water supply risks: that must be “considered”. This provision is inconsistent with HB 542, which clearly is related to the risk of water supply shortfalls in situations where the projected demand cannot be met by the available supply. (2) (9)

The Proposed Regulation also requires that regional plans develop strategies to address the risks identified in 9VAC25-780-125 B. This also goes beyond HB 542 and the original water supply planning legislation, which is focused on identifying alternative sources and promoting water demand management/augmenting existing sources. (2) (9)

The list of risks identified in 9VAC25-780-125 that the regional planning unit must consider remains problematic. The list outlined in the proposed regulatory language is overly broad and goes beyond the purpose and scope of local water supply planning. 9VAC25-780-125 B 3-7 should be removed. (4)

Several parties to the RAP process expressed concern about the list of “water supply risks” that must be evaluated during the planning process (9VAC25-780-125 B). (5)

Agency Response

HB542/Chapter 1105 (2020 General Assembly) specifies that the Board shall “estimate, using a data-driven method that includes multiple reasonable assumptions about supply and demand over varying time frames, the risk that each locality and region will experience water supply shortfalls”. In addition, it states that “Each locality in a regional planning area shall develop and submit a...regional water supply plan...such regional water supply plan shall (i) clearly identify the region’s water supply risks and (ii) propose regional strategies to address those water supply risks.”

The scope of the mandate HB542/Chapter 1105 (2020 General Assembly) and NOIRA were discussed within the RAP. The proposed amendments are necessary to fully meet the directives under HB542, which are to ensure local coordination in development of a regional water supply plan, provide technical assistance, ensure the identification of water supply risks and propose strategies to address those risks.

The department agrees this language should be revised to be consistent with statutory language. Language has been revised, included below, to address concerns and make clear

<p>the requirement that regional water supply plans address, as required in 9VAC25-780-125 only those risks relevant to the regional planning unit.</p>
<p>Proposed change in regulation in response to this comment:</p>
<p>9VAC25-780-125 A. <u>A regional water supply plan shall identify water supply risks [relevant to the regional planning unit, using readily available information as defined in 9VAC25-780-50 C]. For each water supply risk identified, the likelihood and severity of the impact on water supply in the regional water supply plan shall be evaluated.</u></p>
<p>9VAC25-780-125 B. In evaluating <u>identifying</u> potential water supply risks [relevant to the regional planning unit], the regional planning unit shall consider, at a minimum, the following:</p>
<p style="text-align: center;">9VAC25-780-125 B: Beneficial Use</p>
<p style="text-align: center;">Comment Summaries</p>
<p>Inclusion of item 9VAC25-780-125 B 5 is not appropriate based on the statutory prioritization of human consumption above other uses. (3)</p>
<p style="text-align: center;">Agency Response</p>
<p>DEQ is mandated by § 62.1-44.38:1 to establish a comprehensive water supply planning process that is designed to ensure that adequate and safe drinking water is available to all citizens of the Commonwealth, and encourage, promote, and protect all other beneficial uses of the Commonwealth’s water resources. § 62.1-44.3 defines “Beneficial Use” as meaning both instream and off stream uses. Instream beneficial uses include but are not limited to, the protection of fish and wildlife resources and habitat, maintenance of waste assimilation, recreation, navigation, and critical and aesthetic values.</p>
<p>No changes are being made to the regulation in response to this comment.</p>
<p style="text-align: center;">9VAC25-780-125 B: Language</p>
<p style="text-align: center;">Comment Summaries</p>
<p>9VAC25-780-125 B is generally problematic, as it is unclear how the directive to “consider” the enumerated risks will be interpreted and applied by DEQ, and how regional planning units and their constituent localities will be expected to comply with such a directive. (3)</p>
<p style="text-align: center;">Agency Response</p>
<p>This revision was discussed during the RAP process. DEQ notes that the term “consider” is used in similar requirements in the regulation. Changes to 9VAC25-780-125 A. clarify that only risks relevant to the regional planning unit be identified, and only readily available information as defined in 9VAC25-780-50 C must be considered.</p>
<p>No additional changes are being made to the regulation in response to this comment.</p>
<p style="text-align: center;">9VAC25-780-125 B: Other Water Supply Risks</p>
<p style="text-align: center;">Comment Summaries</p>
<p>Regarding the identification of water supply risks and proposed regional strategies in 9VAC25-780-125, we appreciate the inclusion of climate change as a recognized risk. However, we recommend expanding the list of identified water supply risks to include Harmful Algal Blooms, low-water induced bacterial contamination and PFAS. (6)</p>
<p style="text-align: center;">Agency Response</p>
<p>The recommended expanded list of water supply risks such as harmful algal blooms or PFAS, are examples of those “other” risks listed in 9VAC25-780-125 B 8 that may be identified by the local government for inclusion in a regional water supply plan if applicable.</p>

No changes are being made to the regulation in response to these comments.
9VAC25-780-125 B: Inclusion of Water Supply Risks
Comment Summaries
Agrees with the inclusion of the effects of climate change and the need for climate resiliency as water supply risks (9VAC25-780-125). Also encouraged that these risks will be identified and evaluated in these regional water supply plans. (7)
Agency Response
The department acknowledges the comment and the statement of support for identification and evaluation of water supply risks related to climate.
9VAC25-780-140 C: Compliance Items
Comment Summaries
Modify 9VAC25-780-140 C by deleting all but the first sentence, such that subsection C would read: "C. The board will assess the compliance of submitted regional water supply plans with this chapter." (3)
Our understanding from the RAP was that the Department had no intention of adding implied plan requirements through the review criteria in 9VAC25-780-140. Concern about the potential for confusion, conflicts, and mistakes caused by this section. 9VAC25-780-140 states that the Board will review regional supply plans for "demonstrated compliance" with a list of 14 items. Also suggests that the cross-references are unnecessary. The most concerning item on the list is 140 C 3, which implies a new set of requirements for regional water supply plans that are not expressly stated anywhere in the regulations. (5)
Suggested revision to 9VAC25-780-140 C: <i>"The board will assess the compliance of submitted regional water supply plans with this chapter."</i> (Delete remainder of 140 C) (5)
Agency Response
The list of compliance items as included in the regulation is based on discussions with the RAP. The RAP supported the need for clarity in this section. The current list in Section 140.C clarifies the requirements and the compliance items that the Board shall assess in review of regional water supply plans.
No changes are being made to the regulation in response to these comments.
9VAC25-780-140 C: Compliance – Water Supply Risks
Comment Summaries
Concerned about the provision in 9VAC25-780-140 C 10 which suggests that one of the criteria for determining a regional planning unit's compliance with the regulation will be based on whether "the region's water supply risks have been identified and regional strategies to address those risks have been proposed and comply with 9VAC25-780-125." Does this mean that a plan can be rejected or disapproved if each and every risk is not assessed? Does this mean that a plan can be rejected or disapproved if DEQ disagrees with the regional strategies developed to address identified risks? (2) (9)
Agency Response
The regulation specifies that the Board "shall prepare a tentative statement of findings on whether the regional water supply plan has demonstrated compliance with" the identification of the region's water supply risks and regional strategies to address them have been proposed. Language is being revised in 9VAC25-780-125 B to clarify that the regional planning unit is to

<p>identify potential water supply risks that are relevant to the regional planning unit but should consider, at a minimum, those risks identified in the list in 9VAC25-780-125 B.</p> <p>Proposed change in regulation in response to this comment:</p> <p>9VAC25-780-125 A. <u>A regional water supply plan shall identify water supply risks [relevant to the regional planning unit, using readily available information as defined in 9VAC25-780-50 C]. For each water supply risk identified, the likelihood and severity of the impact on water supply in the regional water supply plan shall be evaluated.</u></p> <p>9VAC25-780-125 B. In [evaluating-identifying] <u>potential water supply risks [relevant to the regional planning unit], the regional planning unit shall consider, at a minimum, the following:</u></p>
<p>9VAC25-780-140 G: Alternative Water Supplies</p>
<p>Comment Summaries</p>
<p>The original planning process was established to ensure that localities were identifying and developing their own alternative water. These were meant to be regional plans that informed the state water supply management process (a bottom-up approach). However, the changes to the regulation convert this process to a top-down approach, with DEQ dictating the information to be included, and then itself developing and providing that information (9VAC25-780-140 G). Moreover, the changes do not reflect the fact that many localities/regions have an ongoing planning process, and in many instances have data and information that is potentially more accurate. Localities are better positioned to have information on their projected withdrawals and projected demands. (2) (9)</p>
<p>Agency Response</p>
<p>The information specified in 9VAC25-780-140 G is developed by the Department using the most recently available data collected through regional water supply plans, permitting processes, or annual water withdrawal reporting. Providing the most recently available data to localities supports a continuous water supply planning process.</p> <p>The Department acknowledges the State Water Resources and Supply Plan is not the only dataset that will be considered by localities when developing regional water supply plans. The Department encourages the augmentation of available data where appropriate and the regulation allows for use of this data.</p> <p>No changes are being made to the regulation in response to these comments.</p>
<p>9VAC25-780-140 G: Aquatic Life</p>
<p>Comment Summaries</p>
<p>The proposed language in 9VAC25-780-140 G 3 related to “aquatic life” should revert back to the original regulation language, such that subsection G.3 would read: “The evaluation of potential use conflicts among projected water demand and estimates of requirements of in-stream flow;” The information pertaining to in-stream flows necessary to support aquatic life is new, not properly vetted, and not appropriate for use in the water supply planning context. (3)</p>
<p>Agency Response</p>
<p>Data related to instream flow to support aquatic life provided within the State Water Resources and Supply Plan have been peer-reviewed and published. Use of this information is to inform water supply plan development and adds to the State’s role within 9VAC25-780-60 to provide planning, policy, and technical assistance to each regional planning area.</p>

In response to comments, revisions are being made to 9VAC25-780-140 G 3, changing “aquatic life” to “fish and wildlife resources and habitat” as included within the definition of instream beneficial use at § 62.1-44.3 of the Code of Virginia. DEQ will provide regional planning units with information related to fish and wildlife and habitat included within the most recent State Water Resources and Supply Plan as required by 9VAC25-780-60.

Proposed change in regulation in response to this comment:

9VAC25-780-140 G 3: ~~The evaluation of potential use conflicts among projected water demand and estimates of requirements for instream flow; and~~ An estimate, for each major river and stream, of the minimum in-stream flows necessary during drought conditions to maintain water quality and avoid permanent damage to [aquatic life fish and wildlife resources and habitat] in streams, bays, and estuaries;

Detail of Changes Made Since the Previous Stage

List all changes made to the text since the previous stage was published in the Virginia Register of Regulations and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. ** Put an asterisk next to any substantive changes.*

Current chapter-section number	New chapter-section number, if applicable	New requirement from previous stage	Updated new requirement since previous stage	Change, intent, rationale, and likely impact of updated requirements
9VAC25-780-50 H		<u>H. The following documents and supporting materials shall be appended to and submitted with the regional water supply plan.</u>	<u>H. The following documents and supporting materials shall be appended to and submitted with the regional water supply plan [for reference].</u>	The phrase “for reference” has been added to clarify that the documents identified in this section are reference documents appended to and submitted with the plan, and are not approved by the board but are used to verify compliance with plan content. Change made as the result of public comment.

<p>9VAC25-780-70 F</p>		<p>F. To the extent that information is available, a <u>assist the development of the regional water supply plan, each local government shall review the data provided by the department for sell-supplied users...</u></p>	<p>F. To the extent that information is available, a <u>assist the development of the regional water supply plan, each local government shall review the data provided by the department for [self-suppliedself-supplied] users...</u></p>	<p>Editorial Correction: Spelling</p>
<p>9VAC25-780-90 B 11</p>		<p>11. Potential threats to the existing water quantity and quality, other than those from above <u>Water availability based on in-stream flow necessary to support aquatic life provided by the department as identified in the most recent version of the State Water Resources and Supply.</u></p>	<p>11. Potential threats to the existing water quantity and quality, other than those from above <u>Water availability based on in-stream flow necessary to support [aquatic life provided by the department as identified in the most recent version of the State Water Resources and Supply Plan fish and wildlife resources and habitat] .</u></p>	<p>Change in the regulation language to replace the term “aquatic life” with the phrase “fish and wildlife resources and habitat” as included within the definition of instream beneficial use at § 62.1-44.3. Change made in response to public comment and to be consistent with terminology in state law.</p> <p>Removal of reference to the State Water Resources and Supply Plan (State Plan) in response to comments received. The State Plan remains a resource for regional supply plan development</p>

				and is included elsewhere in the regulation.
9VAC25-780-100 D 4 i		<u>i. Projected water demands with and without water conservation pursuant to 9VAC25-780-110; and</u>	<u>i. Projected water demands with and without water conservation pursuant to [9VAC25-780-110 B9VAC25-780-110 C] ; and</u>	Editorial Correction: Correct typo: Revise reference to 9VAC25-780-100 B to read 9VAC25-780-100 C.
9VAC25-780-100 I 2		<u>2. Identification of a reasonable range of alternatives that potentially may satisfy the stated need, including all alternatives identified by a local government under subsection G of this section,</u>	<u>2. Identification of a reasonable range of alternatives that potentially may satisfy the stated need, including all alternatives identified by a local government under subsection [GH] of this section,</u>	Editorial correction: Correct typo: Revise reference to “subsection G” to read “subsection H”.
9VAC25-780-100 I 4		<u>4. An assessment of whether the identified alternatives are (i) available; (ii) practicable in terms of cost, logistics, and existing technology; (iii) avoid and minimize the need for water to the extent practicable; and (iv) are sufficient to satisfy the need alone or in combination with other short-term or long-term alternatives.</u>	<u>4. An assessment of whether the identified alternatives are (i) available [;(ii) and] practicable in terms of cost, logistics, and existing technology; [(iii)(ii)] avoid and minimize the need for water to the extent practicable; and [(iv)(iii)] are sufficient to satisfy the need alone or in combination with other short-term or long-term alternatives.</u>	Revised text to group the terms “available” and “practicable” and renumbered assessment steps for identified alternatives to provide clarity in response to comments received.
9VAC25-780-100 J		<u>J. A regional water supply plan shall include</u>	<u>J. A regional water supply plan shall include [address consider], if available, any</u>	Replace the term “address” with the term “consider” to

		<p><u>address</u>, if available, any cumulative demand, use conflict, or in-stream flow information developed <u>identified by the board in the most recent review of the regional water supply plan or most recent version of the State Water Resources and Supply Plan</u> pursuant to 9VAC25-780-140 G.</p>	<p>cumulative demand, use conflict, or in-stream flow information <u>developed identified by the board in the most recent review of the regional water supply plan or most recent version of the State Water Resources and Supply Plan</u> pursuant to 9VAC25-780-140 G.</p>	<p>clarify the intent of the requirement and to be consistent with the use of the term “consider” in other sections of the regulations. Change made based on public comment.</p>
<p>9VAC25-780-120 C</p>		<p>C. Each regional planning area, to the extent practicable, shall evaluate the feasibility of developing a regional drought response and contingency plan as part of the regional water supply plan. If a regional drought contingency and response plan is developed, it shall include all of the elements identified in the subsection A of this section.</p>	<p>C. Each regional planning area, to the extent practicable, shall evaluate the feasibility of developing a regional drought response and contingency plan as part of the regional water supply plan. If a regional drought contingency and response plan is developed, it shall include all of the elements identified in the subsection A of this section. [<u>Any local government that utilizes the Potomac River through any portion of their service area as a water supply source shall incorporate the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (2000), including provisions related to triggers, actions, and</u></p>	<p>Addition of language to incorporate the statutory changes in 2023 Virginia Acts of Assembly Chapter 36 (HB 2095) and Chapter 37 (SB1149) related to preparing drought evaluation and response plans and the Metropolitan Washington Water Supply and Drought Awareness Response Plan.</p>

			<u>messages for the Potomac River drought evaluation region.]</u>	
9VAC25-780-125 A		<u>A. A regional water supply plan shall identify water supply risks. For each water supply risk identified the likelihood and severity of the impact on water supply in the regional water supply plan shall be evaluated.</u>	<u>A. A regional water supply plan shall identify water supply risks [relevant to the regional planning unit, using readily available information as defined in 9VAC25-780-50 C] . For each water supply risk identified the likelihood and severity of the impact on water supply in the regional water supply plan shall be evaluated.</u>	Addition of the phrase “relevant to the regional planning unit, using readily available information as defined in 9VAC25-780-50 C” to clarify what water supply risks should be identified in a regional water supply plan. Change made based on public comment.
9VAC25-780-125 B		<u>B. In evaluating potential water supply risks, the regional planning unit shall consider, at a minimum, the following:</u>	<u>B. In [evaluating identifying] potential water supply risks [relevant to the regional planning unit] , the regional planning unit shall consider, at a minimum, the following:</u>	Replaced the term “evaluating” with the term “identifying” and inserted the phrase “relevant to the regional planning unit” to clarify the process for identification of water supply risks by the regional planning unit. Change made based on public comment.
9VAC25-780-140 G 3		<u>3. The evaluation of potential use conflicts among projected water demand and estimates of requirements for in-stream flow; and An estimate, for each major river and stream, of the minimum</u>	<u>3. The evaluation of potential use conflicts among projected water demand and estimates of requirements for in-stream flow; and An estimate, for each major river and stream, of the minimum in-stream flows necessary during drought conditions to maintain water quality and avoid permanent</u>	Replaced the phrase “aquatic life” with the phrase “fish and wildlife resources and habitat” as included within the definition of instream beneficial use at § 62.1-44.3.

		<u>in-stream flows necessary during drought conditions to maintain water quality and avoid permanent damage to aquatic life in streams, bays, and estuaries;</u>	<u>damage to [aquatic life fish and wildlife resources and habitat] in streams, bays, and estuaries;</u>	Change made in the response to public comment and to be consistent with statutory language.
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Detail of All Changes Proposed in this Regulatory Action

List all changes proposed in this action and the rationale for the changes. For example, describe the intent of the language and the expected impact. Describe the difference between existing requirement(s) and/or agency practice(s) and what is being proposed in this regulatory change. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. ** Put an asterisk next to any substantive changes.*

Table 1: Changes to Existing VAC Chapter(s)

Current chapter-section number	New chapter-section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of updated requirements
780-10 A		Application requirements	Clarification of affected entities by deleting the phrase “counties, cities, and towns”, and replacing with “local governments”, identifying the requirement for all localities to participate in regional planning and submit a single jointly produced plan, and addition of language to further clarify participants and their submission requirements. Changes to regulation required by statutory changes.
780-10 C	780-10 B	Application requirements.	Renumbering to reflect shift of language from 780-10 B into 780-10 A. Addition of language to clarify regulation does not alter existing contractual rights related to water supplies.

780-10 D	780-10 C	Application requirements.	Renumbering section.
780-20		Purpose of chapter.	Addition of language to reflect statutory changes with respect to the purpose of the chapter, which is to establish a comprehensive water supply planning process for the collection of certain data by localities and the development of regional and state water supply plans.
780-30		Definitions.	Revised definition of “Beneficial Use” to reference its surface water and its groundwater related definition as found in 9VAC25-210-10 and 9VAC25-610-10, respectively.
780-30		Definitions.	Deletion of term “conservation” – Replaced with more focused definition for “water conservation”.
780-30		Definitions.	Deletion of term “local program” – replaced with “regional water supply plan”. Change necessary to comply with statutory requirement for regional plans.
780-30		Definitions.	Deletion of the term “planning area” – replaced with “regional planning area”. Change necessary to comply with statutory requirement for regional plans.
780-30		Definitions.	Clarification of the term “planning period” to a 30-year time frame and to replace the term “locality” with the phrase “local governments and regional planning units”.
780-30		Definitions	Addition of the term “regional planning area”. Change necessary to comply with statutory requirement for regional plans.
780-30		Definitions.	Clarification of the term “regional planning unit” to include references to “water authorities”; “stakeholders” and “planning district commissions” and to correct reference to the “regional water supply plan”. Change necessary to comply with statutory requirement for regional planning to allow participation of other stakeholders.

			Inclusion of water authorities at recommendation of RAP.
780-30		Definitions.	Revision and clarification of the original term “regional water plan”.
780-30		Definitions.	Revision of definition of “self-supplied user” to remove language stating they receive no water from other systems. In some cases, a self-supplied user may receive water from another system while still operating their own system.
780-30		Definitions.	Addition of the term “stakeholder”.
780-30		Definitions.	Addition of term “State Water Resources and Supply Plan”. This definition clarifies the scope of an existing Department report produced using data collected from water supply plans and other sources.
780-30		Definitions.	Correction of state agency name and inclusion of the term “beneficial” in the definition of “Technical evaluation committee”.
780-30		Definitions.	Revise the term “unaccounted for losses” to “unaccounted for water” to reflect current term of use.
780-30		Definitions.	Addition of term “water authority”.
780-30		Definitions.	Replacement of term “conservation” with “water conservation” to improve clarity.
780-30		Definitions.	Clarification of term “water demand management” to include the concept of water use efficiency and to delete the reference to “a local program.”
780-30		Definitions.	Deletion of the term “water plan” – replaced with the term “regional water supply plan. Change necessary to comply with statutory requirement for regional plans.
780-30		Definitions.	Expansion of the term “water sources” to include “springs” and “aquifers” as they are also sources that should be considered part of this definition.
780.30		Definitions.	Addition of a definition for “water supply risk”.
780-40		Program development.	Section Repealed. Requirements now included in 780-50.

	780-45	<u>Designation of Regional Planning Areas.</u>	Addition of new section entitled: "Designation of Regional Planning Areas" which identifies the regional planning areas and the members off those planning areas for purposes of this regulation and the process for a locality to request a change in the planning area. This new section was added to comply with changes made to the statute.
780-50		<u>Preparation of local information and regional water supply plan; submission-of-a program- requirements for a regional water supply plan.</u>	Title of section revised to indicate the section will address both the local information and regional water supply plan requirements.
780-50 A		<u>Preparation of local information and regional water supply plan; submission-of-a program- requirements for a regional water supply plan.</u>	Clarification of local government responsibilities. Changes throughout this section are intended to clarify which responsibilities shall be completed by local governments and which shall be completed at the regional scale.
780-50 B		<u>Preparation of local information and regional water supply plan; submission-of-a program- requirements for a regional water supply plan.</u>	Removal of language related to submission deadlines that are no longer applicable. Clarification of responsibilities of regional planning units and the department including new requirements to streamline the plan development process including designation of representatives for each local government and convening "kick-off" meetings. These changes were recommended by the RAP to clarify the process. New requirements for increased stakeholder involvement as required by statutory changes also added in this section.
780-50 C		<u>Preparation of local information and regional water supply plan; submission-of-a program- requirements for a regional water supply plan.</u>	Clarification of information collection requirements for local governments and what kinds of information should be considered during plan development.
780-50 C	780-50 D	<u>Preparation of local information and regional water supply plan; submission-of-a program- requirements for a regional water supply plan.</u>	Creation of a new subsection heading for clarification. Revisions to the listed elements required to be in each regional water supply plan. Additional elements and the deletion of several elements to

			reflect changes elsewhere in the regulation.
	780-50 E	Preparation of <u>local information</u> and <u>regional water supply plan</u> ; submission of a program ; <u>requirements for a regional water supply plan</u> .	Added language to clarify that public process requirements must be completed and all local governments must adopt a resolution authorizing the submission of the plan prior to submitting to the Department.
	780-50 F	Preparation of <u>local information</u> and <u>regional water supply plan</u> ; submission of a program ; <u>requirements for a regional water supply plan</u> .	Added language outlining process to be followed by regional planning unit when a local government fails to adopt the resolution.
	780-50 G	Preparation of <u>local information</u> and <u>regional water supply plan</u> ; submission of a program ; <u>requirements for a regional water supply plan</u> .	Added language identifying consensus requirements. These changes are to address how disagreements or lack of consensus should be handled. The changes acknowledge that full consensus may not always be possible in a regional scope.
	780-50 H	Preparation of <u>local information</u> and <u>regional water supply plan</u> ; submission of a program ; <u>requirements for a regional water supply plan</u> .	Added requirements for appending the identified documents and supporting materials to the regional water supply plan “for reference”. These materials were previously considered part of the “local program” which as a concept has been replaced and simplified to a regional water supply plan. Added phrase “for reference” to clarify that the documents were supporting documents for the water supply plan.
780-50 D	780-50 I	Preparation of <u>local information</u> and <u>regional water supply plan</u> ; submission of a program ; <u>requirements for a regional water supply plan</u> .	Revision of numbering to account for inclusion of new subsections and clarification of 5-year review process for a regional water supply plan. Clarification that supplements to regional water supply plans submitted during 5-year review need not be public noticed.
780-50 E	780-50 J	Preparation of <u>local information</u> and <u>regional water supply plan</u> ; submission of a program ; <u>requirements for a regional water supply plan</u> .	Revision of numbering to account for inclusion of new subsections and clarification of 10-year resubmission process for a regional water supply plan. Added requirements for convening a kick-off meeting no later than 180 days

			prior to last compliance determination to be consistent with process for initial submission.
	780-55	<u>Public participation in regional water supply plans.</u>	Addition of new section to clarify public participation requirements previously contained in 780-50. These changes address input received that the existing requirements were unclear and also outlines how the public can participate in plan development to reflect changes in statute that require regional planning units to allow interested parties to participate more directly.
	780-55 A	<u>Public participation in regional water supply plans.</u>	Identification of public notice requirements during plan development. These changes are intended to clarify existing requirements that were unclear according to feedback received by the Department.
	780-55 B	<u>Public participation in regional water supply plans.</u>	Identification of public notice of public informational meeting requirements. These changes are intended to clarify existing requirements that were unclear according to feedback received by the Department.
	780-55 C	<u>Public participation in regional water supply plans.</u>	Public informational meeting requirements. These changes are intended to clarify existing requirements that were unclear according to feedback received by the Department.
	780-55 D	<u>Public participation in regional water supply plans.</u>	Requirements to accept additional written comments. These changes are intended to clarify existing requirements that were unclear according to feedback received by the Department.
	780-55 E	<u>Public participation in regional water supply plans.</u>	Requirements for handling written comments. These changes are intended to provide a process for administering public comments regionally or locally.
	780-55 F	<u>Public participation in regional water supply plans.</u>	New language requiring regional planning units to give due consideration to public comments received and clarification that any

			revisions to the regional water supply plan in response to comments need not be publicly noticed again.
780-60		<u>State role in program regional water supply plan preparation</u>	Replacement of the term “board” with the term “department”.
780-60		State role in program <u>regional water supply plan</u> preparation.	Revision of Section title related to the state role in regional water supply plan preparation.
780-60		State role in program <u>regional water supply plan</u> preparation.	Clarification of the state role in the development of regional water supply plans/requirements for the department and necessary renumbering of subsections. Changes are primarily to address new language in statute identifying Department responsibilities.
780-70 A		Existing water source information.	Changes throughout section 70 are primarily to clarify whether information requirements are local or regional responsibility, and to clarify Department responsibilities. Clarification of local government requirement to provide existing water source information.
780-70 B		Existing water source information.	Clarification of the requirement for local governments to provide existing water source information for community systems using groundwater; replacement of the term “design capacity” with the term “designed related to average daily and maximum daily withdrawals as a result of feedback received by the Department that the original language was unclear.
780-70 C		Existing water source information.	Clarification of need for local governments to provide existing water source information for community water systems using surface water reservoirs and replacement of the phrase “design capacity” with the term “designed” as it relates to average daily and maximum daily withdrawals as a result of feedback received by the Department that the original language was unclear.
780-70 D		Existing water source information.	Clarification of the need for local governments to provide existing

			water source information for community water systems using stream intakes and the replacement of the phrase “design capacity” with the term “designed” as it relates to the average and maximum daily withdrawals from the stream as a result of feedback received by the Department that the original language was unclear.
780-70 E		Existing water source information.	Clarification language added related to local government review of data for self-supplied users of surface water provided by the department. Addition of numbering sequence to clarify requirements. Replacement of the phrase “design capacity” with the term “designed” as a result of feedback received by the Department that the original language was unclear.
780-70 F		Existing water source information.	Clarification language added related to local government review of data for self-supplied users of ground water provided by the department. Addition of numbering sequence to clarify requirements. Replacement of the phrase “design capacity” with the term “designed” as a result of feedback received by the Department that the original language was unclear. Editorial Correction (Spelling): Replaced term “sell-supplied” with “self-supplied”.
780-70 G		Existing water source information.	Clarification language added related to local government review of data for existing contractual agreements provided by the department. Addition of numbering sequence to clarify requirements.
780-70 H		Existing water source information.	Clarification language added related to inclusion of an estimate of the amount of water available to be purchased from outside the regional water supply plan.
780-70 I		Existing water source information.	Clarification language added related to local government review of data for agricultural users provided by the department.

			Addition of numbering sequence to clarify requirements.
780-70 J		Existing water source information.	Clarification language added related to local government providing an estimate of the number of residences and business that are self-supplied by individual wells.
780-70 K		Existing water source information.	Subsection deleted as this requirement has now been included in section 125.
780-80 A		Existing water use information.	Changes throughout section 80 are primarily intended to clarify Department and local government responsibilities. Clarification of requirement for each local government to provide information on existing water use information.
780-80 B		Existing water use information.	Clarification of requirements for a regional water supply plan to include information for each community water system.
780-80 C		Existing water use information.	Clarifying language added related to information to be provided by the department and any additional locally identified data related to water use by self-supplied nonagricultural users of surface and ground water.
780-80 D		Existing water use information.	Clarifying language added related to information to be provided by the department and any additional locally identified data related to water use by self-supplied agricultural users of surface and groundwater.
780-80 E		Existing water use information.	Clarifying language added related to information to be provided by the department and any additional locally identified data related to water use by self-supplied users of groundwater.
780-90		Existing <u>water</u> resource information.	Clarification by addition of the term “water” in title of section.
780-90 A		Existing <u>water</u> resource information.	Addition of clarifying language related to requirements of existing water resource information for local governments within a regional planning area.

780-90 B		Existing <u>water</u> resource information.	Replacement of the term “program” with the phrase “regional water supply plan”. Addition of clarifying language related to information provided by the department. Revision requirement related threats to water quality and quantity to instead focus on “instream flow”. Previous language was too vague and expectation was unclear.
780-90 B11		Existing <u>water</u> resource information...A regional water supply plan shall include the following items: “Water availability based on in-stream flow necessary to support aquatic life...”	<p>11. Potential threats to the existing water quantity and quality, other than those from above Water availability based on in-stream flow necessary to support [aquatic life provided by the department as identified in the most recent version of the State Water Resources and Supply Planfish and wildlife resources and habitat] .</p> <p>Change in the regulation language to replace the term “aquatic life” with the phrase “fish and wildlife resources and habitat” as included within the definition of instream beneficial use at § 62.1-44.3 of the Code of Virginia. Change made in response to public comment.</p>
780-100		Projected water demand information; <u>Statement of need and alternatives.</u>	Revision of section title to reflect addition of content.
780-100 A		Projected water demand information; <u>Statement of need and alternatives.</u>	Changes made in section 100 are largely to clarify local government responsibilities. Addition of clarification of requirement to provide projections of future water demand. Inclusion of the term “regional water supply plan”. Correction of reference.
780-100 B		Projected water demand information; <u>Statement of need and alternatives.</u>	Inclusion of the term “regional water supply plan”. Revision of the length of water demand estimates to 30 years instead of 30 to 50 years. Recommendations from stakeholders and program staff indicate that 30-year timelines were the most common and feasible and standardization would be appropriate.

780-100 C		Projected water demand information; <u>Statement of need and alternatives.</u>	Inclusion of the term “regional water supply plan”.
780-100 D		Projected water demand information; <u>Statement of need and alternatives.</u>	Inclusion of the term “regional water supply plan”. Deletion of the term “proposed” as it relates to service areas. Addition of requirement related to projected water demands.
780-100 D 4 1		Projected water demand information; <u>Statement of need and alternatives.</u>	Editorial Correction: Correct typo: Revise reference to 9VAC25-780-100 B to read 9VAC25-780-100 C.
780-100 E		Projected water demand information; <u>Statement of need and alternatives.</u>	Inclusion of the term “regional water supply plan” and other minor clarifications.
780-100 F		Projected water demand information; <u>Statement of need and alternatives.</u>	Inclusion of the term “regional water supply plan”. Clarification of requirements.
780-100 G		Projected water demand information; <u>Statement of need and alternatives.</u>	Inclusion of the term “regional water supply plan”. Clarification of requirements.
	780-100 H	Projected water demand information; <u>Statement of need and alternatives.</u>	Added language identifying local and regional responsibilities in the preparation of a “statement of need” and the identification of requirement for alternatives analysis for deficits to assess range of potential alternative sources of supply.
	780-100 I	Projected water demand information; <u>Statement of need and alternatives.</u>	Clarifications to requirements for an alternatives analysis and local and regional responsibilities therein. These changes were made based on recommendations by stakeholders to clarify the existing alternative analysis requirements and to reflect a regional scope.
	780-100 I 2	Projected water demand information; <u>Statement of need and alternatives.</u>	Editorial correction: Correct typo: Revise reference to “subsection G” to read “subsection H”.
	780-100 I 4	Projected water demand information; <u>Statement of need and alternatives. 4. An assessment of whether the identified alternatives are (i) available; (ii) practicable...</u>	Revised text to group the terms “available” and “practicable” and renumbered assessment steps for identified alternatives.
780-100 H	780-100 J	Projected water demand information; <u>Statement of need and alternatives.</u> A water plan shall include...	Revised subsection numbering to accommodate addition of new subsections. Inclusion of the term “regional water supply plan”.

			Clarification of requirements. Replaced the phrase “shall include” with the phrase “consider” to clarify the intent of the requirement and to be consistent with the use of the term “consider” in other sections of the regulations. Change made based on public comment.
780-100 I	780-100 K	Projected water demand information; <u>Statement of need and alternatives.</u>	Revised subsection numbering to accommodate addition of new subsections. Inclusion of the term “regional water supply plan”.
	780-110 A	Water demand management information.	Addition of new Subsection A related to local government providing information on existing water demand management plans or practices.
780-110 A	780-110 B	Water demand management information.	Renumbering of subsection to account for addition of new subsection. Inclusion of the term “regional water supply plan”. Clarification of requirements.
780-110 B	780-100 C	Water demand management information.	Renumbering of subsection to account for addition of new subsection. Clarification of requirements.
780-120 A		Drought response and contingency plans.	Addition of subsection numbering to account for addition of new subsections. Clarification of local government responsibility in developing a drought response and contingency plan.
	780-120 B	Drought response and contingency plans.	Addition of language related to conflicts between subsection A requirements and any condition of a permit. This language is intended to address that some permits require drought plans that may already be in existence and must be rectified with any plan developed in response to this chapter.
	780-120 C	Drought response and contingency plans.	Addition of language related to the development of a regional drought response and contingency plan. This language allows regional planning units to evaluate whether a regional drought plan is feasible and develop one if so.

			Addition of language to incorporate the statutory changes in 2023 Virginia Acts of Assembly Chapters 36 (HB 2095) and 37 (SB 1149) related to preparing drought evaluation and response plans and the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (2000).
	780-120 D	Drought response and contingency plans.	Addition of language related to the inclusion of cross-jurisdictional coordination efforts on drought response.
	780-125	<u>Identification of water supply risks and proposed regional strategies.</u>	Addition of new section related to the “identification of water supply risks and proposed regional strategies”. This new section was added to address new statutory requirements for regional plans to identify water supply risks and propose regional strategies to address them. The section includes a list of risks for regional planning units to consider, acknowledging not all risks in the list may be applicable to each regional planning unit. In addition, regional planning units or local governments may identify risks not listed in the regulation.
	780-125 A	<u>Identification of water supply risks and proposed regional strategies. A. a regional water supply shall identify water supply risks.</u>	Addition of the phrase “relevant to the regional planning unit, using readily available information as defined in 9VAC25-780-50 C” to clarify what water supply risks should be identified in a regional water supply plan. Change made based on public comment.
	780-125 B	<u>Identification of water supply risks and proposed regional strategies. B. In evaluating potential water supply risks, the regional planning unit shall consider,</u>	Replaced the term “evaluating” with the term “identifying” and inserted the phrase “relevant to the regional planning unit” to clarify the process for identification of water supply risks by the regional planning unit. Change made in response to public comment.
780-130		<u>Statement of need and alternatives.</u>	Section repealed. Requirements now contained in 780-100.

780-140		Review of local programs <u>regional water supply plans.</u>	Replacement of “local programs” with “regional water supply plans”
780-140 A		Review of local programs <u>regional water supply plans.</u>	Replacement of “local programs” with “regional water supply plans”. Correction of title of “State Plan”.
780-140 B		Review of local programs <u>regional water supply plans.</u>	Replacement of “local programs” with “regional water supply plans”.
780-140 C		Review of local programs <u>regional water supply plans.</u>	Replacement of “local programs” with “regional water supply plans”: Item renumbering to accommodate additional requirements to reflect new requirements such as water supply risks. Correction of reference.
780-140 D		Review of local programs <u>regional water supply plans.</u>	Replacement of “local programs” with “regional water supply plans”
780-140 E		Review of local programs <u>regional water supply plans.</u>	Replacement of “local programs” with “regional water supply plans”
780-140 F		Review of local programs <u>regional water supply plans.</u>	Replacement of “local programs” with “regional water supply plans”
780-140 G		Review of local programs <u>regional water supply plans.</u>	Replacement of “local programs” with “regional water supply plans”. Additions in 9VAC25-780-140 G are clarifications of the information to be developed by the Department.
780-140 G 3		Review of local programs <u>regional water supply plans</u> 3. The evaluation of potential use conflicts among projected water demand and estimates of requirements for in-stream flow; and <u>An estimate, for each major river and stream, of the minimum in-stream flows necessary during drought conditions to maintain water quality and avoid permanent damage to [aquatic life</u> <u>fish and wildlife resources and habitat] in streams, bays, and estuaries;</u>	Changing the language within 9VAC25-780-140 G 3 from “aquatic life” to “fish and wildlife resources and habitat” for consistency with the definition of instream beneficial use at § 62.1-44.3 of the Code of Virginia. DEQ will provide regional planning units with information related to fish and wildlife and habitat included within the most recent State Water Resources and Supply Plan as required by 9VAC25-780-60. Change made in response to public comment.
780-140 H		Review of local programs <u>regional water supply plans</u>	Replacement of the term “board” with the term “department”.
780-140 I		Review of local programs <u>regional water supply plans.</u>	Replacement of “local programs” with “regional water supply plans”. Correction of title of “State Plan”.

780-150 A		Public notice and public comment period.	Replacement of “local programs” with “regional water supply plans”.
780-150 B		Public notice and public comment period.	Replacement of “local programs” with “regional water supply plans”. Correction of title of Department of Game and Inland Fisheries to Department of Wildlife Resources.
780-150 D		Public notice and public comment period.	Replacement of “local programs” with “regional water supply plans”.
780-150 E		Public notice and public comment period.	Replacement of “local programs” with “regional water supply plans”.
780-160 A2		Public meetings.	Replacement of “local plan” with “regional water supply plan”.
780-160 C		Public meetings.	Replacement of “local plan” with “regional water supply plan”.
780-180	780-180 A	Enforcement.	Numbering of subsections added to accommodate addition of new subsection.
780-180	780-180 B	Enforcement.	Numbering of subsections added to accommodate addition of new subsection. Addition of language clarifying that a local government shall not be liable if a local government within their regional planning area does not comply with requirements within this chapter.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

The proposed regulatory amendments are in response to the directive created by Chapter 1105 of the 2020 Acts of Assembly that requires the Board to adopt regulations designating regional planning areas based primarily on river basin. However, during the development of the proposed amendments, DEQ reviewed compliance requirements and the plan development, submission, and review process. While compliance requirements related to the components of a water supply plan were not changed, the process was streamlined in several ways including: 1) clarifying which requirements were to be completed by localities and which by the regional planning unit as a whole, 2) clarifying the extent and type of information that is expected to be collected (readily available information) 3) incorporating new requirements for the Department in convening and facilitating the plan development process, 4) clarifying responsibility for compliance in the event of a single locality refusing to participate, and 5) clarifying public participation processes. In addition, amendments to the regulation were made in response to

Chapter 331 of the 2022 Acts of Assembly which allows local governments to request reassignment to an adjoining regional planning area. Chapters 36 and 37 of the 2023 Acts of Assembly prompted additional amendments to incorporate statutory changes related to the Potomac River regional planning area and consideration of the Metropolitan Washington Water Supply and Drought Awareness Plan: Potomac River (2020).

Changes made in response to Chapter 356 of the 2022 Acts of Assembly are mandated by that statutory change and so no alternative regulatory methods could be considered.

Alternative regulatory methods were considered, and flexibilities were afforded where the statutory mandates allow. Compliance and reporting requirements are mandated by statute. Deadlines for compliance and reporting have been adjusted to allow adequate time for development of regional water supply plans. The Department has revised regulatory language to simplify and clarify requirements. Other alternative regulatory methods mentioned regarding performance standards for small businesses, or exemptions for small businesses do not apply as the Local and Regional Water Supply Planning Regulation (9VAC25-780) does not directly regulate small businesses. The statutory mandates referenced above require the Board to adopt regulations that are consistent with statutory mandates, and further alternatives were not within the scope of the statutory changes.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

It is not anticipated that this regulation will have a direct impact on families.

1 **Project 6543 - Final**

2 **State Water Control Board**

3 **Amendments pursuant to Chapter 1105 of the 2020 Acts of Assembly**

4 **9VAC25-780-10. Application.**

5 A. ~~All counties, cities and towns (hereinafter "local governments")~~ local governments in the
6 Commonwealth of Virginia shall ~~submit a local water supply plan or shall participate in a regional~~
7 ~~planning unit in the submittal of a regional water supply plan to the board in accordance with this~~
8 ~~chapter~~ participate in cross-jurisdictional, coordinated water resource planning and shall develop
9 and submit, with the other local governments within a regional planning area, a single jointly
10 produced regional water plan to the board.

11 B. ~~The provisions of this regulation shall not affect any water supply project for which a permit~~
12 ~~application was submitted prior to January 1, 2003, to any state or federal agency. The provisions~~
13 ~~of this regulation shall not affect any water supply project for which~~ To the extent any provision of
14 this chapter is applicable to or otherwise affects an application for a permit, license, grant, loan,
15 or other request for funding has been of any kind made to a state or federal agency prior to
16 January 1, 2003, such application shall be subject to the version of this chapter in effect on the
17 date the application is submitted. All projects shall remain subject to applicable federal and state
18 regulatory requirements.

19 C. ~~B.~~ Nothing in this chapter shall be construed as altering or authorizing any alteration of any
20 existing surface water, ground water groundwater, or common law water rights; contractual rights
21 or obligations relating to water supplies; or rights to freely enter into contracts or agreements
22 relating to water supplies of any property owner within the Commonwealth local government,
23 water authority, or person, except as required by federal or state law.

24 D. ~~C.~~ The review required by 9VAC25-780-140 shall not be a prerequisite for applying for a
25 permit from the Commonwealth of Virginia for a water supply project.

26 **9VAC25-780-20. Purpose of chapter.**

27 The purpose of this chapter is to establish a comprehensive water supply planning process
28 for the collection of certain data by localities and the development of ~~local,~~ regional, and state
29 water supply plans. This process shall be designed to (i) ensure that adequate and safe drinking
30 water is available to all citizens of the Commonwealth; (ii) encourage, promote, and protect all
31 other beneficial uses of the Commonwealth's water resources; ~~and~~ (iii) encourage, promote, and
32 develop incentives for alternative water sources, including ~~but not limited to~~ desalinization; and
33 (iv) encourage the development of cross-jurisdictional water supply projects.

34 This chapter establishes the required planning process and criteria that local governments
35 with the participation of other stakeholders shall use in the development of ~~the local~~ data and
36 regional water supply plans.

37 **9VAC25-780-30. Definitions.**

38 Unless otherwise defined in this chapter or unless the context clearly indicates otherwise, the
39 terms used in this ~~regulation~~ chapter shall have the meanings ascribed to them by the State Water
40 Control Law, Chapter 3.1 (§ 62.1-44.2 et seq.) of Title 62.1 of the Code of Virginia; the Ground
41 Water Management Act of 1992, Chapter 25 (§ 62.1-254 et seq.) of Title 62.1 of the Code of
42 Virginia; the Virginia Water Protection Permit Program Regulation, 9VAC25-210; and the Surface
43 Water Management Area Regulation, 9VAC25-220, including any general permits issued
44 thereunder.

45 "Beneficial use" ~~means both in-stream and offstream uses. In-stream beneficial uses include,~~
46 ~~but are not limited to, the protection of fish and wildlife habitat, maintenance of waste assimilation,~~

47 recreation, navigation, and cultural and aesthetic values. Offstream beneficial uses include, but
 48 are not limited to, domestic (including public water supply), agricultural, electric power generation,
 49 and commercial and industrial uses has the meaning defined in 9VAC25-210-10 with respect to
 50 surface water and the meaning defined in 9VAC25-610-10 with respect to groundwater.

51 "Board" means the State Water Control Board.

52 "Community water system" means a waterworks that serves at least 15 service connections
 53 used by year-round residents or regularly serves at least 25 year-round residents, and is regulated
 54 by the Virginia Department of Health Waterworks Regulations (12VAC5-590).

55 "Conservation" means ~~practices, techniques, and technologies that improve the efficiency of~~
 56 ~~water use.~~

57 "Department" means the Department of Environmental Quality.

58 "Local government" means a city, incorporated town, or county.

59 "Local program" means ~~the combined water plan, resource conditions, and drought response~~
 60 ~~and contingency plan developed in compliance with this regulation. The term "local program" will~~
 61 ~~be used in this regulation to mean either local or regional programs. The term "program" implies~~
 62 ~~the institution of a continuous planning process for maintenance of these documents.~~

63 "Planning area" means ~~the geographical area as defined by local government boundaries that~~
 64 ~~is included in a local or regional water supply plan.~~

65 "Planning period" means ~~the 30-year to 50-year time frame~~ timeframe used by the locality
 66 local governments and regional planning units to project future water demand in accordance with
 67 9VAC25-780-100 B.

68 "Regional planning area" means the geographical area as defined by 9VAC25-780-45 that is
 69 included in a regional water supply plan.

70 "Regional planning unit" means ~~a collection of local governments who have voluntarily elected~~
 71 ~~to, water authorities, and participating stakeholders that shall~~ develop and submit a regional water
 72 supply plan. A regional planning unit may be composed of all local governments located within
 73 the bounds of a planning district, any subset of local governments within the bounds of a planning
 74 district, or any group of local governments within multiple planning districts. Planning district
 75 commissions are encouraged to participate in the regional planning unit.

76 "Regional water supply plan" means ~~a water plan~~ the document developed and submitted by
 77 ~~two or more cities or counties or both. A town and an adjacent county may develop a regional~~
 78 ~~water plan. Two or more towns may develop and submit a regional water plan where the plan~~
 79 ~~results in the proposed development of future water supply projects that address the water supply~~
 80 ~~demands of the affected towns. Such plans developed by two or more towns may be included in~~
 81 ~~regional water plans developed and submitted by counties or cities. Regional water plans shall~~
 82 ~~be developed and submitted in conjunction with all public service authorities operating community~~
 83 ~~water systems within the~~ by a regional planning unit, if applicable for a regional planning area in
 84 compliance with 9VAC25-780-50 D.

85 "Self-supplied user" means any person making a withdrawal of surface water or ~~ground water~~
 86 groundwater from an original source (e.g., a river, stream, lake, aquifer, or reservoir fed by any
 87 such water body) for their own use. ~~Self-supplied users do not receive water from a community~~
 88 ~~water system.~~

89 "Service area" means the geographical area served by a community water system.

90 "Stakeholder" includes industrial and agricultural water users, public water authorities, private
 91 water suppliers, developers and economic development organizations, and conservation and
 92 environmental organizations.

93 "State Water Resources and Supply Plan" is a plan developed to address the criteria of §
 94 62.1-44.38 B of the Code of Virginia using information developed by local governments and used
 95 to develop regional water supply plans.

96 "Technical evaluation committee" means a committee of state agencies, including ~~but not~~
 97 ~~limited to~~ the Virginia Department of Health, the Department of Conservation and Recreation, the
 98 Marine Resources Commission, the Department of Historic Resources, and the Department of
 99 ~~Game and Inland Fisheries~~ Wildlife Resources, convened by the Department of Environmental
 100 Quality in accordance with ~~subdivision 8 of 9VAC25-780-60~~ to provide comments on the impacts
 101 to or conflicts among ~~in-stream and offstream~~ beneficial uses resulting from proposed alternatives
 102 for meeting projected water demands.

103 "Unaccounted for ~~losses~~water" means the difference between a community water system's
 104 billing records for volumes of water distributed and production records for volumes of water
 105 treated.

106 "Water authority" means a water supply entity created under Chapter 51 (§ 15.2-5100 et seq.)
 107 of Title 15.2 of the Code of Virginia.

108 "Water conservation" means practices, techniques, and technologies that improve the
 109 efficiency of water use.

110 "Water demand management" means plans for improving water use efficiency through water
 111 conservation, reuse, and reducing unaccounted for water losses contained in a local program.

112 ~~"Water plan" means a document developed in compliance with this regulation. The term "water~~
 113 ~~plan" will be used in this regulation to mean either local or regional water plans.~~

114 "Water sources" means wells, stream intakes, and springs, reservoirs, or aquifers that serve
 115 as sources of water supplies.

116 "Water supply risk" refers to a future circumstance or event that may reasonably impair the
 117 ability of one or more local governments, water authorities, or community water systems in the
 118 water planning area to meet current or projected water demand within the planning period. Water
 119 supply risks do not include (i) minor, infrequent, and temporary interruptions to the available water
 120 supply or water quality that may be remedied through the normal operation and maintenance of
 121 water supply systems; (ii) projected deficits in water supplies identified in accordance with the
 122 requirements of 9VAC25-780-100 I; or (iii) potential events or circumstances that are not
 123 reasonably foreseeable to occur within the planning period.

124 **9VAC25-780-40. Program development. (Repealed.)**

125 ~~Local governments shall develop programs for local or regional water plans that are necessary~~
 126 ~~to comply with this chapter. Local governments shall consult and coordinate with all community~~
 127 ~~water systems in the planning area during the preparation of local or regional programs.~~
 128 ~~Community water systems within the planning area shall cooperate and participate with the~~
 129 ~~locality during preparation of the local program. Counties, cities, and towns are encouraged to~~
 130 ~~develop regional programs. Local programs shall be designed to (i) ensure that adequate and~~
 131 ~~safe drinking water is available, (ii) encourage and protect all beneficial uses, (iii) encourage and~~
 132 ~~promote alternative water sources, and (iv) promote conservation.~~

133 **9VAC25-780-45. Designation of Regional Planning Areas.**

134 A. Regional planning areas are designated in subsection B of this section. Incorporated towns
 135 not listed in subsection B of this section shall participate in the same regional planning area as
 136 the county within which they are located.

137 B. The board designates the following regional planning areas:

138 1. The Big Sandy and Upper Tennessee Rivers 1 planning area encompasses the
 139 Counties of Lee, Scott, and Wise; and the City of Norton.

- 140 2. The Big Sandy and Upper Tennessee Rivers 2 planning area encompasses the
 141 Counties of Buchanan, Dickenson, Russell, Smyth, Tazewell, and Washington; and the
 142 City of Bristol.
- 143 3. The Chowan River 1 planning area encompasses the Counties of Brunswick,
 144 Lunenburg, Nottoway, and Prince Edward.
- 145 4. The Chowan River 2 planning area encompasses the Counties of Greenville, Surry,
 146 and Sussex; and the City of Emporia.
- 147 5. The Eastern Shore planning area encompasses the Counties of Accomack and
 148 Northampton.
- 149 6. The Middle James River 1 planning area encompasses the Counties of Albemarle,
 150 Buckingham, Fluvanna, Greene, and Louisa; and the City of Charlottesville.
- 151 7. The Middle James River 2 planning area encompasses the Counties of Amherst,
 152 Appomattox, Campbell, and Nelson; and the City of Lynchburg.
- 153 8. The Middle James River 3 planning area encompasses the Counties of Amelia,
 154 Chesterfield, Cumberland, Dinwiddie, Goochland, Hanover, Henrico, Powhatan, and
 155 Prince George; and the Cities of Colonial Heights, Hopewell, Petersburg, and Richmond.
- 156 9. The New River 1 planning area encompasses the Counties of Bland, Giles,
 157 Montgomery, and Pulaski; and the City of Radford.
- 158 10. The New River 2 planning area encompasses the Counties of Carroll, Floyd, Grayson,
 159 and Wythe; and the City of Galax.
- 160 11 The Northern Coastal Plain 1 planning area encompasses the Counties of Lancaster,
 161 Northumberland, Richmond, and Westmoreland.
- 162 12. The Northern Coastal Plain 2 planning area encompasses the Counties of Essex, King
 163 and Queen, Mathews, and Middlesex.
- 164 13. The Northern Coastal Plain 3 planning area encompasses the Counties of Caroline
 165 and King George.
- 166 14. The Northern Piedmont 1 planning area encompasses the Counties of Culpeper,
 167 Fauquier, Madison, Orange, and Rappahannock.
- 168 15. The Northern Piedmont 2 planning area encompasses the Counties of Spotsylvania
 169 and Stafford; and the City of Fredericksburg.
- 170 16 The Northern Virginia planning area encompasses the Counties of Fairfax, Loudoun,
 171 and Prince William; and the Cities of Alexandria, Arlington, Fairfax, Falls Church,
 172 Manassas, and Manassas Park.
- 173 17. The Roanoke River 1 planning area encompasses the Counties of Bedford, Franklin,
 174 and Roanoke; and the Cities of Bedford, Roanoke, and Salem.
- 175 18. The Roanoke River 2 planning area encompasses the Counties of Henry, Patrick, and
 176 Pittsylvania; and the Cities of Danville and Martinsville.
- 177 19. The Roanoke River 3 planning area encompasses the Counties of Charlotte, Halifax,
 178 and Mecklenburg.
- 179 20. The Shenandoah River 1 planning area encompasses the Counties of Augusta and
 180 Rockingham; and the Cities of Harrisonburg, Staunton, and Waynesboro.
- 181 21. The Shenandoah River 2 planning area encompasses the Counties of Clarke,
 182 Frederick, Page, Shenandoah, and Warren; and the City of Winchester.
- 183 22. The Southeast Virginia planning area encompasses the Counties of Isle of Wight and
 184 Southampton; and the Cities of Chesapeake, Franklin, Norfolk, Portsmouth, Suffolk, and
 185 Virginia Beach.

186 23 The Upper James River 1 planning area encompasses the Counties of Alleghany, Bath,
 187 and Highland; and the City of Covington.

188 24. The Upper James River 2 planning area encompasses the Counties of Botetourt,
 189 Craig, and Rockbridge; and the Cities of Buena Vista and Lexington.

190 25. The York and James River 1 planning area encompasses the Counties of Charles
 191 City, King William, and New Kent.

192 26. The York and James River 2 planning area encompasses the Counties of Gloucester,
 193 James City, and York; and the Cities of Hampton, Newport News, Poquoson, and
 194 Williamsburg.

195 C. A local government may request that the department change its designated regional
 196 planning area to an adjoining planning area. The request shall be in writing and shall demonstrate
 197 that the local government shares common water supply sources, river basin, or existing or
 198 planned cross-jurisdictional relationships with the planning area it proposes to join. The
 199 department will provide notice of the request to all designated representatives of local
 200 governments in the two affected regional planning areas. If no objections are received by the
 201 department within 30 days of notifying the designated representatives, the department shall
 202 approve the request. If one or more objections are received, the department shall approve or deny
 203 the request after considering the positions of the requesting and objecting parties in light of the
 204 purpose and objectives of this chapter. The department shall provide notice of any action to
 205 approve or deny a request to modify a regional planning area concurrently to the requesting local
 206 government and all other designated representatives in the affected regional planning areas.
 207 Department action approving a request shall be effective on the date the notice is provided.

208 **9VAC25-780-50. Preparation of local information and regional water supply**
 209 **plan; submission of requirements for a program regional water supply plan.**

210 A. Local governments must adopt a local program as defined in this section, including any
 211 revisions to comprehensive plans, water supply plans, water and sewer plans, and other local
 212 authorities necessary to implement this chapter. A local public hearing consistent with § 15.2-
 213 1427 of the Code of Virginia is required during the development of the local program. The public
 214 hearing may be combined with other public hearings that may be required. Each locality in a
 215 regional planning area shall assist its regional planning unit in developing and submitting a single
 216 jointly produced regional water supply plan to the department within five years from (insert the
 217 effective date of the regulation). To meet this requirement, local governments must complete the
 218 following for use by the regional planning unit:

219 1. Prepare water source information from its jurisdiction that complies with 9VAC25-780-
 220 70.

221 2. Prepare existing water use information from its jurisdiction that complies with 9VAC25-
 222 780-80. This information must include a review of water reporting data provided by the
 223 department and supplemented to the extent practicable, with any locally known omissions
 224 of water users and service area maps for public water utilities.

225 3. Prepare existing water resource information from its jurisdiction that complies with
 226 9VAC25-780-90.

227 4. Prepare a 30-year demand projection of water demand and any alternatives for deficits
 228 in meeting this demand from existing sources of supply for its jurisdiction that complies
 229 with 9VAC25-780-100.

230 5. Prepare water demand management information from its jurisdiction that complies with
 231 9VAC25-780-110.

232 6. Prepare a minimum three-stage drought response and contingency plan for its
 233 jurisdiction consistent with local sources of supply and water use patterns that complies
 234 with 9VAC25-780-120.

235 B. ~~All local governments shall submit a local program to the department in accordance with~~
 236 ~~the following schedule:~~

237 ~~1. Local governments with populations in excess of 35,000 persons based on the most~~
 238 ~~recent U.S. Census shall do so no later than November 2, 2008.~~

239 ~~2. Local governments with populations in excess of 15,000 persons but no more than~~
 240 ~~35,000 persons based on the most recent U.S. Census shall do so no later than November~~
 241 ~~2, 2009.~~

242 ~~3. Local governments with populations less than or equal to 15,000 persons based on the~~
 243 ~~most recent U.S. Census shall do so no later than November 2, 2010.~~

244 ~~4. Notwithstanding the above, local governments may elect to participate in the submittal~~
 245 ~~of regional water supply plans. By November 2, 2008, local governments participating in~~
 246 ~~a regional plan shall provide notice to the department of the intent to participate in a~~
 247 ~~regional plan and shall include the names of the other participating localities. Such~~
 248 ~~regional plans shall be submitted no later than November 2, 2011.~~

249 ~~Nothing in this section shall be construed as limiting the submittal of local or regional water~~
 250 ~~supply plans before the date when such plans are due. In developing a regional water supply~~
 251 ~~plan, regional planning units shall use the following process:~~

252 1. Each local government and water authority shall designate a representative and one or
 253 more alternates to represent its interests in the regional planning unit by submitting the
 254 names and contact information of such individuals to the department within (insert date 60
 255 days from the effective date of the regulation). Local governments and alternates may
 256 jointly represent the local government and any water authority created by the local
 257 government. The department will collect and distribute the contact information for the
 258 designated representatives and alternates, and a list of the available data for all registered
 259 community water systems and self-supplied users that utilize more than 300,000 gallons
 260 of water in any month, to the members of each respective planning unit. The department
 261 shall maintain a current list of designated representatives and alternates and shall make
 262 the list publicly available to facilitate coordinated water supply planning.

263 2. The department will schedule and convene a kickoff meeting for each regional planning
 264 unit to provide guidance on the regional water plan development process, requirements,
 265 and timelines. The department will provide notice of the kickoff meeting, at a minimum, to
 266 (i) each designated representative for the regional planning unit; (ii) any other community
 267 water systems and self-supplied users that utilize more than 300,000 gallons of water in
 268 any month, including agricultural, industrial, and power generation users within the
 269 respective regional planning area; and (iii) any planning district commission whose
 270 territory includes all or part of the regional planning area. A kickoff meeting will be
 271 convened within (insert date 180 days from the effective date of this regulation). On the
 272 department's initiative or at the request of any designated representative, the department
 273 will schedule a kickoff meeting in preparation for revising a regional water supply plan in
 274 accordance with subsections I and J of this section.

275 3. Subdivisions B 1 and B 2 of this section shall not apply to any regional planning unit in
 276 which a planning district commission notifies the department that it will coordinate local
 277 government participation in the regional water supply plan development process in
 278 accordance with its authority under Chapter 42 (§ 15.2-4200 et seq.) of Title 15.2 of the
 279 Code of Virginia. Such notice may be submitted by any planning district commission
 280 whose territory includes the entire regional planning area. If the regional planning area

281 embraces the territory of more than one planning district commission, a joint notice may
 282 be submitted by or on behalf of all such planning district commissions.

283 4. Each local government shall make reasonable efforts to consult and coordinate with all
 284 community water systems and self-supplied users that utilize more than 300,000 gallons
 285 of water in any month, including agricultural, industrial, and power generation users within
 286 its jurisdiction during the preparation of regional water supply plans. Regional planning
 287 units shall develop a process for other stakeholder participation in the preparation of a
 288 regional water supply plan.

289 5. To the extent practicable, regional water supply plans shall be consistent with the goals
 290 of § 62.1-44.38:1 A of the Code of Virginia to (i) ensure that adequate and safe drinking
 291 water is available; (ii) encourage and protect all beneficial uses; (iii) encourage and
 292 promote alternate water sources, including desalinization; (iv) promote water
 293 conservation; and (v) encourage the development of cross-jurisdictional water supply
 294 projects.

295 C. Local programs shall contain the elements listed below governments shall be responsible
 296 for collecting and compiling the information from within their locality necessary to comply with
 297 these requirements. This Any information may required to be collected, compiled, or provided by
 298 a local government shall be derived from existing, readily available information and additional
 299 detailed. Additional studies shall not be required. Information is readily available to a local
 300 government if it is (i) in the possession of the local government; (ii) provided by the department;
 301 (iii) available from a website or electronic database known to and accessible by the local
 302 government in an appropriate format; or (iv) provided by a third party in response to a written
 303 request from the local government. The regional water supply plan shall document any known
 304 information gaps.

305 D. Regional water supply plans shall contain the following elements:

306 1. A description of existing water sources in accordance with the requirements of 9VAC25-
 307 780-70;

308 2. A description of existing water use in accordance with the requirements of 9VAC25-
 309 780-80;

310 3. A description of existing water resource conditions in accordance with the requirements
 311 of 9VAC25-780-90;

312 4. An assessment of projected water demand in accordance with the requirements of
 313 9VAC25-780-100;

314 5. A description of water management actions in accordance with the requirements of
 315 9VAC25-780-110 and 9VAC25-780-120;

316 6. An identification of water supply risks and regional strategies to address identified risks
 317 in accordance with the requirements of 9VAC25-780-125;

318 67. A statement of need for the regional planning unit in accordance with the requirements
 319 of 9VAC25-780-130; 9VAC25-780-100;

320 78. An alternatives analysis that identifies potential alternatives to address projected
 321 deficits in water supplies in accordance with the requirements of 9VAC25-780-
 322 130; 9VAC25-780-100; and

323 89. A map or maps identifying important elements of the program discussed in the water
 324 supply plan that may include existing environmental resources, existing water sources,
 325 significant existing water uses, and proposed new sources;

326 ~~9. A copy of the adopted program documents including any local plans or ordinances or~~
 327 ~~amendments that incorporate the local regional program elements required by this~~
 328 ~~chapter;~~

329 ~~10. A resolution approving the plan from each local government that is party to the plan;~~
 330 ~~and~~

331 ~~11. A record of the local public hearing, a copy of all written comments and the submitter's~~
 332 ~~response to all written comments received.~~

333 ~~D. All local programs shall be reviewed no later than five years after a compliance~~
 334 ~~determination by the board.~~ E. Except as provided in subsection F of this section, a draft regional
 335 water supply plan shall not be deemed final and eligible for submission to the department until:

336 1. The public participation process in 9VAC25-780-55 has been completed; and

337 2. Each of the governing bodies of the local governments in the regional planning area
 338 has adopted a resolution authorizing the submission of the plan by the regional planning
 339 unit on the local government's behalf and provided a copy of the resolution to the regional
 340 planning unit.

341 F. If a local government fails or refuses to timely adopt the resolution referenced in subsection
 342 E of this section, the regional planning unit may provide written notice to the department identifying
 343 such local government. The regional planning unit may submit the water supply plan without a
 344 local government's authorization 60 days after the notice is provided to the department.

345 G. Regional water supply plans shall reflect the consensus of the local governments and water
 346 authorities in the regional planning unit. The regional planning units shall attempt to resolve any
 347 disagreement to produce a consensus. Any disagreements among local governments or water
 348 authorities that cannot be resolved through the plan development process shall be documented
 349 in the plan.

350 H. The following documents and supporting materials shall be appended to and submitted
 351 with the regional water supply plan [for reference] .

352 1. A copy of supporting documents including any revisions to comprehensive plans, water
 353 supply plans, water and sewer plans, and other local ordinances necessary to implement
 354 the regional water supply plan;

355 2. Copies of any drought response and contingency plans required by 9VAC25-780-120;

356 3. A resolution approving the regional water supply plan from each local government;

357 4. A copy of all written comments and a response to all written comments received as
 358 required by 9VAC25-780-55; and

359 5. A summary of the processes used to ensure cross-jurisdictional coordinated water
 360 resource planning between local governments and to ensure stakeholder consultation,
 361 including a list of local governments and stakeholders that participated during the regional
 362 water supply plan development, including the process developed in accordance with
 363 subdivision B 4 of this section. Copies of any public notices, written comments received,
 364 and responses to the comments shall be included. Other correspondence and
 365 documentation, such as invitations, meeting agendas, and outreach materials may be
 366 included and shall be provided upon request by the department.

367 I. No later than 180 days before the five-year anniversary of the most recent compliance
 368 determination by the board in accordance with 9VAC25-780-140 F. Revised plans shall be
 369 submitted when, each regional planning unit shall initiate a process to review the regional water
 370 supply plan. If this review indicates that circumstances have changed or new information has
 371 been made available that will result in impacts one or more local governments within a regional
 372 planning unit resulting in substantial changes in current or proposed sources, demands, or water

373 ~~demands demand deficits or water supply risks that will were not be met by alternatives contained~~
 374 ~~considered in the regional water plan, the regional planning unit shall prepare a supplement to~~
 375 ~~the regional water supply plan addressing such circumstances or changed information. These~~
 376 ~~The supplement shall be submitted to the department no later than 180 days after the five-year~~
 377 ~~anniversary of the most recent compliance determination. Such circumstances may be caused~~
 378 ~~by include changes in demands, the availability of the anticipated source sources, cumulative~~
 379 ~~impacts, in-stream beneficial uses, or other factors. In the case where the review by the local~~
 380 ~~government or regional planning unit indicates that the circumstances have not changed~~
 381 ~~sufficiently to warrant a revision of the water supply plan after five years, the locality regional~~
 382 ~~planning unit shall notify the department that the information in the existing plan is still in effect~~
 383 ~~the most current available on or before the five-year anniversary of the most recent compliance~~
 384 ~~determination. The actions of each regional planning unit under this subsection shall reflect the~~
 385 ~~consensus of its local governments. A supplement to a regional water supply plan need not be~~
 386 ~~publicly noticed or approved by resolution of the local governments.~~

387 ~~E. J. Notwithstanding subsection D I of this section, all local programs regional water supply~~
 388 ~~plans shall be reviewed, revised, and resubmitted to the department every 10 years after the date~~
 389 ~~of last approval in accordance with procedures and requirements set forth in this chapter. Except~~
 390 ~~in regional planning areas for which notice has been provided by a planning district commission~~
 391 ~~in accordance with subdivision B 3 of this section, no later than 180 days before the 10-year~~
 392 ~~anniversary of the most recent compliance determination by the board, the department shall~~
 393 ~~schedule and convene a kickoff meeting to initiate the planning process for the development of~~
 394 ~~the regional water supply plan. In regional planning areas for which notice has been provided by~~
 395 ~~a planning district commission in accordance with subdivision B 3 of this section, the identified~~
 396 ~~planning district commission shall convene a kickoff meeting no later than 180 days before the~~
 397 ~~10-year anniversary of the most recent compliance determination and shall invite the department~~
 398 ~~to participate.~~

399 **9VAC25-780-55. Public participation in regional water supply plans.**

400 ~~A. The draft regional water supply plan developed by the regional planning unit shall be~~
 401 ~~publicly noticed once in a newspaper of general circulation in each county, city, and incorporated~~
 402 ~~town in the regional planning area. A public notice in a newspaper of general circulation that~~
 403 ~~covers multiple localities within a regional planning area shall satisfy this requirement for each~~
 404 ~~local government included within that area of general circulation. The public notice shall include~~
 405 ~~the following:~~

- 406 ~~1. Brief description of the purpose of the draft regional water supply plan, including a list~~
 407 ~~of all localities included in the regional planning area;~~
- 408 ~~2. Identification of means for the public to obtain copies of the draft regional water supply~~
 409 ~~plan in electronic and paper formats;~~
- 410 ~~3. Announcement of a comment period of at least 30 days following the date of publication~~
 411 ~~for interested persons to submit written comments to their respective local government;~~
- 412 ~~4. Brief description of how to submit comments; and~~
- 413 ~~5. Either (i) notice of a public informational meeting or (ii) a statement informing persons~~
 414 ~~of their right to request a public informational meeting.~~

415 ~~B. If 15 or more individual requests for a public informational meeting are received from~~
 416 ~~commenters in any county, city, or incorporated town, the county, city, or incorporated town shall~~
 417 ~~publish a second public notice of a public informational meeting to be held no sooner than 15~~
 418 ~~days from the date of the notice. Local governments may hold joint informational meetings.~~

419 C. A public informational meeting shall include a presentation summarizing the draft regional
 420 water supply plan and a reasonable opportunity for interested members of the public to offer
 421 comments or questions on the draft plan.

422 D. The local government shall accept any additional written comments received up to 15 days
 423 after the public informational hearing.

424 E. Written comments received by any local government shall be circulated to the designated
 425 representative for the other local governments in the regional planning area. Responses to public
 426 comments shall be prepared in either of the following ways, as determined by the regional
 427 planning unit:

428 1. Each local government shall prepare a written summary of any comments it has
 429 received and a response to those comments; or

430 2. The regional planning unit shall prepare a joint document providing a summary and
 431 response to all comments received by each local government in the regional planning
 432 area.

433 F. The regional planning unit shall give due consideration to public comments and may revise
 434 the draft regional water supply plan. The revised regional water supply plan need not be publicly
 435 noticed.

436 **9VAC25-780-60. State role in ~~program~~ regional water supply plan preparation.**

437 To assist local governments in the development of ~~local programs~~ regional water supply plans,
 438 the ~~board~~ department will:

439 1. Provide ~~technical and financial assistance~~ planning, policy, and technical assistance to
 440 each regional planning area differentiated according to each area's water supply
 441 challenges, existing resources, and other factors;

442 2. Provide financial assistance from any planning funds and prioritize the allocation of
 443 planning funds and other available funds to local governments that sufficiently participate
 444 in regional planning;

445 23. Provide guidance on compliance options;

446 34. Facilitate acquisition of existing water resource conditions (the department shall
 447 prepare and post on its website a list of readily available sources for the items identified
 448 in 9VAC25-780-90 B);

449 45. Facilitate acquisition of existing use information that has been reported to the
 450 department;

451 56. Facilitate acquisition of water management information (the department shall prepare
 452 and post on its website a list of acceptable practices that are used with regard to the topics
 453 in 9VAC25-780-110);

454 67. Identify acceptable methods for the projection of future water demands as per
 455 9VAC25-780-100;

456 78. Provide any information regarding known beneficial use conflicts relating to the
 457 development of alternatives as identified in the most recent State Water Resources and
 458 Supply Plan;

459 89. Convene kickoff meetings for the regional planning units;

460 10. Follow up with localities that have been identified as not participating in the regional
 461 planning unit and the development of the regional water supply plan;

462 11. Ensure that local governments coordinate sufficiently in the development of regional
 463 plans;

464 12. Ensure that each regional plan clearly identifies the region's water supply risks and
 465 proposes strategies to address those risks;

466 13. At the request of the applicant, convene a technical evaluation committee meeting;
 467 and

468 14. Provide notice on the department website of local public hearings informational
 469 meetings on the local program regional water supply plan upon notification by the locality.

470 **9VAC25-780-70. Existing water source information.**

471 A. Each local government within the regional planning area shall provide existing water source
 472 information to assist in the development of the regional water supply plan. A regional water supply
 473 plan shall include current information on existing water sources within the regional planning area.

474 B. Each local government within the regional planning area shall provide existing water source
 475 information for community water systems using groundwater to assist in the development of the
 476 regional water supply plan. A regional water supply plan shall include, for community water
 477 systems using ground water, groundwater: (i) the name and identification number of the well or
 478 wells, (ii) the well depth, (iii) the casing depth, (iv) the screen depth (top and bottom) or water
 479 zones, (v) the well diameter, (vi) the design capacity for the designed average daily withdrawal
 480 and maximum daily withdrawal, (vii) the system capacity permitted by the Virginia Department of
 481 Health, and (viii) the annual and monthly permitted amounts contained in ground water withdrawal
 482 permits for all wells located within ground water management areas.

483 C. Each local government within the regional planning area shall provide existing water source
 484 information for community water systems using surface water reservoirs to assist in the
 485 development of the regional water supply plan. A regional water supply plan shall include, for
 486 community water systems using surface water reservoirs; (i) the name of the reservoirs, (ii) the
 487 sub-basins in which the reservoirs are located, (iii) the drainage area, (iv) the amount of on-stream
 488 storage available for water supply, (v) the design capacity for designed average daily and
 489 maximum daily withdrawals from the reservoirs, (vi) the safe yield of the reservoirs, (vii) the
 490 capacity of any associated water treatment plant, (viii) the Virginia Department of Health permitted
 491 capacity of the systems, and (ix) any limitations on withdrawal established by permits issued by
 492 the department. For a community water system that operates a system of interconnected
 493 reservoirs, the reporting of the design capacity for withdrawals, designed average daily
 494 withdrawal, the designed maximum daily withdrawal and the safe yield information may be
 495 presented for the entire system or may be reported as subsets of the system, except that the plan
 496 must report the drainage area and amount of storage available for water supply from each
 497 reservoir independently. The plan shall designate which reservoirs and which intakes constitute
 498 a system for the purposes of this paragraph subsection. The plan must report the drainage area
 499 and amount of storage available for water supply from each reservoir independently.

500 D. Each local government within the regional planning area shall provide existing water source
 501 information for community water systems using stream intakes to assist in the development of the
 502 regional water supply plan. A regional water supply plan shall include, for community water
 503 systems using stream intakes; (i) the name of the stream or river, (ii) the drainage area of the
 504 intake, (iii) the sub-basin in which the intake is located, (iv) the design capacity for designed
 505 average daily and designed maximum daily withdrawal from the stream, (v) the safe yield, (vi) the
 506 lowest daily flow of record, (vii) the design capacity of the pump station, (viii) the design capacity
 507 of the water treatment plant, (ix) the capacity of the system permitted by the Virginia Department
 508 of Health, and (x) any limitation on withdrawals established by permits issued by the department.

509 E. To the extent that information is available, a assist the development of the regional water
 510 supply plan, each local government shall review the data provided by the department for self-
 511 supplied users of more than 300,000 gallons of surface water in any one month. Local
 512 governments shall review this information and provide information for any locally known

513 withdrawals of more than 300,000 gallons in any one month not identified in the dataset provided.
 514 A regional water supply plan shall include a list of for all self-supplied users of more than 300,000
 515 gallons per in any month of surface water for nonagricultural uses; (i) the name of the water body
 516 utilized, (ii) the design capacity for the designed average daily and maximum daily withdrawal,
 517 and (iii) any limitation on withdrawals established by permits issued by the department, the
 518 Virginia Department of Health, or any other agency.

519 F. To the extent that information is available, a assist the development of the regional water
 520 supply plan, each local government shall review the data provided by the department for [self-
 521 suppliedself-supplied] users of more than 300,000 gallons of groundwater in any one month.
 522 Local governments shall review this information and provide information for any locally known
 523 withdrawals of more than 300,000 gallons in any one month not identified in the dataset provided.
 524 A regional water supply plan shall include, for all self-supplied users of more than 300,000 gallons
 525 per in any month of ground water groundwater for nonagricultural uses; (i) the name and
 526 identification number of the well or wells, (ii) the well depth, (iii) the casing depth, (iv) the screen
 527 depth (top and bottom) or water zones, (v) the well diameter, (vi) the design capacity for the
 528 designed average daily and maximum daily withdrawal and (vii) any limitation on withdrawal
 529 established by permits issued by the department, the Virginia Department of Health, or any other
 530 agency.

531 G. To assist the development of the regional water supply plan, each local government shall
 532 review the data provided by the department for community water systems with existing contractual
 533 agreements to receive raw or finished water deliveries from another party. Local governments
 534 shall review this information and provide information for any locally known contractual agreements
 535 not identified in the dataset provided. A regional water supply plan shall include, for any
 536 community water systems with existing contractual agreements to receive raw or finished water
 537 deliveries from another party: (i) the source of the water to be provided under the contract, (ii) the
 538 amount of ground groundwater or surface water to be purchased contractually available to be
 539 delivered to the community water system from a water supply systems outside the geographic
 540 boundaries of the planning area system on a maximum daily and average annual basis, (iii) any
 541 contractual limitations on the purchase delivery of the water, including but not limited to the term
 542 of any contract or agreement, (iv) the recipient(s) recipients or areas served by the water
 543 purchased, and (v) the name(s) name of the supplier(s) any supplier.

544 H. A regional water supply plan, if practicable, shall include an estimate of the amount of water
 545 available to be purchased outside the planning area from any source with the capacity to withdraw
 546 more than 300,000 gallons per in any month of surface and ground water or groundwater, reported
 547 on a maximum daily and average annual basis and any contractual limitations on the purchase of
 548 the water including but not limited to the term of any contract or agreement, the geographic
 549 region(s) that receive the water purchased, and the name(s) of the supplier(s) and that is not
 550 addressed by subsection G of this section.

551 I. To assist the development of the regional water supply plan, each local government shall
 552 review the data provided by the department related to agricultural users who utilize more than
 553 300,000 gallons in any month. Local governments shall review this information and provide
 554 information for any locally known agricultural users of more than 300,000 gallons in any month
 555 not identified in the dataset provided. A regional water supply plan shall include, to the extent
 556 possible, (i) a list of agricultural users who utilize more than 300,000 gallons per in any month, (ii)
 557 an estimate of total agricultural usage by source, (iii) whether the use is irrigation or nonirrigation,
 558 (iv) the maximum capacity of the intake or well, and (v) whether the source is surface or ground
 559 water or groundwater.

560 J. To assist the development of the regional water supply plan, each local government shall
 561 provide an estimate of the number of residences and businesses that are self-supplied by
 562 individual wells withdrawing less than 300,000 gallons in any month and an estimate of the

563 population served by individual wells. A regional water supply plan shall include an estimate of
 564 the number of residences and businesses that are self-supplied by individual wells withdrawing
 565 less than 300,000 gallons per in any month and an estimate of the population served by individual
 566 wells.

567 ~~K. When available, a water plan shall include a summary of findings and recommendations~~
 568 ~~from applicable source water assessment plans or wellhead protection programs.~~

569 **9VAC25-780-80. Existing water use information.**

570 A. Each local government within the regional planning area shall provide information
 571 documenting existing water use information to assist in the development of the regional water
 572 supply plan. A regional water supply plan shall include, at a minimum, current information
 573 documenting existing water use as listed below in this section for each local government within
 574 the regional planning area. Water use information shall be obtained from the Virginia Department
 575 of Health waterworks permit compliance reports, the department ground-water groundwater
 576 permit compliance reports or, department water use reports provided to each local government,
 577 or other appropriate available sources. Information shall be reported for the most recent previous
 578 annual compilation of such data that is available on the date of submission of the water plan. Each
 579 local government shall be responsible for reviewing the water use information for their locality and
 580 obtaining this information from any known omissions in the dataset.

581 B. A regional water supply plan shall include the following information for each community
 582 water systems system within the regional planning area:

583 1. The population within the planning area served by each community water system
 584 served.

585 2. The number of service connections within the planning area for each community water
 586 system.

587 3. The average and maximum daily withdrawal for each community water system within
 588 the planning area of groundwater or surface water over the most recent five-year period.

589 4. The amount of water used within the planning area on an annual average basis, and on
 590 an average monthly basis for each community water system expressed in terms of million
 591 gallons per day over the most recent five-year period.

592 5. The peak day water use by month for each community water system within the planning
 593 area.

594 6. An estimate of the water used on an average annual basis by self-supplied
 595 nonagricultural users of more than 300,000 gallons per in any month of surface water and
 596 ground-water groundwater within the service area of each the community water system.

597 7. An estimate of the amount of water used on an average annual basis by self-supplied
 598 agricultural users of more than 300,000 gallons per in any month of surface water and
 599 ground-water groundwater within the service area of each the community water supply
 600 system.

601 8. An estimate of the number of self-supplied users of less than 300,000 gallons per in
 602 any month of ground-water groundwater and an estimate of the total amount of water used
 603 by them on an annual average basis within the service area of each the community water
 604 supply system.

605 ~~9. For each community water system included in the water plan, the plan shall include an~~
 606 An estimate of the disaggregated amounts of water used in categories of use appropriate
 607 for the system. Typical categories may include:

608 a. Residential use;

609 b. Commercial, institutional, and light industrial (CIL) use;

- 610 c. Heavy industrial use;
- 611 d. Military water use;
- 612 e. Water used in water production processes;
- 613 f. Unaccounted for losses;
- 614 g. Sales to other community water systems and the names of such systems; or
- 615 h. Subtotals of the above categories for all community water systems.

616 10. To the extent that information ~~is available~~ or sources of information are provided by
 617 the department pursuant to 9VAC25-780-60 ~~and other sources~~, for each community water
 618 system ~~included in the water plan~~ using stream intakes, ~~the plan shall include~~ a qualitative
 619 description of existing in-stream beneficial uses within the planning area or outside the
 620 planning area that may be affected by the ~~point of~~ stream withdrawal.

621 C. A Using information provided by the department and any additional locally identified data,
 622 a regional water supply plan shall include an estimate of the water used on an average annual
 623 basis by self-supplied nonagricultural ~~user~~ users of more than 300,000 gallons ~~per~~ in any month
 624 of surface water and ~~ground water~~ groundwater outside the service areas of community water
 625 systems.

626 D. A Using information provided by the department and any locally identified data, a regional
 627 water supply plan shall include an estimate of the amount of water used on an average annual
 628 basis by self-supplied agricultural users of more than 300,000 gallons ~~per~~ in any month of surface
 629 water and ~~ground water~~ groundwater outside the service areas of community water systems.

630 E. A Using information provided by the department and any additionally identified data, a
 631 regional water supply plan shall include an estimate of the number of self-supplied users of less
 632 than 300,000 gallons ~~per~~ in any month of ~~ground water~~ groundwater and an estimate of the total
 633 amount of water used by them on an annual average basis outside the service areas of community
 634 water systems.

635 **9VAC25-780-90. Existing water resource information.**

636 A. ~~A program shall include a description of~~ Each local government within the regional planning
 637 area shall provide information documenting existing geologic, hydrologic, and meteorological
 638 conditions to assist in the development of the regional water supply plan. A regional water supply
 639 plan shall include a description of existing geologic, hydrologic, and meteorological conditions
 640 within the planning area, and in proximity to the point of withdrawal if it is outside the planning
 641 area.

642 B. A ~~program~~ regional water supply plan shall include a description of existing environmental
 643 conditions that pertain to, or may affect, in-stream flow, in-stream uses, and sources that provide
 644 the current supply. This description of conditions may be provided in a distinct section of the plan
 645 document or as a part of the existing water sources information required pursuant to 9VAC25-
 646 780-70. This information may be derived from existing, readily available sources of information
 647 ~~and additional detailed, and information provided by the department.~~ Additional studies shall not
 648 be required. The description of conditions shall include the following items, as they are applicable:

- 649 1. State or federal listed threatened or endangered species or habitats of concern;
- 650 2. Anadromous, trout, and other significant fisheries;
- 651 3. River segments that have recreational significance, including state scenic river status;
- 652 4. Sites of historic or archaeological significance;
- 653 5. Unusual geologic formations or special soil types;
- 654 6. Wetlands;
- 655 7. Riparian buffers and conservation easements;

- 656 8. Land use and land coverage, including items such as percentage of impervious cover
 657 within a watershed and areas where new development may impact water quality of the
 658 source;
- 659 9. The presence of impaired streams and the type of impairment;
- 660 10. The location of point source discharges; and
- 661 11. ~~Potential threats to the existing water quantity and quality, other than those from above~~
 662 Water availability based on in-stream flow necessary to support [aquatic life provided by
 663 the department as identified in the most recent version of the State Water Resources and
 664 Supply Plan fish and wildlife resources and habitat] .

665 **9VAC25-780-100. Projected water demand information; statement of need and alternatives.**

666 A. Each local government within the regional planning area shall provide projections of future
 667 water demand to assist in the development of the regional water supply plan. A regional water
 668 supply plan shall include projections of future water demand as listed below for each local
 669 government within the regional planning area in accordance with this section. Population in
 670 aggregate and disaggregate formulations should be estimated according to information from the
 671 U.S. Census Bureau, Bureau of Economic Analysis, the Virginia Employment Commission, or
 672 other accepted source of population information, including ~~but not limited to~~, local or regional
 673 sources. Demand projection methodologies should be consistent with those outlined ~~in the~~
 674 ~~American Water Works Association or American Society of Civil Engineers manuals~~ by the
 675 department consistent with 9VAC25-780-60. Sources of information and methodologies used in
 676 projecting future water demand shall be documented.

677 B. A regional water supply plan shall estimate water demand within the planning area for a
 678 ~~minimum of 30 to a maximum of 50 years into the future. While not required, localities are~~
 679 ~~encouraged to plan for the maximum planning period to ensure that the most appropriate and~~
 680 ~~sustainable alternatives are identified.~~

681 C. A regional water supply plan shall include an estimated future water use projected at the
 682 beginning of each decade (2010, 2020, 2030, etc.) within the planning period.

683 D. A regional water supply plan shall include the following projections for community water
 684 systems:

- 685 1. An estimate of population within the planning area served by each community water
 686 system;
- 687 2. A map depicting the ~~proposed~~ service area of each existing or proposed community
 688 water system;
- 689 3. Estimated water demand for each existing or proposed community water system on
 690 both an annual average and peak monthly basis;
- 691 4. Estimated water demand for each existing or proposed community water system
 692 disaggregated into categories of use appropriate for the system. Typical categories may
 693 include:
 - 694 a. Residential use;
 - 695 b. Commercial institutional and light industrial (CIL) use;
 - 696 c. Heavy industrial use;
 - 697 d. Military water use;
 - 698 e. Water used in water production processes;
 - 699 f. Unaccounted for losses;
 - 700 g. Sales to other community water systems and the names of such systems; or

- 701 h. Subtotals of the ~~above~~ categories listed in this subsection for all community water
 702 systems; ~~and or~~
- 703 i. Projected water demands with and without water conservation pursuant
 704 to [~~9VAC25-780-110 B~~9VAC25-780-110 C] ; and
- 705 5. Total projected water demand for all existing or proposed community water systems
 706 disaggregated into the categories used in subdivision 4 of this subsection.
- 707 E. A regional water supply plan shall include a projection of water demand within the regional
 708 planning area on an annual average basis for each existing and any proposed self-supplied
 709 nonagricultural user of more than 300,000 gallons ~~per~~ in any month of surface water and ground
 710 water located outside the service areas of community water systems groundwater.
- 711 F. A regional water supply plan shall include a projection of the amount of water use on an
 712 annual average basis for each existing and any projected self-supplied agricultural user of more
 713 than 300,000 gallons ~~per~~ in any month of surface water and ground water located outside the
 714 service areas of community water systems groundwater.
- 715 G. A regional water supply plan shall include a projection of the number of self-supplied users
 716 of less than 300,000 gallons ~~per~~ in any month of ~~ground water~~ groundwater and a projection of
 717 the amount of water used on an annual average basis ~~outside the service areas of community~~
 718 water systems.
- 719 H. Each local government within the regional planning area shall assist in the development of
 720 the regional water supply plan by determining the adequacy of existing water sources to meet
 721 current and projected demand by preparing a clear statement of need that is derived from an
 722 evaluation of the information required by 9VAC25-780-70 through 9VAC25-780-110. The
 723 statement of need shall contain, at a minimum, a determination of whether the existing sources
 724 are adequate to meet current and projected demands. If the determination is that existing sources
 725 are inadequate to meet current or projected demands during the planning period, each local
 726 government shall identify a reasonable range of potential alternative sources of supply to address
 727 the shortfall in demand. The list of alternatives shall include:
- 728 1. Potential water savings from water demand management actions, including an
 729 estimated volume for each action; and
- 730 2. Potential sources for new or alternative supplies, including an estimated volume from
 731 each source.
- 732 I. If any local government in the regional planning area determines that one or more existing
 733 sources within its jurisdiction is inadequate to meet projected demands during the planning period,
 734 or the regional strategies proposed in 9VAC25-780-125 include the development of new or
 735 alternative water sources, the regional water supply plan shall include an alternatives analysis
 736 with the following elements:
- 737 1. A statement of need that addresses the location, magnitude, and timing of the projected
 738 shortfall in demand within the regional planning area;
- 739 2. Identification of a reasonable range of alternatives that potentially may satisfy the stated
 740 need, including all alternatives identified by a local government under
 741 subsection [~~GH~~] of this section, and, as appropriate, other (i) water savings from water
 742 demand management actions, including an estimated volume for each action; (ii) sources
 743 for new water supplies, such as wells, reservoirs, impoundments and stream intakes, or
 744 aquifers, and an estimated volume from each source; (iii) nontraditional means of
 745 increasing supplies, such as interconnection, desalination, recycling, and reuse; and (iv)
 746 cross-jurisdictional regional approaches for shared development of new sources or
 747 expanding existing sources;

748 3. For each alternative to which it applies, a statement of any potential water availability
 749 issues identified by the board in the most recent review of the regional water supply plan
 750 or the State Water Resources and Supply Plan in accordance with 9VAC25-780-140 G,
 751 for each potential new source that any future water project will need to consider in its
 752 development; and

753 4. An assessment of whether the identified alternatives are (i) available [; (ii)
 754 and] practicable in terms of cost, logistics, and existing technology; [(iii)(ii)] avoid and
 755 minimize the need for water to the extent practicable; and [(iv)(iii)] are sufficient to satisfy
 756 the need alone or in combination with other short-term or long-term alternatives.

757 J. A regional water supply plan shall include [address/consider] , if available, any cumulative
 758 demand, use conflict, or in-stream flow information developed identified by the board in the most
 759 recent review of the regional water supply plan or most recent version of the State Water
 760 Resources and Supply Plan pursuant to 9VAC25-780-140 G.

761 K. A regional water supply plan shall explain how the projected needs of domestic
 762 consumption, in-stream uses, and economic development have been accounted for in the
 763 demand projection for the planning period.

764 **9VAC25-780-110. Water demand management information.**

765 A. Each local government within the regional planning area shall provide information
 766 documenting existing water demand management plans or practices to assist in the development
 767 of the regional water supply plan.

768 AB. As part of a long-term strategy, a regional water supply plan shall address water
 769 conservation as a part of overall water demand management in accordance with the following
 770 requirements:

771 1. A regional water supply plan shall include information that describes practices describe
 772 strategies for more efficient use of water that are used within the regional planning area.
 773 The type of measures to be described may include, but are not limited to, the adoption
 774 and enforcement of the Virginia Uniform Statewide Building Code (13VAC5-63) sections
 775 that limit maximum flow of water closets, urinals, and appliances; use of low-water use
 776 landscaping; and increases in irrigation efficiency.

777 2. A regional water supply plan shall include information describing describe the water
 778 conservation measures used within the regional planning area to conserve water through
 779 the reduction of use. The types of measures to be described may include, but are not
 780 limited to, technical, educational, and financial programs.

781 3. A regional water supply plan shall include information that describes describe, within
 782 the regional planning area, the practices to address water loss in the maintenance of water
 783 systems to reduce unaccounted for water loss. The types of items to be described may
 784 include, but are not limited to: leak detection and repair and old distribution line
 785 replacement.

786 B. C. Current water conservation practices, techniques, and technologies shall be considered
 787 in projecting water demand pursuant to 9VAC25-780-100 D.

788 **9VAC25-780-120. Drought response and contingency plans.**

789 A program A. Each local government with the regional planning area that includes contains
 790 within its geographic jurisdiction community water systems and self-supplied users who withdraw
 791 more than an average of 300,000 gallons per in any month of surface water and ground-water
 792 groundwater shall contain develop a drought response and contingency plans in accordance with
 793 plan that contains the following requirements:

794 1. Drought response and contingency plans shall be structured to address the unique
 795 characteristics of the water source that is being utilized and the nature of the beneficial

796 use of water. Direct stream intakes shall consider the lowest flow of record and reservoirs
 797 shall consider available usable storage to the extent practicable.

798 2. Drought response and contingency plans shall contain, at a minimum, the following
 799 three graduated stages of responses to the onset of drought conditions:

800 a. Each drought stage shall have specific triggers designed to address the particular
 801 vulnerabilities of each water source.

802 ab. Drought watch stage responses are generally responses that are intended to
 803 increase awareness in the public and private sector to climatic conditions that are likely
 804 to precede the occurrence of a significant drought event. Public outreach activities
 805 shall be identified to inform the population served by a community water system of the
 806 potential for drought conditions to intensify and potential water conservation activities
 807 that may be utilized.

808 bc. Drought warning stage responses are generally responses that are required when
 809 the onset of a significant drought event is imminent. Voluntary water conservation
 810 activities shall be identified with the goal of reducing water use by 5-10%.

811 ed. Drought emergency stage responses are generally responses that are required
 812 during the height of a significant drought event. Mandatory water conservation
 813 activities shall be identified with the goal of reducing water use by 10-15%.

814 3. Drought response and contingency plans shall include references to local ordinances,
 815 if adopted, and procedures for the implementation and enforcement of drought response
 816 and contingency plans.

817 B. If there is a conflict between subsection A of this section and any condition of a permit
 818 issued by the department, a drought response and contingency plan shall conform to the permit
 819 and, to the extent practicable and consistent with the permit, subsection A of this section.

820 C. Each regional planning area, to the extent practicable, shall evaluate the feasibility of
 821 developing a regional drought response and contingency plan as part of the regional water supply
 822 plan. If a regional drought contingency and response plan is developed, it shall include all of the
 823 elements identified in the subsection A of this section. [Any local government that utilizes the
 824 Potomac River through any portion of their service area as a water supply source shall incorporate
 825 the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response
 826 Plan: Potomac River System (2000), including provisions related to triggers, actions, and
 827 messages for the Potomac River drought evaluation region.]

828 D. If a regional drought response and contingency plan is not feasible, the regional water
 829 supply plan shall include a summary description of any cross-jurisdictional coordination efforts on
 830 drought response.

831 **9VAC25-780-125. Identification of water supply risks and proposed regional strategies.**

832 A. A regional water supply plan shall identify water supply risks [relevant to the regional
 833 planning unit, using readily available information as defined in 9VAC25-780-50 C] . For each
 834 water supply risk identified the likelihood and severity of the impact on water supply in the regional
 835 water supply plan shall be evaluated.

836 B. In [evaluating/identifying] potential water supply risks [relevant to the regional planning
 837 unit] , the regional planning unit shall consider, at a minimum, the following:

838 1. The findings of any wellhead protection or source water protection plans developed for
 839 sources of supply in the regional planning area;

840 2. The potential effects of climate change or need for climate resiliency;

841 3. Reduction in availability to meet water supply demands during short-term droughts and
 842 long-term droughts due to current demands, increasing demands, new withdrawals, or
 843 other factors;

844 4. Reduction in availability of groundwater from coastal plain or fractured rock aquifers
 845 due to current or increasing demands or new withdrawals;

846 5. The water needs of other beneficial uses, including aquatic habitat and waste
 847 assimilative capacity;

848 6. Reductions in available supply due to a lack of assessment or failure to address
 849 excessive rates of unaccounted water;

850 7. Affordability of costs for developing new or maintaining existing sources, infrastructure
 851 improvements, and impacts to rates for water customers; and

852 8. Other water supply risks as identified by the local governments.

853 C. The regional water supply plan shall identify and evaluate a reasonable range of potential
 854 regional strategies or projects to address each identified water supply risk. Each strategy or
 855 project shall include, at a minimum, the following information:

856 1. A description of the strategy or project and the local governments and stakeholders that
 857 would be involved if implemented; and

858 2. An analysis of how the strategy or project would mitigate the impact of risk. For
 859 strategies or projects intended to address risks associated with a reduction in available
 860 water supply, an estimate of how the strategy would impact available water supply shall
 861 also be included.

862 D. Regional strategies or projects may address more than one risk. Cross-jurisdictional
 863 strategies or projects shall be considered to the extent practicable. Strategies may include water
 864 conservation elements included in the water demand management information and drought
 865 response and contingency plans required by 9VAC25-780-110 and 9VAC25-780-120
 866 respectively. Projects that include alternative water sources or the expansion of existing sources
 867 shall be included in the analysis of alternatives required by 9VAC25-780-100 I.

868 **9VAC25-780-130. Statement of need and alternatives. (Repealed.)**

869 ~~A. A water plan shall determine the adequacy of existing water sources to meet current and~~
 870 ~~projected demand by preparing a clear statement of need that is derived from an evaluation of~~
 871 ~~the information required by 9VAC25-780-70 through 9VAC25-780-110. The statement of need~~
 872 ~~shall contain, at a minimum, a determination of whether the existing source(s) is adequate to meet~~
 873 ~~current and projected demands.~~

874 ~~B. If the determination is that the existing source is inadequate to meet projected demands~~
 875 ~~during the planning period, the program shall include an alternative analysis of potential sources~~
 876 ~~that includes the following information:~~

877 ~~1. A description of potential water savings from water demand management actions~~
 878 ~~including an estimated volume for each action;~~

879 ~~2. A description of potential sources for new supplies including an estimated volume from~~
 880 ~~each source; and~~

881 ~~3. A description of potential resource issues or impacts, identified in accordance with~~
 882 ~~9VAC25-780-140 G, known for each potential new source that any future water project~~
 883 ~~will need to consider in its development.~~

884 ~~C. Potential alternatives considered shall include water demand management alternatives as~~
 885 ~~well as more traditional means of increasing supply, i.e., wells, reservoirs, impoundments and~~
 886 ~~stream intakes. Where appropriate, the program shall consider nontraditional means of increasing~~
 887 ~~supplies such as interconnection, desalination, recycling and reuse. The analysis of potential~~

888 alternatives may include a combination of short term and long term alternatives. The result of this
 889 analysis shall be provided as part of the submission required by 9VAC25-780-50 C 7.

890 **9VAC25-780-140. Review of ~~local programs~~ regional water supply plans.**

891 A. The board shall review all ~~programs~~ regional water supply plans to determine compliance
 892 with this ~~regulation~~ chapter and consistency with the State Water Resources and Supply Plan.
 893 The board will review adopted elements of a ~~local program~~ regional water supply plan according
 894 to review policies adopted by the board. Copies of the adopted ~~local program~~ regional water
 895 supply plan documents and subsequent changes thereto shall be provided to the ~~board~~
 896 department.

897 B. To assist in the review of the ~~program~~ regional water supply plans, the board shall provide
 898 the Virginia Department of Health and other agencies listed in 9VAC25-780-150 B along with any
 899 other agency the board deems appropriate, 90 days to evaluate the ~~program~~ regional water
 900 supply plans. Comments must be received from the Virginia Department of Health or other agency
 901 by the deadline stipulated in the written notification from the board.

902 C. The board will assess the compliance of submitted ~~programs~~ regional water supply plans
 903 with ~~these regulations~~ this chapter. The board shall prepare a tentative statement of findings on
 904 whether the ~~program~~ regional water supply plan has demonstrated compliance with the following:

- 905 1. All elements of a ~~local program~~ regional water supply plan identified in 9VAC25-780-50
 906 have been submitted;
- 907 2. The ~~program~~ regional water supply plan was developed through a planning process
 908 consistent with this chapter;
- 909 3. The results of any evaluation conducted pursuant to subsection G of this section have
 910 been appropriately accommodated;
- 911 4. The existing sources information complies with 9VAC25-780-70;
- 912 5. The existing water use information complies with 9VAC25-780-80;
- 913 6. The existing resources information complies with 9VAC25-780-90;
- 914 7. The projected water demand is based on an accepted methodology and complies with
 915 9VAC25-780-100;
- 916 8. The water demand management information complies with 9VAC25-780-110;
- 917 9. The drought response and contingency plan complies with 9VAC25-780-120;
- 918 10. The region's water supply risks have been identified and regional strategies to address
 919 those risks have been proposed and comply with 9VAC25-780-125;
- 920 ~~10. 11. The statement of need complies with 9VAC25-780-130 A 9VAC25-780-100 H;~~
- 921 ~~11. 12. When required, the alternatives comply analysis complies with 9VAC25-780-130~~
 922 ~~9VAC25-780-100;~~
- 923 13. The regional water supply plan demonstrates sufficient cross-jurisdictional
 924 coordination between local governments and consultation with stakeholders during
 925 regional water supply plan development in accordance with 9VAC25-780-50; and
- 926 ~~12. 14. The ~~local program~~ regional water supply plan is consistent with 9VAC25-390-20,~~
 927 ~~§ 62.1-11 of the Code of Virginia, and Chapter 3.2 (§ 62.1-44.36 et seq.) of Title 62.1 of~~
 928 ~~the Code of Virginia.~~

929 D. If the board's tentative decision is to find the ~~local program~~ regional water supply plan in
 930 compliance with subsection C of this section, the board shall provide public notice of its findings
 931 pursuant to 9VAC25-780-150.

932 E. If the tentative decision of the board is to find the ~~local program~~ regional water supply plan
 933 in noncompliance with ~~subsection C of this section~~ this chapter, the board shall identify (i) the

934 reason for the finding of noncompliance, (ii) what is required for compliance, and (iii) and the right
 935 to an informational proceeding under Article 3 (§ 2.2-4018 et seq.) of Chapter 40 of the Virginia
 936 Administrative Process Act.

937 F. The board shall make a final decision on whether the ~~local program~~ regional water supply
 938 plan is in compliance with this chapter after completing review of the submitted ~~program~~ regional
 939 water supply plan, any agency comments received, and any public comment received from a
 940 public meeting held pursuant to 9VAC25-780-160.

941 G. In conjunction with the compliance determination made by the board, the state will develop
 942 additional information and conduct additional evaluation of local or regional alternatives in order
 943 to facilitate continuous planning. This additional information shall be included in the State Water
 944 Resources and Supply Plan and ~~used by~~ made available to localities for use in their program
 945 planning. This information developed by the department shall include:

946 1. ~~A cumulative demand analysis, based upon information contained in the State Water~~
 947 ~~Resources Plan and other sources~~ An estimate of current water withdrawals and use for
 948 agriculture, domestic use, and other significant categories of water users;

949 2. ~~The evaluation of alternatives prepared pursuant to 9VAC25-780-130 B and C~~ A
 950 projection of water withdrawals and use by agriculture, industry, domestic use, and other
 951 significant categories of water users;

952 3. ~~The evaluation of potential use conflicts among projected water demand and estimates~~
 953 ~~of requirements for in-stream flow; and~~ An estimate, for each major river and stream, of
 954 the minimum in-stream flows necessary during drought conditions to maintain water
 955 quality and avoid permanent damage to [aquatic life and wildlife resources and
 956 habitat] in streams, bays, and estuaries;

957 4. ~~An evaluation of the relationship between the local plan and the State Water Resources~~
 958 ~~Plan, to the extent practicable, of the ability of existing subsurface and surface waters to~~
 959 ~~meet current and future water uses, including minimum in-stream flows, during drought~~
 960 ~~conditions;~~ meet current and future water uses, including minimum in-stream flows, during drought
 961 conditions;

962 5. An evaluation, in cooperation with the Virginia Department of Health and local water
 963 supply managers, of the current and future capability of public water systems to provide
 964 adequate quantity and quality of water;

965 6. An estimate, using a data-driven method that includes multiple reasonable assumptions
 966 about supply and demand over varying timeframes, of the risk that each locality and region
 967 will experience water supply shortfalls; and

968 7. An evaluation, to the extent practicable, of hydrologic, environmental, economic, social,
 969 legal, and jurisdictional aspects identified.

969 H. ~~The board~~ department may facilitate information sharing and discussion among localities
 970 when potential conflicts arise with regard to demands upon a source.

971 I. ~~A local program's~~ regional water supply plan's information shall be included in the State
 972 Water Resource and Supply Plan when determined to be in compliance by the board.

973 **9VAC25-780-150. Public notice and public comment period.**

974 A. The board shall give public notice on the department website for every tentative ~~and final~~
 975 decision to determine ~~local program~~ regional water supply plan compliance.

976 B. The board shall give public notice to the Virginia Department of Health, the Department of
 977 Conservation and Recreation, the Marine Resources Commission, the Department of Historic
 978 Resources, and the Department of ~~Game and Inland Fisheries~~ Wildlife Resources for every
 979 tentative ~~and final~~ decision on ~~program~~ regional water supply plan compliance. The agencies shall

980 have 90 days to submit written comment. At the request of the applicant, the board will convene
981 a technical evaluation committee meeting to facilitate receipt of these comments.

982 C. The board shall provide a comment period of at least 30 days following the date of the
983 public notice for interested persons to submit written comments on the tentative or final decision.
984 All written comments submitted during the comment period shall be retained by the board and
985 considered during its final decision.

986 D. Commenters may request a public meeting when submitting comments. In order for the
987 board to grant a public meeting, there must be a substantial public interest and a factual basis
988 upon which the commenter believes that the proposed ~~program~~ regional water supply plan might
989 be contrary to the purposes stated in 9VAC25-780-20.

990 E. The contents of the public notice of a proposed ~~program~~ regional water supply plan
991 compliance determination shall include:

- 992 1. ~~Name(s)~~ Names and ~~address(es)~~ addresses of the ~~locality(ies)~~ localities that submitted
993 the local or regional water plan;
- 994 2. Brief synopsis of the proposed plan, including any identified future alternatives;
- 995 3. The ~~name(s)~~ names of the principal water supply sources;
- 996 4. A statement of the tentative determination to certify or deny consistency with the
997 regulation;
- 998 5. A brief description of the final determination procedure;
- 999 6. The address, ~~e-mail~~ email address, and ~~phone~~ telephone number of a specific person
1000 at the state office from whom further information may be obtained; and
- 1001 7. A brief description on how to submit comments and request a public meeting.

1002 **9VAC25-780-160. Public meetings.**

1003 A. Public notice of any public meeting held pursuant to 9VAC25-780-150 shall be circulated
1004 as follows:

- 1005 1. Notice shall be published on the department website;
- 1006 2. Notice shall be published once in a newspaper of general circulation in ~~the~~ each county,
1007 city, or town where the ~~local~~ or regional water supply plan is in effect; and
- 1008 3. Notice of the public meeting shall be sent to all persons and government agencies that
1009 requested a public meeting or have commented in response to the public notice.

1010 B. Notice shall be effected pursuant to ~~subdivisions A 1 through 3~~ subsection A of this section
1011 at least 30 days in advance of the public meeting.

1012 C. The content of the public notice of any public meeting held pursuant to this section shall
1013 include at least the following:

- 1014 1. Name and address of the localities who prepared the ~~program~~ regional water supply
1015 plan;
- 1016 2. The regional planning area covered by the ~~program~~ regional water supply plan;
- 1017 3. A brief reference to the public notice issued for the comment period, including the date
1018 of issuance unless the public notice includes the public meeting notice;
- 1019 4. Information regarding the time and location for the public meeting;
- 1020 5. The purpose of the public meeting;
- 1021 6. A concise statement of the relevant water resources planning, water quality, or fish and
1022 wildlife resource issues raised by the persons requesting the public meeting;
- 1023 7. Contact person and the address, ~~e-mail~~ email address, and ~~phone~~ telephone number
1024 of the department office at which the interested persons may obtain further information or

1025 request a copy of the draft statement of findings prepared pursuant to 9VAC25 780-140
1026 D; and

1027 8. A brief reference to the rules and procedures to be followed at the public meeting.

1028 **9VAC25-780-180. Enforcement.**

1029 A. Enforcement of this chapter will be in accordance with §§ 62.1-44.15, 62.1-44.23, and 62.1-
1030 44.32 of the Code of Virginia.

1031 B. A local government shall not be liable for the inability of the local government or its regional
1032 planning unit to comply with any requirement of this chapter caused by the failure or refusal of
1033 any other local government, community water system, or self-supplied user to comply with any
1034 provisions of this chapter.

Office of Regulatory Management
Economic Review Form

Agency name	Department of Environmental Quality
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC 25-780
VAC Chapter title(s)	Local and Regional Water Supply Planning
Action title	Amendments pursuant to Chapter 1105 of the 2020 Acts of Assembly
Date this document prepared	October 31, 2023
Regulatory Stage (including Issuance of Guidance Documents)	Final

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>• As mandated by Chapter 1105 (HB542) of the 2020 Acts of Assembly, the proposed regulation requires localities to participate in cross-jurisdictional water resources planning with other localities within their regional planning area. Each regional planning area shall submit a single regional plan. Regional planning areas are defined in the proposed regulation as state law requires. The proposed regulation allows for localities to request a change to their regional planning area designation in accordance with Chapter 331 (HB1297) of the 2022 Acts of Assembly.</p> <p>Direct Costs: No new direct fiscal costs are expected as these changes themselves do not introduce any new requirements to the water supply plan itself and the current regulation allows for regional planning. However, localities that submitted local plans, and did not previously participate in regional planning, may need to utilize additional staff time to collaborate with the regional planning unit in the development of regional water supply plans. This will vary significantly across localities as some localities already plan regionally or will be planning in geographic areas that largely overlap existing planning structures such as Planning District Commissions (PDCs). Additional costs may range from zero to an unknown amount due to staffing and contractual support.</p> <p>Indirect Costs: No indirect costs are anticipated.</p> <p>Direct Benefits: Meet the legal mandate of state law. The purpose for the statutorily mandated change is to improve planning across jurisdictions given water sources are commonly shared across multiple localities. Planning that includes coordinated evaluation of common regional water sources at the regional scale allows for improved optimization of the use of these resources and may increase water availability for future water needs such as economic development opportunities.</p> <p>Indirect Benefits: No indirect benefits are anticipated.</p> <p>• As mandated by Chapter 1105 (HB542) of the 2020 Acts of Assembly, the proposed regulation requires localities to invite stakeholder groups to participate in planning.</p> <p>Direct Costs: No direct fiscal costs are expected as a result of this statutorily mandated requirement for localities to invite stakeholder groups to participate in planning. Limited increases in staff time may result from facilitating participation of stakeholders who choose to participate.</p>
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	<p>Indirect Costs: No indirect costs are anticipated.</p> <p>Direct Benefits: Meet the mandate of state law. Additionally, involving stakeholders in the planning process may save localities time and resources by identifying areas of concern that may come up during public processes for water withdrawal permit applications. As permit applications can face delays when unforeseen concerns appear late in the permit process, allowing interested stakeholders to provide input on proposed projects during plan development is likely to be a net benefit to localities, and improve likelihood that withdrawal projects necessary to meet projected growth will be successful.</p> <p>Indirect Benefits: No indirect benefits are anticipated.</p> <p>• As mandated by Chapter 1105 (HB542) of the 2020 Acts of Assembly, the proposed regulation requires the Department to ensure each regional water supply plan clearly identifies water supply risks, evaluates likelihood and severity of each risk identified, and proposes regional strategies to address each risk.</p> <p>Direct Costs: The statutorily mandated requirement specified in the regulation that regional plans clearly identify water supply risks and propose regional strategies to address them may be consequential, to the extent that these items have not been already addressed in water supply plans. It is estimated that fulfilling this requirement would require approximately 10 to 20 additional hours of staff time for each locality during the plan development and submittal cycle (once every 10 years). There is no current estimate available for added costs to localities needing to hire consultants to complete this work, but it is anticipated that it would only be a small component of the overall plan development effort costs and is unlikely to significantly increase costs. (SOURCE: Virginia Department of Planning and Budget Economic Impact Analysis for 9VAC25-780 Dated October 27, 2022.)</p> <p>Indirect Costs: No indirect costs are anticipated.</p> <p>Direct Benefits: Meet the legal mandate of state law and allow localities to comply with current law. Having water supply risks and proposed regional strategies addressed in plans would improve the ability of the region, and the localities that comprise them, to avoid and address water supply problems in the future.</p> <p>Indirect Benefits: No indirect benefits are anticipated.</p> <p>• As mandated by Chapter 36 (HB2095) and Chapter 37 (SB1149) of the 2023 Acts of Assembly, the proposed regulation requires that</p>
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	<p>localities that use the Potomac River as a water supply source be recognized as a distinct planning area and that plans for those areas incorporate the provisions of the Metropolitan Washington Water Supply and Drought Awareness Response Plan: Potomac River System (2000).</p> <p>Direct Costs: There are no known monetized direct costs expected for local governments and partners associated with this mandate.</p> <p>Indirect Costs: There are no known monetized indirect costs expected for local governments and partners associated with this mandate.</p> <p>Direct Benefits: Meet the legal mandate of state law and allow localities to comply with current law.</p> <p>Indirect Benefits: No indirect benefits are anticipated.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Estimated range for plan development per locality of \$13,000 - \$115,000 depending on locality population.	(b) Unknown
(3) Net Monetized Benefit	Unknown	
(4) Other Costs & Benefits (Non-Monetized)	Regional planning with increased stakeholder participation includes benefits such as improved feasibility of cost-effective regional water supply projects and avoidance of common issues in permit processing that delay or complicate project development.	
(5) Information Sources	Discussions with regional planning commission, consultants who worked on previous plans, and localities.	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

Agency Note: Under the current regulation, localities can choose to develop a water supply plan independently (local plan) or may choose to plan regionally with other localities (regional plans). In total, 48 water supply plans were submitted in 2008, of which 10 were local plans and 38 were regional plans with the majority of those consisting of one county and one or more cities or incorporated towns located within the boundaries of the county.

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>The proposed amendments are mandated by state law. If the regulation is not changed, it will not meet the legal mandate of state law and localities will be unable to submit water supply plans that comply with current law.</p> <p>Direct Costs: There are no additional monetized direct costs expected for local governments and partners associated with retaining this regulation with no changes. However, there is an existing baseline cost of between \$13,000 to \$115,000 for local governments to adequately evaluate and plan for sustainable water supplies.</p> <p>Indirect Costs: There are no additional monetized costs over and above those that currently exist with the regulation as it is currently written as local governments review, revise, and resubmit their plans every 10 years as required by 9VAC25-780-50 E.</p> <p>Direct Benefits: There are no additional monetized direct benefits expected for local governments associated with retaining this regulation with no changes.</p> <p>Indirect Benefits: There are no known monetized indirect benefits expected for local governments associated with retaining this regulation with no changes.</p>	
<p>(2) Present Monetized Values</p>	<p>Direct & Indirect Costs</p> <p>(a) It currently costs local governments between \$13,000 and \$79,000 if their plan is developed using in-house resources and between \$19,000 and \$115,000 if it is developed using a combination of in-house resources and external consultants.</p>	<p>Direct & Indirect Benefits</p> <p>(b) The current benefits include the provisions of adequate and safe drinking water, encouragement and protection of beneficial in-stream and off-stream uses, encouragement and promotion of alternate water sources, and promotion of conservation activities. By rationalizing state water resource use such that in-stream and off-stream benefits are balanced and by ensuring consistency in the use of water resources on a statewide basis, the current regulation encourages more efficient use of Virginia's water resources.</p>
<p>(3) Net Monetized Benefit</p>	<p>A significant portion of the benefits of local and regional water supply planning accrue from the improvement in efficiency in the use of the state's water resource as a result of having local and regional water supply plans. The economic benefits accruing from this regulation include the provision of adequate drinking water supplies and an improvement in efficiency in the use of state water resources. Estimates of these benefits are not currently available.</p>	

	The regulation likely has a positive impact on businesses and entities providing water supply planning services as localities develop, review and revise their water supply plans. An estimate of these impacts is not currently available.
(4) Other Costs & Benefits (Non-Monetized)	This regulation protects the health, safety, and welfare of citizens by requiring local and regional water supply planning and encouraging more efficient use of Virginia’s water resources. By identifying potential conflicts before they arise among localities securing adequate drinking water supplies and between in-stream and off-stream needs, the regulation ensures consistency in the use of water resources on a statewide basis.
(5) Information Sources	Discussions with a regional planning commission, consultants who worked on previous plans and localities. In addition, the Economic Impact Analysis prepared by the Virginia Department of Planning and Budget on the regulation prepared on February 18, 2005; the Office of Regulatory Management Economic Review Form prepared by DEQ on 9VAC25-780 dated September 1, 2022, and the Office of Regulatory Management Economic Review Form prepared by DEQ for the Periodic Review of 9VAC25-780 dated June 12, 2023 were also consulted.

Table 1c: Costs and Benefits under Alternative Approach(es)

NOT REQUIRED: Amendments are mandated by changes in statute. No alternative approaches are applicable.

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: N/A Indirect Costs: N/A Direct Benefits: N/A Indirect Benefits: N/A	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A
(3) Net Monetized Benefit	N/A	
(4) Other Costs & Benefits (Non-Monetized)	N/A	
(5) Information Sources	N/A	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: Refer to Table 1a. Indirect Costs: There may be future costs for local partners associated with this regulation as they review, revise, and resubmit plans every 10 years as required by 9VAC25-780-50 E. Direct Benefits: Refer to Table 1a. Indirect Benefits: Refer to Table 1a.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) Direct Costs – Refer to Table 1a.	(b) Direct Benefits – Refer to Table 1a.
(3) Other Costs & Benefits (Non-Monetized)	Refer to Table 1a.	
(4) Assistance	Agency does not currently provide financial assistance to local partners for the development of water supply plans.	
(5) Information Sources	Information sources were pulled from a previous Economic Impact Forms posted on Town Hall on 09/12/2022 and 08/01/2023 which included discussions with regional planning commissions, consultants who worked on previous plans, and localities.	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

AGENCY NOTE: DEQ anticipates that implementation locally of the requirement to develop a regional water supply plan will have a minimal economic impact on individual families. The statute and regulations impose the requirement on all counties, cities and incorporated towns. The regulatory change seeks to ensure the coordinated development of regional water supply plans among localities and by doing so, ensure that adequate water supply is available for Virginia families over the long term.

Table 3: Impact on Families

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>Direct Costs: There are no monetized direct costs to families associated with this regulation.</p> <p>Indirect Costs: There are no monetized indirect costs to families associated with this regulation.</p> <p>Direct Benefits: There are no monetized direct benefits to families associated with this regulation.</p> <p>Indirect Benefits: This regulatory change seeks to ensure the coordinated development of regional water supply plans among localities and by doing so, ensure that there are adequate water supplies available for Virginia families over the long term.</p>	
<p>(2) Present Monetized Values</p>	<p>Direct & Indirect Costs</p>	<p>Direct & Indirect Benefits</p>
	<p>(a) N/A</p>	<p>(b) N/A</p>
<p>(3) Other Costs & Benefits (Non-Monetized)</p>	<p>Management of the resource benefits all users, including families, by ensuring adequate water supply is available over the long term.</p>	
<p>(4) Information Sources</p>	<p>Information sources were pulled from a previous Economic Impact Forms posted on Town Hall on 09/12/2022 and 08/10/2023 which included discussions with regional planning commissions, consultants who worked on previous plans and localities.</p>	

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Agency Note: The local implementation of this regulation has a minimal economic impact on small businesses. The statute and regulation impose the requirements on all counties, cities, and incorporated towns with the intent of ensuring that adequate water supply is available for drinking water and economic development over the long term. The regulatory change provides a seat at the table for local businesses in the development of regional water supply plans that was not previously required, to provide a mechanism for their water needs to be accurately accounted for in this regional planning. The regulatory change is expected to benefit small businesses by providing additional certainty that water will be available for them in the future.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Direct Costs: There are no direct costs to small businesses associated with this regulation.</p> <p>Indirect Costs: There are no indirect costs to small businesses associated with this regulation.</p> <p>Direct Benefits: There are no direct benefits to small businesses associated with this regulation.</p> <p>Indirect Benefits: There are no monetized indirect benefits to small businesses associated with this regulation.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) N/A	(b) N/A
(3) Other Costs & Benefits (Non-Monetized)	Management of the resource benefits all users, including small businesses, by ensuring adequate water supply is available over the long term.	
(4) Alternatives	None, mandated by Chapter 1105 (HB542) of the 2020 Acts of Assembly.	
(5) Information Sources	Information sources were pulled from a previous Economic Impact Forms posted on Town Hall on 09/12/2022 and 08/01/2023 which included discussions with regional planning commissions, consultants who worked on previous plans and localities.	

Changes to Number of Regulatory Requirements

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Agency Note: There are **73** requirements for the regulated community in the current Chapter 780-Local and Regional Water Supply Planning Regulations, which governs the development of water supply plans. The regulatory change to Chapter 780 increases the number of total requirements for the regulated community by **35** requirements. These **35** requirements are being added to the regulation in response to Chapter 1105 (HB542) of the 2020 Acts of Assembly; Chapter 331 (HB1297) of the 2022 Acts of Assembly; Chapter 36 (HB2095) and Chapter 37 (SB1149) of the 2023 Acts of Assembly. No requirements were removed from the existing regulation, but many were clarified and placed in different sections of the regulations. In addition, some of the existing requirements were reworded to make them less burdensome based on feedback from a regulatory advisory panel. New requirements related to the identification and evaluation of water supply risks and the identification of proposed regional strategies to address those risks have been added based on statutory requirements found in Chapter 1105 (HB542) of the 2020 Virginia Acts of Assembly. A new requirement related to the preparation of drought evaluation and response plans has been added based on statutory requirements found in Chapter 36 (HB2095) and Chapter 37 (SB1149) of the 2023 Acts of Assembly.

Change in Regulatory Requirements

VAC Section(s) Involved	Authority of Change	Initial Count	Additions	Subtractions	Net Change
9VAC25-780-10	Statutory:	1	0	0	0
	Discretionary:	0	0	0	0
9VAC25-780-20	Statutory:	0	0	0	0
	Discretionary:	0	0	0	0
9VAC25-780-30	Statutory	0	0	0	0
	Discretionary	0	0	0	0
9VAC25-780-40**	Statutory:	4	0	4	-4
	Discretionary:	0	0	0	0
9VAC25-780-45	Statutory:	0	7	0	+7
	Discretionary:	0	0	0	0
9VAC25-780-50	Statutory:	7	4	0	+4
	Discretionary:	0	0	0	0
9VAC25-780-55	Statutory:	0	8	0	+8
	Discretionary:	0	0	0	0
9VAC25-780-60	Statutory:	0	0	0	0
	Discretionary:	0	0	0	0
9VAC25-780-70	Statutory:	13	5	0	+5
	Discretionary:	0	0	0	0
	Statutory:	7	2	0	+2

9VAC25-780-80	Discretionary:	0	0	0	0	
9VAC25-780-90	Statutory:	2	1	0	+1	
	Discretionary:	0	0	0	0	
9VAC25-780-100	Statutory:	10	4	0	+4	
	Discretionary:	0	0	0	0	
9VAC25-780-110	Statutory:	2	1	0	+1	
	Discretionary:	0	0	0	0	
9VAC25-780-120	Statutory:	1	4	0	+4	
	Discretionary:	0	0	0	0	
9VAC25-780-125	Statutory:	0	6	0	+6	
	Discretionary:	0	0	0	0	
9VAC25-780-130**	Statutory:	4	0	4	-4	
	Discretionary:	0	0	0	0	
9VAC25-780-140	Statutory:	12	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-780-150	Statutory:	6	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-780-160	Statutory:	3	0	0	0	
	Discretionary:	0	0	0	0	
9VAC25-780-180	Statutory:	1	1	0	+1	
	Discretionary:	0	0	0	0	
					Total Net Change of Statutory Requirements:	+35
					Total Net Change of Discretionary Requirements:	0

* Additions considered only new regulatory requirements not already included in the current regulation such as the requirement to plan regionally, identify water supply risks, propose regional strategies to address risks, and invite participation of stakeholders.

** **The requirements have been relocated to other sections and are not new requirements.**

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-780-125	New section added related to the identification of water supply risks and	N/A	It is estimated that fulfilling this requirement would require	This section adds additional regulant requirements related to the responsibilities of

	proposed regional strategies.		approximately 10 to 20 additional hours of staff time for each locality during the plan development and submittal cycle (once every 10 years). There is no current estimate available for added costs to localities needing to hire consultants to complete this work, but it is anticipated that it would only be a small component of the overall plan development effort costs and is unlikely to significantly increase costs.	regional planning units for inclusion of information in their water supply plans related to water supply risks and regional strategies. Costs related to the identification and inclusion of this information have not been determined at this time.
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Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
9VAC25-780-45	Section related to designation of regional planning areas added.	The addition of requirements related to the designation of regional planning areas, as required by statute, increases the regulatory burden by requiring a local government's participation in a regional planning area. The designated

		regional planning areas were created with a basis in the state’s existing drought management areas and finalized based on regulatory advisory panel discussions and in consideration of Chapter 36 (HB2095) of the 2023 Acts of Assembly. As required by statute, towns shall participate in the same regional planning area as the county they are in.
9VAC25-780-125	New section added related to the identification of water supply risks and proposed regional strategies.	This section adds requirements related to the responsibilities of regional planning units for inclusion of information in their water supply plans related to water supply risks and regional strategies.

Length of Guidance Documents (only applicable if guidance document is being revised)

Title of Guidance Document	Original Length	New Length	Net Change in Length
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

TAB G



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

MEMORANDUM

TO: State Water Control Board Members

FROM: Neil Zahradka, Office of Land Application Programs Manager

DATE: November 6, 2023

SUBJECT: Request to Revise Proposed Amendments to the Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding Operations and Animal Waste Management (9VAC25-192-10 et seq.) Before Proceeding to Notice of Public Comment and Hearing

Introduction

At the November 30, 2023 meeting, the Virginia Department of Environmental Quality (DEQ or the Department) staff intends to bring to the State Water Control Board (Board) a request to revise the previously approved proposed amendments to the Virginia Pollution Abatement Regulation and General Permit for Animal Feeding Operations and Animal Waste Management (9VAC25-192-10 et seq.) (VPA AFO Regulation and General Permit), and to then proceed to notice of public comment and hearing. The amendments are being proposed as part of the process allowing for the reissuance of the general permit under this regulation, which will expire on November 15, 2024.

Statutory Authority

Section 62.1-44.17:1 of the Code of Virginia authorizes the Board to establish and implement the general permit for confined animal feeding operations having 300 or more animal units and utilizing a liquid manure collection and storage system. This Code section includes provisions that the Board must, at a minimum, include in its regulations for permitting confined animal feeding operations under a general permit.

Background

At the August 23, 2023 Board meeting, DEQ staff brought to the Board a request to proceed to notice of public comment and hearing on proposed amendments to the VPA AFO Regulation and General Permit. The Board unanimously approved the staff recommendation.

Proposed amendments to 9VAC25-192-70 Part I.A. Table 1 and Part III.A. Table 1 would change the frequency of groundwater monitoring. Section 62.1-44.17:1.E.4 of State Water Control Law requires groundwater monitoring at permitted AFOs where earthen liquid waste storage facilities were constructed after December 1, 1998, to an elevation below the seasonal high water table or within one foot thereof. The statute does not specify a minimum monitoring frequency.

The proposed amendment to the VPA AFO Regulation and General Permit previously approved by the Board on August 23, 2023 increased the frequency from once every three years to once every year to be consistent with the Virginia Department of Conservation and Recreation (DCR) Nutrient Management Plan (NMP) Special Conditions (added to all NMPs written for a VPA-permitted animal feeding operation). The DCR NMP Special Conditions required annual monitoring and a permittee must comply with the most restrictive frequency stated either in the VPA AFO Regulation and General Permit or the NMP.

Change in DCR Requirements

On October 31, 2023, DCR staff notified DEQ that DCR has removed the special condition related to groundwater monitoring frequency from the DCR NMP Special Conditions. As there is no longer an inconsistency between the existing VPA AFO Regulation and General Permit and DCR NMP Special Conditions, the basis for the amendment to the groundwater monitoring frequency has been eliminated.

Regulatory Sections Affected

In response to the change to the DCR NMP Special Conditions, DEQ proposes to remove the proposed change to Section 70, Part I.A. Table 1, and Part III.A. Table 1 in the VPA AFO Regulation and General Permit that specifies groundwater monitoring frequency.

Board Action

At the November 30, 2023 Board meeting, staff will request the Board to approved the revised section 70 as part of the proposed regulation and to proceed to notice of public comment and hearing.

Attachments

1. Revised Exempt Action Proposed Regulation Agency Background Document (Form TH-08)
2. Revised Section 70 of the proposed VPA AFO Regulation and General Permit (9VAC25-192-70)

Contact Information

Betsy K. Bowles
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townhall.virginia.gov

Exempt Action: Proposed Regulation Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-192 et seq.
VAC Chapter title(s)	Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding Operations and Animal Waste Management
Action title	2024 Reissue and amend, as necessary, the Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding Operations and Animal Waste Management
Date this document prepared	November 2, 2023

This information is required for executive branch review pursuant to Executive Order 19 (2022) (EO 19), any instructions or procedures issued by the Office of Regulatory Management (ORM) or the Department of Planning and Budget (DPB) pursuant to EO 19. In addition, this information is required by the Virginia Registrar of Regulations pursuant to the Virginia Register Act (§ 2.2-4100 et seq. of the Code of Virginia). Regulations must conform to the Regulations for Filing and Publishing Agency Regulations (1 VAC 7-10), and the *Form and Style Requirements for the Virginia Register of Regulations and Virginia Administrative Code*.

Brief Summary

Provide a brief summary (preferably no more than 2 or 3 paragraphs) of this regulatory change (i.e., new regulation, amendments to an existing regulation, or repeal of an existing regulation). Alert the reader to all substantive matters. If applicable, generally describe the existing regulation.

The State Water Control Board is proposing this action to reissue and amend, as necessary, the existing Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding Operations and Animal Waste Management (9VAC25-192-10 et seq.). Section 62.1-44.17:1 of the Code of Virginia, states that the Board shall adopt a general VPA permit to cover animal feeding operations having 300 or more animal units utilizing a liquid manure collection and storage system. The current VPA regulation and general permit expires on November 15, 2024. This regulation governs the pollutant management activities of animal wastes at animal feeding operations not covered by a Virginia Pollutant Discharge Elimination System permit and animal waste utilized or stored by animal waste end-users. These animal feeding operations may operate and maintain treatment works for waste storage, treatment, or recycling and may perform land application of manure, wastewater, compost, or sludges. The general permit is the primary permit mechanism used to cover animal feeding operations which confine livestock, such as, but

not limited to, swine, dairy and beef cattle across the Commonwealth. During this action, language has been amended to update the incorporation by reference date of 40 CFR references in the regulation as necessitated by changes to the Federal Rules.

Mandate and Impetus

Identify the mandate for this regulatory change, and any other impetus that specifically prompted its initiation (e.g., new or modified mandate, internal staff review, petition for rulemaking, periodic review, or board decision). For purposes of executive branch review, “mandate” has the same meaning as defined in the ORM procedures, “a directive from the General Assembly, the federal government, or a court that requires that a regulation be promulgated, amended, or repealed in whole or part.”

The impetus of the regulatory change is § 62.1-44.15 (5b) of the Code of Virginia, which states, "All certificates issued by the Board under this chapter shall have fixed terms. ... The term of a Virginia Pollution Abatement permit shall not exceed 10 years, except that the term of a Virginia Pollution Abatement permit for confined animal feeding operations shall be 10 years." The general permit issued through this regulation must be reissued in order to meet the requirements of § 62.1-44.17:1 of the Code of Virginia and continue the general permit coverage of confined animal feeding operations. This regulation expires on November 15, 2024, and must be reissued to cover the existing animal feeding operations and any new animal feeding operations. There are currently 110 animal feeding operations covered under the general permit. If the regulation is not reissued in a timely manner, the operations that are covered under the general permit, as well as any new operations that need a permit, will be required to seek an individual VPA permit, which require more time to develop and issue, and impose a greater burden and costs on permittees and increased administrative burden on DEQ.

Acronyms and Definitions

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the “Definition” section of the regulations.

- AFO - Animal Feeding Operations
- CFR - Code of Federal Regulations
- DCR - Department of Conservation and Recreation
- DEQ or department - Department of Environmental Quality
- NMP - Nutrient Management Plan
- VPA - Virginia Pollution Abatement

Legal Basis

Please identify (1) the agency or other promulgating entity, and (2) the state and/or federal legal authority for the regulatory change, including the most relevant citations to the Code of Virginia or Acts of Assembly chapter number(s), if applicable. Your citation must include a specific provision, if any, authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency or promulgating entity’s overall regulatory authority.

In 1994, the Virginia General Assembly passed House Bill 222 (codified at § 62.1-44.17:1 of the Code of Virginia) establishing the general permit for confined animal feeding operations. The Act required the State Water Control Board to adopt the general permit, establish provisions for issuing the general permits and establish criteria for the design and operation of the confined AFOs. Section 62.1-44.17:1 of the Code of Virginia authorizes the State Water Control Board to establish and implement the general permit for confined AFOs having 300 or more animal units utilizing a liquid manure collection and storage

system. The regulation and general permit first became effective on November 16, 1994. Since 1994, the regulation has been reissued two times, the last becoming effective on November 16, 2014. Changes to this chapter of the Virginia Administrative Code are exempt from Article 2 of the Administrative Process Act (§ 2.2-4006 A 8 of the Code of Virginia).

Purpose

Please explain the need for the regulatory change, including a description of: (1) the rationale or justification, (2) the specific reasons the regulatory change is essential to protect the health, safety or welfare of citizens, and (3) the goals of the regulatory change and the problems it is intended to solve.

The purpose of this action is to reissue and amend, as necessary, the existing VPA Regulation and General Permit for Animal Feeding Operations and Animal Waste Management. The general permit expires on November 15, 2024, and must be reissued to cover the existing animal feeding operations and any new animal feeding operations. This action is needed in order to maintain permitting requirements for pollutant management activities of animal wastes at animal feeding operations not covered by a Virginia Pollutant Discharge Elimination System permit and animal waste utilized or stored by animal waste end-users. The goal is to update the regulation and the general permit to be consistent with the VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630) and protect water quality.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the “Detail of Changes” section below.

This action is primarily a reissuance of the existing general permit and does not include significant changes; however, the following items are included in this regulatory proposal:

1. Definitions. The proposal includes the addition of five new defined terms, the inclusion in Section 10 of two already defined terms, and the amendment of five defined terms. The additions and amendments to the definitions section will facilitate a better understanding of the terms used throughout the regulation sections.
2. Groundwater monitoring requirements. The proposal includes two amendments to the groundwater monitoring requirements for the permittee, including:
 - a. Addition of a permit condition describing when a permittee is required to submit a groundwater monitoring action plan; and
 - b. A permit condition amendment outlines which parameters must be analyzed by a laboratory accredited under the Virginia Environmental Laboratory Accreditation Program.
3. Animal Waste Storage Requirements. The proposal includes amendments to conditions applicable to animal waste storage, including:
 - a. Addition of language to clarify which tools are to be used to determine the floodplain when siting waste storage facilities;
 - b. Amended permit conditions outlining what is considered adequate storage of semi-solid and solid waste;
 - c. Addition of a permit condition that addresses situations where animal waste storage can be threatened by emergencies such as fire or flood; and
 - d. Addition of a permit condition that requires notification to the department prior to the closure of a liquid waste storage facility.
4. Nutrient Management Plan (NMP) Submittal. The proposal includes amended permit language to add the requirement for the permittee to submit NMP revisions approved by DCR to the department before the expiration date of the previous NMP.
5. Permit Conditions in Part II of the general permit. The proposal includes amending, re-organizing, and the renumbering the conditions found in Part II of Section 70 (the contents of the general

permit). The amendments to Part II will make this regulation consistent with the VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-10 et seq.).

6. The continuation of permit coverage language will be amended to remove the dates and to make it consistent with language in the VPA Regulation and General Permit for Poultry Waste Management.
7. During this action, language will be amended to update the incorporation by reference date of 40 CFR references in the regulation.

Issues

Please identify the issues associated with the regulatory change, including: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, include a specific statement to that effect.

The primary advantage of the proposed regulatory action is the reissuance of the regulation that will allow for animal feeding operations to be covered under a general permit instead of each animal feeding operation having to apply for coverage under an individual permit. The general permit contains provisions appropriate for the protection of state waters, while limiting the time and resources required for an animal feeding operation to apply for a permit and the department to issue the permit. This is an advantage for the public, the regulated community, and the Commonwealth. There are no disadvantages of the proposed regulatory action.

Requirements More Restrictive than Federal

Please identify and describe any requirement of the regulatory change that is more restrictive than applicable federal requirements. Include a specific citation for each applicable federal requirement, and a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements, or no requirements that exceed applicable federal requirements, include a specific statement to that effect.

There are no applicable federal requirements for animal feeding operations that do not discharge or propose to discharge to state waters. The VPA Regulation and General Permit for Animal Feeding Operations and Animal Waste Management is a state program with requirements included in the regulation necessary to meet state statutory requirements.

Agencies, Localities, and Other Entities Particularly Affected

Please identify any other state agencies, localities, or other entities particularly affected by the regulatory change. "Particularly affected" are those that are likely to bear any identified disproportionate material impact, which would not be experienced by other agencies, localities, or entities. "Locality" can refer to either local governments or the locations in the Commonwealth where the activities relevant to the regulation or regulatory change are most likely to occur. If no agency, locality, or entity is particularly affected, include a specific statement to that effect.

Other State Agencies Particularly Affected:

This general permit regulation affects the Virginia Department of Conservation and Recreation since this regulation includes requirements for Nutrient Management Plans. The requirements for developing Nutrient Management Plans fall under the purview of the Virginia Department of Conservation and Recreation.

Localities Particularly Affected:

This general permit regulation affects the entire state; no localities are identified to be particularly affected by this regulatory action.

Other Entities Particularly Affected:

This general permit regulation affects the permitted livestock growers and unpermitted and permitted end-users of animal waste. No other entities are identified to be particularly affected by this regulatory action.

Regulatory Flexibility Analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency's analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) establishing less stringent compliance or reporting requirements; 2) establishing less stringent schedules or deadlines for compliance or reporting requirements; 3) consolidation or simplification of compliance or reporting requirements; 4) establishing performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the regulatory change.

Currently, 110 animal feeding operations are covered under this general permit. One alternative to the reissuance of the VPA Regulation and General Permit for Animal Feeding Operations and Animal Waste Management is to issue an individual VPA permit to each animal feeding operation which confines 300 or more animal units utilizing a liquid manure collection and storage system. However, due to the number of animal feeding operations currently required to obtain a VPA permit, it is not practical to issue an individual VPA permit to each animal feeding operation. Operations that do not qualify for coverage under the general permit will be issued an individual VPA permit. This general permit regulation provides the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity.

Public Comment Received

Please summarize all comments received during the public comment period following the publication of the NOIRA, and provide the agency response. Ensure to include all comments submitted: including those received on Town Hall, in a public hearing, or submitted directly to the agency or board. If no comment was received, enter a specific statement to that effect.

Commenter	Comment	Agency response
James E. Riddell - Virginia Cattleman's Association	Requested to serve on TAC	James E. Riddell was recommended and approved to be a member of the Technical Advisory Committee.
Eric Paulson - Virginia State Dairymen's Association	Requested to serve on TAC	Eric Paulson was recommended and approved to be a member of the Technical Advisory Committee.
Brad Copenhaver - Virginia Agribusiness Council	Requested to serve on TAC	Brad Copenhaver was recommended and approved to be a member of the Technical Advisory Committee and Cliff Williamson to serve as the alternate.

Commenter	Comment	Agency response
Tom Dunlap - James River Association	<ol style="list-style-type: none"> 1. Include technology and protocols that identify and source groundwater contamination; include bacteria monitoring; establish limits on other parameters ammonia nitrogen, nitrate nitrogen, pH, conductivity in impacted groundwater. 2. Identify and close unlined earthen waste storage facilities constructed prior to December 1, 1998; 3. Re-evaluate freeboard height in light of increased frequency and severity of precipitation events; and schedule the closure or remediation of existing manure impoundments that are in close proximity to surface water or groundwater or that sit in groundwater. 	<p>These comments were shared and discussed with the members of the Technical Advisory Committee.</p> <p>The general permit contains design and engineering specifications which must be met by all permittees when constructing a waste storage structure. The specifications for compacted soil structures ensure that the structures are not designed to leak. The date, December 1, 1998, found in permit special conditions related to waste storage is the effective date of amendments that were made to the regulation based on changes to the Code of VA § 62.1-44.17:1. The date was inserted into the regulation to make it clear when certain requirements became effective. The liner thickness and permeability specification requirements were in the regulation prior to the amendments that became effective on December 1, 1998, and therefore were in effect for waste storage structures constructed prior to December 1, 1998.</p> <p>The 25-year, 24-hour storm event rainfall number is determined by NOAA (National Weather Service - NWS) using historic rainfall data. The current language in the regulation allows for any changes made by NOAA based on the precipitation data.</p>
Patrick Fanning - Chesapeake Bay Foundation	<ol style="list-style-type: none"> 1. Requested to serve on TAC; 2. DEQ require practices in the 10-year AFO VPA General Permit that will in fact lead to the necessary nitrogen, phosphorus, and sediment reductions for the sector; 3. DEQ should include language in the General Permit requiring fencing reporting (reported) to DEQ; 4. DEQ should also include provisions that will require operators with 20 or more bovines to adopt stream exclusion systems by 2028 or at least no later than the date that practice becomes mandatory; 5. DEQ should consider requiring all six priority practices; (1) nutrient management, (2) animal waste management systems, (3) conservation plans, (4) barnyard runoff control systems, (5) stream 	<p>Patrick Fanning was recommended and approved to be a member of the Technical Advisory Committee and Joe Wood to serve as the alternate.</p> <p>These comments were shared and discussed with the members of the Technical Advisory Committee.</p> <p>The Committee discussed the limited scope of this general permit as established by State Water Control Law.</p> <p>This regulation requires that the permittee manage animal waste and nutrients from the activities being covered under the general permit. The regulation includes conditions that require the management of waste on the site to include the livestock confinement area and the nutrients from the waste in storage and in land application. While the regulations do not specifically say that a barnyard runoff control system is required the regulation does</p>

Commenter	Comment	Agency response
	<p>fencing on pastures, and (6) vegetated buffers on pastures;</p> <p>6. DEQ require groundwater monitoring at all liquid waste storage facilities, rather than just those constructed after December 1, 1998;</p> <p>7. DEQ should consider whether the existing parameters for monitoring sufficiently cover the realm of pollutants that could reach state waters through liquid waste storage facilities;</p> <p>8. DEQ should consider requiring groundwater monitoring more frequently than once every three years and the results of such sampling should be reported to DEQ;</p> <p>9. DEQ must incorporate additional mechanisms to dictate necessary thresholds for monitoring and required steps a facility must take in the event of any exceedance;</p> <p>10. modified the permit to require that waste transfer records be submitted to DEQ (see 9 VAC 25-630-50 Part I C 3). DEQ should incorporate the same change here;</p> <p>11. DEQ should also consider adding language to the permit requiring the submission of NMPs to DEQ;</p> <p>12. The terms of the current permit nowhere require that an NMP be unexpired, nor that it be annually re-evaluated; and</p> <p>13. DEQ should address how it intends to resolve these comments related to inspections and enforcement as part of the stakeholder process. (related to 2015 EPA Ag Assessment.</p>	<p>require the permittee to manage runoff so as not to discharge to state waters. Although a conservation plan requirement is outside of the scope of the regulation, if tillage practices are included in the NMP it is necessary to implement the tillage practices. By definition, a pasture is not considered confinement; therefore, stream fencing on pastures, and vegetated buffers on pastures are outside of the scope of this regulation prescribed by the State Water Control Law.</p> <p>The Code of Virginia §62.1-44.17:1 states that ground water shall be monitored at new earthen waste storage facilities constructed to an elevation below the seasonal high water table or within one foot thereof.</p> <p>Currently, DEQ can inspect the waste transfer records and request copies if necessary. There is a method and option for poultry waste transfers to be used to obtain credit for nutrient movement out of the watershed. There is no option for Virginia to obtain credit in the Bay model for other animal waste transfers; therefore, there is no impetus to require the data to be reported to DEQ.</p> <p>The 2015 EPA Ag Assessment comments were related to DEQ timing of inspections during the year, expired NMPs and inconsistent inspection report forms. DEQ and DCR staff determined that the inconsistencies in the reported NMP numbers were due to outdated information being tracked in the DCR NMP database. DEQ staff were already using the report forms with the same information, but at first glance may have appeared different because of things like page borders or the information being on a different page. The following changes have been implemented: new DEQ inspection report forms; DCR is now encouraging the addition of the DEQ permit numbers on the NMPs; and regular updates to the DCR database based on new information provided by DEQ.</p> <p>DEQ's implementation of inspection and enforcement procedures are not components of the regulatory requirements of AFO owners or animal waste end-users and are therefore not in the text of the regulation.</p>

Commenter	Comment	Agency response
		<p>The proposed regulation includes amendments to the groundwater monitoring section and conditions related to submittal of nutrient management plans. Refer to response to the James River Association's comments.</p>
<p>Stefanie Taillon - Virginia Farm Bureau Federation</p>	<p>1. Requested to serve on TAC 2. Requested that the regulation remain the same</p>	<p>Stefanie Taillon was recommended and approved to be a member of the Technical Advisory Committee and Tony Banks to serve as the alternate.</p>
<p>Mark Frondorf - Shenandoah Riverkeeper and Betsy Nicholas - Potomac Riverkeeper Network</p>	<p>1. Requested for Mark Frondorf to serve on TAC; 2. Must not allow groundwater discharges in this permit; require all General Purpose (GP) covered liquid manure lagoons to conduct routine groundwater monitoring; establish e. coli, Cryptosporidium, ammonium, and other pollutants and pathogens found in dairy and swine manure; 3. Incorporate clean up thresholds and reporting requirements in the event that monitoring data or other information indicates that a manure storage lagoon or, liquid manure spills, or repeated land application has contaminated groundwater or surface water; 4. Setting a schedule for closure or immediate remediation of existing manure impoundments that are in close proximity to surface water or groundwater, or that sit in groundwater; 5. Setting a schedule for closure of manure impoundments that have compacted soil and/or leaking liners; Establish routine liner integrity testing and inspections; 6. Require more frequent (annual or semi-annual) groundwater monitoring and electronic submittal of results to DEQ on e-DMRs; 7. Require groundwater monitoring plans to be certified by a professional engineer or qualified DEQ staff prior to permit reissuance; 8. Increase freeboard heights to account for expected larger rainfall events. The current permit requires 1 foot, up to and including a 25-</p>	<p>Mark Frondorf was recommended and approved to be a member of the Technical Advisory Committee.</p> <p>These comments were shared and discussed with the members of the Technical Advisory Committee.</p> <p>The Committee discussed the limited scope of this general permit as established by State Water Control Law.</p> <p>The regulation contains requirements for reporting spills or any non-compliance, the requirements are found in Part II of the general permit contents (9VAC25-192-70). If there is unusual monitoring data (groundwater, waste, or soils), the permittee may be required to repeat monitoring and could further be required to submit an action plan. Additionally, the regulation contains requirements that if the permittee cannot maintain compliance with the general permit then the permittee may be required to obtain an individual permit.</p> <p>The regulation does not allow for waste storage structures to be built in the 100-year flood plain. Prior to December 1, 1998, the structures could be sited in the 100-year flood plain but had to be protected from inundation.</p> <p>The proposed regulation includes amendments to the groundwater monitoring section and conditions related to submittal of nutrient management plans.</p> <p>The general permit prescribes the conditions by which groundwater wells are to be placed and monitored, thus the regulatory mechanism does not utilize a separate groundwater monitoring plan. If a permittee is</p>

Commenter	Comment	Agency response
	<p>year, 24-hour storm. The Department should evaluate whether higher freeboard requirements will be needed over the 10-year term of the permit, or whether to issue the permit every five years instead;</p> <p>9. Require electronic submission of initial and current nutrient management plans to VDEQ as they are updated;</p> <p>10. Expand the amount of information contained in NMPs to enable the department to determine whether the state is meeting its agriculture-related local and Chesapeake Bay TMDL implementation milestones. To the extent possible, this information should be submitted electronically to enable accurate and efficient analysis by the Department and the Department of Conservation and Recreation; and</p> <p>11. Write the draft AFO Permit in a way that will protect the Chesapeake Bay.</p>	<p>required to obtain an individual permit, more detailed groundwater monitoring requirements are considered.</p> <p>DEQ scans all submitted files for upload into the DEQ electronic filing system. Many of the permittees would not have the capability to submit the NMP in an electronic format.</p> <p>DCR administers the regulation that governs nutrient management plans; thus, requirements for the plan content are outside of the scope of this regulatory action.</p> <p>Refer to the response to the Chesapeake Bay Foundation's and the James River Association's comments.</p>
<p>Robin Broder - Waterkeepers Chesapeake and Gabby Ross - Assateague Coastal Trust</p> <p>(Waterkeepers Chesapeake submits comments on behalf of the Waterkeepers listed on letterhead and supports the comments submitted by Potomac Riverkeeper Network, Shenandoah Riverkeeper, James Riverkeeper, and</p>	<p>1. Requested for Mark Frondorf to serve on TAC;</p> <p>2. Must not allow groundwater discharges in this permit; require all General Purpose (GP) covered liquid manure lagoons to conduct routine groundwater monitoring; establish e. coli, Cryptosporidium, ammonium, and other pollutants and pathogens found in dairy and swine manure;</p> <p>3. Incorporate clean up thresholds and reporting requirements in the event that monitoring data or other information indicates that a manure storage lagoon or, liquid manure spills, or repeated land application has contaminated groundwater or surface water;</p> <p>4. Setting a schedule for closure or immediate remediation of existing manure impoundments that are in close proximity to surface water or groundwater, or that sit in groundwater;</p> <p>5. Setting a schedule for closure of manure impoundments that have</p>	<p>Mark Frondorf was recommended and approved to be a member of the Technical Advisory Committee.</p> <p>These comments were shared and discussed with the members of the Technical Advisory Committee.</p> <p>The Committee discussed the limited scope of this general permit as established by State Water Control Law.</p> <p>The proposed regulation includes amendments to the groundwater monitoring section and conditions related to submittal of nutrient management plans.</p> <p>Refer to the response to the Chesapeake Bay Foundation's, the James River Association's, the Shenandoah Riverkeeper's and Potomac Riverkeeper Network's comments.</p>

Commenter	Comment	Agency response
Environmental Integrity Project)	<p>compacted soil and/or leaking liners; Establish routine liner integrity testing and inspections;</p> <p>6. Require more frequent (annual or semi-annual) groundwater monitoring and electronic submittal of results to DEQ on e-DMRs;</p> <p>7. Require groundwater monitoring plans to be certified by a professional engineer or qualified DEQ staff prior to permit reissuance;</p> <p>8. Increase freeboard heights to account for expected larger rainfall events. The current permit requires 1 foot, up to and including a 25-year, 24-hour storm. The Department should evaluate whether higher freeboard requirements will be needed over the 10-year term of the permit, or whether to issue the permit every five years instead;</p> <p>9. Require electronic submission of initial and current nutrient management plans to VDEQ as they are updated;</p> <p>10. Expand the amount of information contained in NMPs to enable the department to determine whether the state is meeting its agriculture-related local and Chesapeake Bay TMDL implementation milestones. To the extent possible, this information should be submitted electronically to enable accurate and efficient analysis by the Department and the Department of Conservation and Recreation; and</p> <p>11. Write the draft AFO Permit in a way that will protect the Chesapeake Bay.</p>	
<p>Courtney Bernhardt, Meg Parrish - Environmental Integrity Project;</p> <p>David Reed, Evan Isaacson - Chesapeake Legal Alliance;</p>	<p>1. Requested to serve on TAC; Must not allow groundwater discharges in this permit; require all General Purpose (GP) covered liquid manure lagoons to conduct routine groundwater monitoring; establish e. coli, Cryptosporidium, ammonium, and other pollutants and pathogens found in dairy and swine manure;</p>	<p>The Director appointed members from different industries and sectors and backgrounds to the TAC while maintaining balanced representation and limited the number of members appointed to the TAC to ten members; therefore, Courtney Bernhardt was not appointed to the TAC.</p> <p>These comments were shared and discussed with the members of the Technical Advisory Committee.</p>

Commenter	Comment	Agency response
<p>Mark Frondorf - Shenandoah Riverkeeper; and Betsy Nicholas - Potomac Riverkeeper Network</p> <p>(These comments are submitted on behalf of the Environmental Integrity Project, Chesapeake Legal Alliance, Waterkeepers Chesapeake, the Shenandoah Riverkeeper, and the Potomac Riverkeeper Network)</p>	<p>2. Incorporate clean up thresholds and reporting requirements in the event that monitoring data or other information indicates that a manure storage lagoon or, liquid manure spills, or repeated land application has contaminated groundwater or surface water;</p> <p>3. Setting a schedule for closure or immediate remediation of existing manure impoundments that are in close proximity to surface water or groundwater, or that sit in groundwater;</p> <p>4. Setting a schedule for closure of manure impoundments that have compacted soil and/or leaking liners; Establish routine liner integrity testing and inspections;</p> <p>5. Require more frequent (annual or semi-annual) groundwater monitoring and electronic submittal of results to DEQ on e-DMRs;</p> <p>6. Require groundwater monitoring plans to be certified by a professional engineer or qualified DEQ staff prior to permit reissuance;</p> <p>7. Increase freeboard heights to account for expected larger rainfall events. The current permit requires 1 foot, up to and including a 25-year, 24-hour storm. The Department should evaluate whether higher freeboard requirements will be needed over the 10-year term of the permit, or whether to issue the permit every five years instead;</p> <p>8. Require electronic submission of initial and current nutrient management plans to VDEQ as they are updated;</p> <p>9. Expand the amount of information contained in NMPs to enable the department to determine whether the state is meeting its agriculture-related local and Chesapeake Bay TMDL implementation milestones. To the extent possible, this information should be submitted electronically to enable accurate and efficient analysis by the Department and the</p>	<p>The Committee discussed the limited scope of this general permit as established by State Water Control Law.</p> <p>The proposed regulation includes amendments to the groundwater monitoring section and conditions related to submittal of nutrient management plans.</p> <p>Refer to the response to the Chesapeake Bay Foundation's, the James River Association's, the Shenandoah Riverkeeper's and Potomac Riverkeeper Network's comments.</p>

Commenter	Comment	Agency response
	Department of Conservation and Recreation.	
Hannah Conner - Center for Biological Diversity	<ol style="list-style-type: none"> 1. Requested to serve on TAC; 2. Must not allow groundwater discharges in this permit; require all General Purpose (GP) covered liquid manure lagoons to conduct routine groundwater monitoring; establish e. coli, Cryptosporidium, ammonium, and other pollutants and pathogens found in dairy and swine manure; 3. Incorporate clean up thresholds and reporting requirements in the event that monitoring data or other information indicates that a manure storage lagoon or, liquid manure spills, or repeated land application has contaminated groundwater or surface water; 4. Setting a schedule for closure or immediate remediation of existing manure impoundments that are in close proximity to surface water or groundwater, or that sit in groundwater; 5. Setting a schedule for closure of manure impoundments that have compacted soil and/or leaking liners; Establish routine liner integrity testing and inspections; 6. Require more frequent (annual or semi-annual) groundwater monitoring and electronic submittal of results to DEQ on e-DMRs; 7. Require groundwater monitoring plans to be certified by a professional engineer or qualified DEQ staff prior to permit reissuance; 8. Increase freeboard heights to account for expected larger rainfall events. The current permit requires 1 foot, up to and including a 25-year, 24-hour storm. The Department should evaluate whether higher freeboard requirements will be needed over the 10-year term of the permit, or whether to issue the permit every five years instead; 9. Require electronic submission of initial and current nutrient 	<p>The Director appointed members from different industries and sectors and backgrounds to the TAC while maintaining balanced representation and limited the number of members appointed to the TAC to ten members; therefore, Hannah Connor was not appointed to the TAC.</p> <p>These comments were shared and discussed with the members of the Technical Advisory Committee.</p> <p>The Committee discussed the limited scope of this general permit as established by State Water Control Law.</p> <p>The proposed regulation includes amendments to the groundwater monitoring section and conditions related to submittal of nutrient management plans.</p> <p>All documents pertaining to the permit are subject to the Freedom of Information Act and therefore available.</p> <p>DEQ is working to accommodate for different languages spoken by the permittees. Information being documented related to their preferred language will allow staff to determine if a translator or translated documents are necessary.</p> <p>Refer to the response to the Chesapeake Bay Foundation's, the James River Association's, the Shenandoah Riverkeeper's and Potomac Riverkeeper Network's comments.</p>

Commenter	Comment	Agency response
	management plans to VDEQ as they are updated; 10. Expand the amount of information contained in NMPs to enable the department to determine whether the state is meeting its agriculture-related local and Chesapeake Bay TMDL implementation milestones. To the extent possible, this information should be submitted electronically to enable accurate and efficient analysis by the Department and the Department of Conservation and Recreation; 11. Write the draft AFO Permit in a way that will protect the Chesapeake Bay; 12. Continuing to improve public access to all permitting, compliance, public complaint, and state inspection and violation documents for all AFOs. 13. Improving language access by making all permitting materials available, at a minimum, in both English and Spanish languages.	

Public Participation

Please include a statement that in addition to any other comments on the proposal, the agency is seeking comments on the costs and benefits of the proposal and the impacts of the regulated community.

In addition to any other comments, the Board is seeking comments on the costs and benefits of the proposal, the potential impacts of this regulatory proposal and any impacts of the regulation on farm and forest land preservation. The Board is also seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code of Virginia. Information may include 1) projected reporting, recordkeeping and other administrative costs, 2) probable effect of the regulation on affected small businesses, and 3) description of less intrusive or costly alternative methods of achieving the purpose of the regulation.

Anyone wishing to submit written comments for the public comment file may do so by mail or email to Betsy Bowles at P.O. Box 1105, Richmond, VA 23218; betsy.bowles@deq.virginia.gov. Phone: 804-659-1913. Comments may also be submitted through the Public Forum feature of the Virginia Regulatory Town Hall web site at (<http://www.townhall.virginia.gov>). Written comments must include the name and address of the commenter. In order to be considered, comments must be received by 11:59 pm on the last day of the public comment period.

A public hearing will be held following the publication of this stage and notice of the hearing will be posted on the Virginia Regulatory Town Hall website (<http://www.townhall.virginia.gov>) and on the Commonwealth Calendar website (<https://commonwealthcalendar.virginia.gov/>). Both oral and written comments may be submitted at that time.

Detail of Changes

List all regulatory changes and the consequences of the changes. Explain the new requirements and what they mean rather than merely quoting the text of the regulation. If the regulatory change will be a new chapter, describe the intent of the language and the expected impact. Please describe the difference between existing regulation(s) and/or agency practice(s) and what is being proposed in this regulatory change. Please include citations to the specific section(s) of the regulation that are changing.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-192-10 (Definitions)	N/A	Introduction to definition section that explains when definitions are pertinent to the regulation.	Amended the introductory language to read: "The following words and terms when used in this regulation shall have the meanings defined in the State Water Control Law and the Virginia Pollution Abatement (VPA) Permit Regulation (9VAC25-32) unless the context clearly indicates otherwise, except that for the purposes of this chapter:" Removed citation for State Water Control Law (since the definition along with the citation are being added to the definition Section); and added the name "Virginia Pollution Abatement (VPA)" to the permit reg regulation. Amended the introduction language for clarification. Made minor changes based on the Style Manual developed by the Registrar's Office.
9VAC25-192-10 (Definitions)	N/A	This definition is currently contained in section 9VAC25-192-10.	Amended "Agricultural stormwater discharge" to add the word "land" to clarify the definition. This addition to the definition section will facilitate a better understanding of the term used throughout the regulation sections.
9VAC25-192-10 (Definitions)	N/A	This definition is currently contained in section 9VAC25-192-10.	Amended "Animal feeding operation" for consistency with the definition in the Code of Virginia § 62.1-44.17:1. Permits for confined animal feeding operations.
9VAC25-192-10 (Definitions)	N/A	This definition is currently contained in section 9VAC25-192-10.	Amended "Confined animal feeding operation" for consistency with the other definitions.
9VAC25-192-10 (Definitions)	N/A	This definition is currently contained in section 9VAC25-192-10.	Amended "Director" for consistency with other regulations.
9VAC25-192-10 (Definitions)	N/A	N/A	Added a definition for "General permit" to clarify the meaning when the term is used throughout the regulation. This addition to the definition section will facilitate a better

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			understanding of the term used throughout the regulation sections.
9VAC25-192-10 (Definitions)	N/A	N/A	Added a definition for “Land application” to clarify the meaning when the term is used throughout the regulation. This addition to the definition section will facilitate a better understanding of the term used throughout the regulation sections.
9VAC25-192-10 (Definitions)	N/A	This definition is currently contained in the conditions located throughout the regulation.	Added a definition for “Local government ordinance form”. Definition was stated in numerous subdivisions within the regulation; it was removed from conditions and moved to the definition section. This addition to the definition section will facilitate a better understanding of the term used throughout the regulation sections.
9VAC25-192-10 (Definitions)	N/A	N/A	Amended definition of Nutrient management plan. Amended “the” to “this” in front of “general permit” for consistency with the rest of the regulation.
9VAC25-192-10 (Definitions)	N/A	N/A	Added a definition for “Permittee” to clarify the meaning when the term is used throughout the regulation. This addition to the definition section will facilitate a better understanding of the term used throughout the regulation sections.
9VAC25-192-10 (Definitions)	N/A	This definition is currently contained in the conditions located in the contents of the general permit (9VAC25-192-70 and 90).	Added “Seasonal high water table” definition. Definition was stated in numerous subdivisions within the regulation; it was removed from conditions and moved to the definition section. This addition to the definition section will facilitate a better understanding of the term used throughout the regulation sections.
9VAC25-192-10 (Definitions)	N/A	N/A	Added a definition for “State Water Control Law” to clarify the meaning when the term is used throughout the regulation. This addition to the definition section will facilitate a better understanding of the term used throughout the regulation sections.
9VAC25-192-10 (Definitions)	N/A	N/A	Added a definition for “Treatment works” to clarify when the term is used in the definition of an animal feeding operation and throughout the regulation. This addition to the

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			definition section will facilitate a better understanding of the term used throughout the regulation sections.
9VAC25-192-10 (Definitions)	N/A	This definition is currently contained in section 9VAC25-192-10.	Moved the definition for “Vegetated buffer” to get the definition in alphabetical order within the Section.
N/A	9VAC25-192-15 (Applicability of incorporated references based on the dates that they became effective)	N/A	Added this section to make it clear which version of the Code of Federal Regulations is effective. The addition of this section will ensure that those subject to this regulation will know which version of the Code of Federal Regulations is pertinent to the cited condition in the regulation.
9VAC25-192-20 (Purpose; effective date of permit)	N/A	The current language outlines what is governed by this regulation. The current regulation became effective on November 16, 2014, and will expire on November 15, 2024.	<p>Amended Section title: Purpose; effective date of the general permit.</p> <p>Amended subsection A: added the title of the regulation and parentheses around the term “general permit” to allow for the use of “general permit” throughout the regulation to mean the VPA regulation and general permit for animal feeding operations and animal waste management. Made additional amendments to clarify who is subject to this regulation.</p> <p>Added “The owners of” and replaced “operate” with “run”. Made changes to language to clarify who is authorized to manage pollutants.</p> <p>Amended subsection B: to read: “This general permit will become effective on November 16, 2024. This general permit will expire on November 15, 2034.” Amended dates to allow for continuation of coverage under the General Permit and allow for the reissuance of the regulation and thereby extend the ability to provide coverage under the general permit for another 10 years.</p>
9VAC25-192-25 (Duty to comply)	N/A	The current language outlines the duty to comply with the regulation.	Amended subsections A and B: A. No person shall operate an animal feeding operation with 300 or more animal units utilizing a liquid manure collection and storage system after July 1, 2000, without having submitted

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p>a registration statement as provided in 9VAC25-192-60 or being covered by a Virginia Pollutant Discharge Elimination System (VPDES) permit or an individual Virginia Pollution Abatement (VPA) permit.</p> <p>B. The owner shall comply with all conditions of the general permit and the requirements of this regulation.</p> <p>Amended subsections A and B to be consistent with the language subsection I of the Code of Virginia § 62.1-44.17:1. Permits for confined animal feeding operations.</p>
<p>9VAC25-192-50 (Authorization to manage pollutants)</p>	<p>N/A</p>	<p>The current language outlines who and under what circumstances is subject to the regulation and what is authorized by the permit. The current section refers to the water quality standards regulation but does not cite the regulation.</p> <p>The current regulation allows for the continuation of the general permit coverage.</p>	<p>Amended subsections A, B and C. Made changes to language in subsection A to make it clear who is authorized to manage pollutants. Spelled out acronyms (VPA and VPDES). Added the citation for the specific water quality standards regulation and amended condition language to make it consistent with other regulations. Made the term industrial wastes consistent with term defined in Chapter 32. Deleted the language describing the Local Government Ordinance Form (moved to definition section). Moved subdivision 5 a of subsection A to make the formatting consistent with the other subdivisions in this section. Made minor changes based on the Style Manual developed by the Registrar’s Office. Added “VPA” to places where individual permit is stated. Removed citation in subdivision A 6 and B 2 d related to the training requirements. Subsection C. Added “general” to the tagline. Removed the dates and revised the language for consistency with language in other general permits including the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-30).</p>
<p>9VAC25-192-60. (Registration statement)</p>	<p>N/A</p>	<p>The current language outlines the requirements to become covered under the general permit and the</p>	<p>Amended language in this section to bring consistency to the terms in the regulation. Replaced “VPA General Permit” with “general permit” (as</p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		<p>information that must be submitted to be considered a complete registration statement (permit application).</p>	<p>defined). This language change allows for the use of “general permit” throughout this section to mean the VPA regulation and general permit for animal feeding operations and animal waste management.</p> <p>In subsection A, deleted “facility” throughout section and replaced with “animal feeding operation.” Deleted the language describing the Local Government Ordinance Form (moved to definition section).</p> <p>In subsection B, deleted “facility” and replaced with “animal waste end-user.” Corrected citation in subsection C.</p> <p>Made minor changes based on the Style Manual developed by the Registrar’s Office. Amended language to provide clarity throughout this section.</p>
<p>9VAC25-192-70. (Contents of the general permit)</p>	<p>N/A</p>	<p>The current language contains the requirements of the general permit. The current regulation will expire on November 15, 2024.</p>	<p>Made minor changes based on the Style Manual developed by the Registrar’s Office. Amended language based on the authority of the State Water Control Board (deleted “board” - replaced with “department” where appropriate) in accordance with Senate Bill 657 as enacted by the 2022 General Assembly.</p> <p>Amended effective date for General Permit to read “November 16, 2024” and expiration date to read “November 15, 2034.” Amended date for reissuance of General Permit. Amending this date will allow for the reissuance of the regulation and thereby extend the ability to provide coverage under the general permit for another 10 years.</p> <p>Amended the name of Part II in the authorization language.</p>
<p>9VAC25-192-70 (Contents of the general permit) Parts I, II and III</p>	<p>N/A</p>	<p>There is inconsistent language in the current regulation.</p>	<p>Replaced “VPA General Permit” with “general permit” (as defined). This language change allows for the use of “general permit” throughout this section to mean the VPA regulation and general permit for animal feeding operations and animal waste management.</p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p>Replaced “facility” throughout section and replaced with “animal feeding operation.” Amended language to provide clarity throughout this section. Added the word “individual” to VPA permit to clarify the permit type.</p>
<p>9VAC25-192-70 (Contents of the general permit) Part I</p>	<p>N/A</p>	<p>The current section did not have Part I labeled.</p> <p>The tables are in the regulation but not labeled.</p>	<p>Labeled Part I and the name above subsection A. Added this label to facilitate the reader of the contents of the general permit.</p> <p>Added labels and references to the three tables in subsection A of Part I. Added the labels to facilitate the reader of the contents of the general permit.</p>
<p>9VAC25-192-70 (Contents of the general permit) Part I subsection A 6, 7 and Table 1</p>	<p>N/A</p>	<p>The current regulation requires groundwater monitoring at earthen liquid waste storage facilities constructed to a bottom elevation that is below the seasonal high water table.</p>	<p>Added two conditions related to groundwater monitoring. One permit condition describes when a permittee is required to submit a groundwater monitoring action plan. This process is already required by the department; adding it to the permit makes it clear to the permittee in what cases that the action plan is expected.</p> <p>The other condition outlines which parameters must be analyzed by a laboratory accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) in accordance with 1VAC30-46-20. This requirement is already in place; adding it to the permit conditions makes it clear to the permittee.</p>
<p>9VAC25-192-70 (Contents of the general permit) Part I subsection B</p>	<p>N/A</p>	<p>The overall requirements for storage exist in the current regulation.</p>	<p>Amended subsection tagline to assist with reorganizing the conditions into specific subject matters. New tagline: “Site design, storage, and operation requirements”. The conditions have been separated from the animal waste transfer and utilization and other general conditions to facilitate a clearer understanding of the requirements. Adding the tagline helps distinguish the subsections. This addition also makes this regulation consistent with the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).</p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-192-70 (Contents of the general permit) Part I subsection B	N/A	The special conditions exist but are not organized into specific subject areas.	Made the following changes to the subdivisions: B 1 through B 10 were not renumbered Original B 17 is now B 11 Original B 11 is now C 1 Original B 12 is now C 2 Original B 13 is now C 3 Original B 14 is now C 4 New Condition C 5 Original B 15 is now C 6 Original B 16 is now C 7 Original B 18 is now D Conditions are being kept, some were amended, and many were moved to a specific subsection and renumbered. The site conditions have been separated from the animal waste transfer and utilization conditions and the condition related to training to facilitate a clearer understanding of the requirements. These amendments also make this regulation consistent with the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).
9VAC25-192-70 (Contents of the general permit) Part I subsection B 2	N/A	The specifics for determining the 100-year floodplain are not contained in the regulation.	Added clarification as to which tools are to be used to determine the floodplain when siting animal waste storage facilities. Adding the language ensures that the permittee will know what tools must be used to make this determination. This addition also makes this regulation consistent with the other VPA general permit regulation- VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).
9VAC25-192-70 (Contents of the general permit) Part I subsection B 8	N/A	A minimum of 2-ft separation distance to the seasonal high water table required.	No change to the requirement; moved definition of "seasonal high water table" in this section because it was added to the definition section of the regulation.
9VAC25-192-70 (Contents of the general permit) Part I subsection B 8	N/A	Storage requirements are in the existing regulation.	Added language related to the storage of semi-solid and solid waste to clarify what is considered adequate storage.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-192-70 (Contents of the general permit) Part I subsection B 11	N/A	Waste storage closure requirements are in the existing regulation.	Moved closure requirements from B.17 and added a notification to the department prior to the closure of a liquid waste storage facility. This notification is an addition to an existing permit condition related to the closure of a waste storage facility. Adding this notification will facilitate the ability for department staff to provide compliance assistance and proper closure procedures to the permittee.
9VAC25-192-70 (Contents of the general permit) Part I (new) subsection C	N/A	The subsection and tagline do not exist. The overall requirements for animal waste use and transfer exist in the current regulation.	Added a new subsection. New tagline: "Animal waste use and transfer requirements". The conditions have been separated from the site design, storage, and operations related to waste storage and the condition related to training to facilitate a clearer understanding of the requirements. Adding the tagline helps distinguish the subsections. This addition also makes this regulation consistent with the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).
9VAC25-192-70 (Contents of the general permit) Part I (new) subsection C 2	N/A	The permittee shall implement an NMP.	Amended new condition (C 2) to add the requirement for the permittee to submit NMP revisions approved by DCR before the expiration date of the previous NMP. The permittee is currently required to provide a copy of the current DCR approved NMP; adding this requirement makes it clear to the permittee of the expectation.
9VAC25-192-70 (Contents of the general permit) Part I (new) subsection C 3	N/A	Waste shall not be land applied with buffer zones. Buffer zone maintenance requirements are specified.	Amended new condition (C 3) to remove the word "permanent" from the condition. "Permanent" is in the definition of the term "vegetated buffer" found in Section 10. This improves clarity and understanding for the permittees.
9VAC25-192-70 (Contents of the general permit) Part I (new) subsection C 5	N/A	The requirement to report unusual or extraordinary discharges is required by the permit.	Added a new condition (new C 5) to clarify requirements in cases of waste storage emergencies such as fire or flood. The new condition provides criteria for the land application of animal waste outside of the land application schedule found in the nutrient management plan, so long as land application information is

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p>documented, and the Department is notified. This condition provides permittees with clear requirements related to waste storage and land application when the permittee is faced with an emergency. Added this condition to be consistent with the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).</p>
9VAC25-192-70 (Contents of the general permit) Part I (new) subsection D	N/A	The permittee training requirement is in the existing regulation.	New subsection D. This amendment makes this condition consistent with the rest of the conditions in Section 70.
9VAC25-192-70 (Contents of the general permit) Part II	N/A	Part II of Section 70 contains conditions applicable to VPA permits.	<p>Part II was amended, re-organized and renumbered to be consistent with the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).</p> <p>There are no substantive changes to the conditions that are applicable to the general permit.</p> <p>Made the following changes to Part II: A and B were amended Original C is now B 2 Original D is now A 4 and C 3 & 4 Original E is now F Original F is now H Original G is now F 1 Original H now covered by G Original I is now covered by Q Original J is now covered by Q and R Original K now covered by G Original L is now O Original M is now covered by N Original N is now W Original O is now J Original P is now M Original Q is now V Original R is now covered by S Original S is amended to cover all permit actions Original T was only slightly amended Original U was only slightly amended Original V is now O Original W is now P</p>

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			<p>Original X is now E</p> <p>New D, I, K, L, and M are conditions that are in 9VAC25-32 which are applicable to all VPA permits.</p> <p>To provide clarity and convenience for owners of animal feeding operations and animal waste end-users who have a general permit, all of the applicable conditions are compiled in Part II.</p>
9VAC25-192-70 (Contents of the general permit) Part III subsection A	N/A	The tables are in the regulation but not labeled.	Added labels and references to the three tables in subsection A of Part III. Added the labels to facilitate the reader of the contents of the general permit.
9VAC25-192-70 (Contents of the general permit) Part III subsection A 6, 7, and Table 1	N/A	The current regulation requires groundwater monitoring at earthen liquid waste storage facilities constructed to a bottom elevation that is below the seasonal high water table.	<p>Added two conditions related to groundwater monitoring. One permit condition describes when a permittee is required to submit a groundwater monitoring action plan. This process is already required by the department; adding it to the permit makes it clear to the permittee in what cases that the action plan is expected.</p> <p>The other condition outlines which parameters must be analyzed by a laboratory accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) in accordance with 1VAC30-46-20. This requirement is already in place; adding it to the permit conditions makes it clear to the permittee.</p>
9VAC25-192-70 (Contents of the general permit) Part III subsection B	N/A	The overall requirements for storage exist in the current regulation.	Amended subsection tagline to assist with reorganizing the conditions into specific subject matters. New tagline: "Site design, storage, and operation requirements". The conditions have been separated from the animal waste transfer and utilization and other general conditions to facilitate a clearer understanding of the requirements. Adding the tagline helps distinguish the subsections. This addition also makes this regulation consistent with the other VPA general permit regulation - VPA Regulation and General Permit for

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Poultry Waste Management (9VAC25-630-50).
9VAC25-192-70 (Contents of the general permit) Part III subsection B	N/A	The special conditions exist but are not organized into specific subject areas.	Made the following changes to the subdivisions: B 1 through B 10 were not renumbered Original B 17 is now B 11 Original B 11 is now C 1 Original B 12 is now C 2 Original B 13 is now C 3 Original B 14 is now C 4 New Condition C 5 Original B 15 is now C 6 Original B 16 is now C 7 Original B 18 is now D Conditions are being kept, some were amended, and many were moved to a specific subsection and renumbered. The site conditions have been separated from the animal waste transfer and utilization conditions and other special conditions to facilitate a clearer understanding of the requirements. These amendments also make this regulation consistent with the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).
9VAC25-192-70 (Contents of the general permit) Part III subsection B 2	N/A	The specifics for determining the 100-year floodplain are not contained in the regulation.	Added clarification as to which tools are to be used to determine the floodplain when siting animal waste storage facilities. Adding the language ensures that the permittee will know what tools must be used to make this determination. This addition also makes this regulation consistent with the other VPA general permit regulation- VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).
9VAC25-192-70 (Contents of the general permit) Part III subsection B 8	N/A	A minimum of 2-ft separation distance to the seasonal high water table required.	No change to the requirement; moved definition of "seasonal high water table" from this section because it was added to the definition section of the regulation.
9VAC25-192-70 (Contents of the general permit) Part	N/A	Storage requirements are in the existing regulation.	Added permit language related to the storage of semi-solid and solid waste to clarify what is considered adequate storage.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
III subsection B 8			
9VAC25-192-70 (Contents of the general permit) Part III subsection B 11	N/A	Waste storage closure requirements are in the existing regulation.	Moved closure requirements from B.17 and added a notification to the department when the permittee closes a liquid waste storage facility. This notification is an addition to an existing permit condition related to the closure of a waste storage facility. Adding this notification will facilitate the ability for department staff to provide compliance assistance and proper closure procedures to the permittee.
9VAC25-192-70 (Contents of the general permit) Part III subsection B	N/A	Waste storage closure requirements are in the existing regulation.	Added a notification to the department prior to the closure of a liquid waste storage facility. This notification is an addition to an existing permit condition related to the closure of a waste storage facility. Adding this notification will facilitate the ability for department staff to provide compliance assistance and proper closure procedures to the permittee.
9VAC25-192-70 (Contents of the general permit) Part III (new) subsection C	N/A	The subsection and tagline do not exist. The overall requirements for animal waste use and transfer exist in the current regulation.	Added a new subsection. New tagline: "Animal waste use and transfer requirements". The conditions have been separated from the site design, storage, and operations related to waste storage and the condition related to training to facilitate a clearer understanding of the requirements. Adding the tagline helps distinguish the subsections. This addition also makes this regulation consistent with the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).
9VAC25-192-70 (Contents of the general permit) Part III (new) subsection C 2	N/A	The permittee shall implement an NMP.	Amended new condition (C 2) to add the requirement for the permittee to submit NMP revisions approved by DCR before the expiration date of the previous NMP. The permittee is currently required to provide a copy of the current DCR approved NMP; adding this requirement makes it clear to the permittee of the expectation.
9VAC25-192-70 (Contents of the general permit) Part	N/A	The requirement to report unusual or extraordinary discharges is required by the permit.	Added a new condition to clarify requirements in cases of waste storage emergencies such as fire or flood. The new condition provides

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
III (new) subsection C 5			<p>criteria for the land application of animal waste outside of the land application schedule found in the nutrient management plan, so long as land application information is documented, and the Department is notified. This condition provides permittees with clear requirements related to waste storage and land application when the permittee is faced with an emergency. Added this condition to be consistent with the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).</p>
9VAC25-192-70 (Contents of the general permit) Part III (new) subsection C 5	N/A	Waste shall not be land applied within buffer zones. Buffer zone maintenance requirements are specified.	Amended new condition (C 3) to remove the word “permanent” from the condition. Permanent is in the definition of the term “vegetated buffer” found in Section 10. This improves clarity and understanding for permittees.
9VAC25-192-70 (Contents of the general permit) Part III (new) subsection D	N/A	The permittee training requirement is in the existing regulation.	New subsection. This amendment makes this condition consistent with the rest of the conditions in Section 70.
9VAC25-192-80 (Tracking and accounting requirements for animal waste end-users)	N/A	The regulation contains the recordkeeping requirements for animal waste end-users.	Amended language in this section to bring consistency to the terms in the regulation. Added the different permit types to subsection A. Made the entity plural in subdivisions A 1 a and A 2 a. Made minor changes based on the Style Manual developed by the Registrar’s Office. Amended language based on the authority of the State Water Control Board (deleted “board”- replaced with “department”, where appropriate) in accordance with Senate Bill 657 enacted by the 2022 General Assembly.
9VAC25-192-90 (Utilization and storage requirements)	N/A	The regulation contains the utilization and storage requirements for animal waste end-users.	Amended Section title to: Storage and land application requirements for transferred animal waste. Added the different permit types to subsections A, B, and C. Amended language in this section to bring consistency to the terms in the regulation.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-192-90 (Utilization and storage requirements)	N/A	The regulation currently contains conditions for waste storage.	Changed animal waste to semi-solid and solid waste in subdivision in B 1 to clarify the storage requirements and make it consistent with the requirements in Section 70.
9VAC25-192-90 (Utilization and storage requirements)	N/A	The definition exists in the current regulation.	Removed definition of “seasonal high water table” from this section because it was added to the definition section of the regulation.
9VAC25-192-90 (Utilization and storage requirements)	N/A	The regulation currently contains conditions for waste storage.	Added language related to the storage of semi-solid and solid waste to clarify what is considered adequate storage.
9VAC25-192-90 (Utilization and storage requirements)	N/A	The specifics for determining the 100-year floodplain are not contained in the regulation.	Added clarification as to which tools are to be used to determine the floodplain when siting animal waste storage facilities. Adding the language ensures that the regulated end-user will know what tools must be used to make this determination. This addition also makes this regulation consistent with Section 70 of this regulation and the other VPA general permit regulation- VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).
9VAC25-192-90 (Utilization and storage requirements)	N/A	The table in Section 90 does not have a label	Added a label and reference to the table in subsection C. Added the label to facilitate the reader of this Section.
9VAC25-192-90 (Utilization and storage requirements)	N/A	The requirements for buffer zones exist in Section 90.	Amended new condition (C 3) to remove the word “permanent” from the condition. “Permanent” is in the definition of the term “vegetated buffer” found in Section 10.
9VAC25-192-90 (Utilization and storage requirements)	N/A	The current language in Section 90 does not provide options during an emergency.	Added a new condition (new C 4) to clarify requirements in cases of waste storage emergencies, such as fire or flood. The new condition provides criteria for the land application of animal waste outside of the land application schedule found in the nutrient management plan, so long as land application information is documented and the Department is notified. This condition provides permittees with clear requirements related to waste storage and land application when the regulated end-user is faced with an emergency. Added this condition to be consistent with Section 70 of this regulation and

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			the other VPA general permit regulation - VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-50).
9VAC25-192-90 (Utilization and storage requirements)	N/A	The current section refers to the water quality standards regulation but does not cite the regulation. The current section refers to the State Water Control Law and includes the specific citation.	Subsection E: Added the citation for the specific water quality standards regulation and amended condition language for consistency with the rest of this regulation and other regulations. Removed citation for State Water Control Law (since the definition along with the citation are being added to the definition Section) and to make it consistent with the rest of this regulation.
9VAC25-192-90 (Utilization and storage requirements)	N/A	The requirement refers to the Board instead of the department.	Subsection F: Amended language based on the authority of the State Water Control Board (deleted "board"-replaced with "department", where appropriate) Board Bill consistent with Senate Bill 657 enacted by the General Assembly in 2022.
FORMS	N/A	The current effective forms are consistent with the current regulation.	Revised forms and Animal Waste Fact Sheet for consistency with the changes made to 9VAC25-192-60, 9VAC25-192-80 and 9VAC25-192-90. Revising the registration statements and the Animal Waste Fact Sheet will provide forms consistent with the changes made to sections previously mentioned.

Family Impact

In accordance with § 2.2-606 of the Code of Virginia, please assess the potential impact of the proposed regulatory action on the institution of the family and family stability including to what extent the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one’s spouse, and one’s children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

It is not anticipated that an amendment to this regulation will have any impacts on the family and family stability.

1 **Project 7432 – Proposed- November 30, 2023 State Water Control Board meeting**
2 **2024 Reissue and amend, as necessary, the Virginia Pollution Abatement (VPA)**
3 **Regulation and General Permit for Animal Feeding Operations and Animal Waste**
4 **Management**

5 Chapter 192

6 Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding
7 Operations and Animal Waste Management

8 **9VAC25-192-10. Definitions.**

9 The following words and terms when used in this chapter regulation shall have the meanings
10 defined in the State Water Control Law (~~§ 62.1-44.2 et seq. of the Code of Virginia~~) and the
11 Virginia Pollution Abatement (VPA) Permit Regulation (9VAC25-32) unless the context clearly
12 indicates otherwise, except that for the purposes of this chapter:

13 "Agricultural stormwater discharge" means a precipitation-related discharge of manure, litter,
14 or process wastewater that has been applied on land areas under the control of an animal feeding
15 operation or under the control of an animal waste end-user in accordance with a nutrient
16 management plan approved by the Virginia Department of Conservation and Recreation and in
17 accordance with site specific nutrient management practices that ensure appropriate agricultural
18 land utilization of the nutrients in the manure, litter, or process wastewater.

19 "Animal feeding operation" means a lot or facility, together with any associated treatment
20 works, where both of the following conditions are met:

21 1. Animals have been, are, or will be stabled or confined and fed or maintained for a total
22 of 45 days or more in any 12-month period; and

23 2. Crops, vegetation, forage growth, or post-harvest residues are not sustained in the
24 normal growing season over any portion of the operation of the lot or facility.

25 Two or more animal feeding operations under common ownership are a single animal feeding
26 operation for the purposes of determining the number of animals at an operation, if they adjoin
27 each other, or if they use a common area or system for the disposal of ~~wastes~~ liquid waste.

28 "Animal waste" means liquid, semi-solid, and solid animal manure and process wastewater,
29 compost, or sludges associated with animal feeding operations including the final treated wastes
30 generated by a digester or other manure treatment technologies.

31 "Animal waste end-user" or "end-user" means any recipient of transferred animal waste who
32 stores or who utilizes the waste as fertilizer, fuel, feedstock, livestock feed, or other beneficial use
33 for an operation under his control.

34 "Animal waste fact sheet" means the document that details the requirements regarding
35 utilization, storage, and management of animal waste by end-users. The fact sheet is approved
36 by the department.

37 "Beneficial use" means a use that is of benefit as a substitute for natural or commercial
38 products and does not contribute to adverse effects on health or environment.

39 "Board" means the State Water Control Board. When used outside the context of the
40 promulgation of regulations, including regulations to establish general permits, "board" means the
41 Department of Environmental Quality.

42 "Confined animal feeding operation;" means, for the purposes of this regulation, ~~has~~ the same
43 ~~meaning as an~~ "animal feeding operation."

44 "Department" means the Department of Environmental Quality.

45 "Director" means the Director of the Virginia Department of Environmental Quality, or his
46 designee an authorized representative.

47 "General permit" means the Virginia Pollution Abatement Regulation and General Permit for
48 Animal Feeding Operations and Animal Waste Management, 9VAC25-192.

49 "Land application" means, for the purposes of this regulation, the distribution of animal waste
50 by spreading or spraying on the surface of the land, injecting below the surface of the land, or
51 incorporating into the soil with a uniform application rate for the purpose of fertilizing crops or
52 vegetation or conditioning the soil. The fields or sites used for the land application of animal waste
53 in accordance with this regulation are not considered to be treatment works. Deposition of animal
54 waste by an animal is not land application.

55 "Local government ordinance form" means a notification from the governing body of the
56 county, city or town where the animal feeding operation is located that the animal feeding
57 operation is consistent with all ordinances adopted pursuant to Chapter 22 (§15.2-2200 et seq.)
58 of Title 15.2 of the Code of Virginia.

59 "Nutrient management plan" or "NMP" means a plan developed or approved by the
60 Department of Conservation and Recreation that requires proper storage, treatment, and
61 management of animal waste and limits accumulation of excess nutrients in soils and leaching or
62 discharge of nutrients into state waters; except that for an animal waste end-user who is not
63 covered under ~~the~~ this general permit, the requirements of 9VAC25-192-90 constitute the NMP.

64 "Organic source" means any nutrient source including, but not limited to, manures, biosolids,
65 compost, and waste or sludges from animals, humans, or industrial processes, but for the
66 purposes of this regulation it excludes waste from wildlife.

67 "Permittee" means the owner or operator of an animal feeding operation or animal waste end-
68 user whose animal waste management activities are covered under this general permit.

69 "Seasonal high water table" means that portion of the soil profile where a color change has
70 occurred in the soil as a result of saturated soil conditions or where soil concretions have formed.
71 Typical colors are gray mottlings, solid gray, or black. The depth in the soil at which these
72 conditions first occur is termed the seasonal high water table.

73 "State Water Control Law" means Chapter 3.1 (§62.1-44.2 et.seq.) of Title 62.1 of the Code
74 of Virginia.

75 "Treatment works" means (i) a waste holding pond or tank used to store manure prior to land
76 application or, (ii) a lagoon or treatment facility used to digest or reduce the solids or nutrients.

77 "Vegetated buffer" means a permanent strip of dense perennial vegetation established
78 parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of
79 slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients
80 or pollutants from leaving the field and reaching surface waters.

81 "Waste nutrient analysis rate" means a land application rate for animal waste approved by the
82 board as specified in this regulation.

83 "Waste storage facility" means (i) a waste holding pond or tank used to store manure prior to
84 land application, (ii) a lagoon or treatment facility used to digest or reduce the solids or nutrients,
85 or (iii) a structure used to store manure or waste.

86 "~~Vegetated buffer~~" means ~~a permanent strip of dense perennial vegetation established~~
87 ~~parallel to the contours of and perpendicular to the dominant slope of the field for the purposes of~~

88 slowing water runoff, enhancing water infiltration, and minimizing the risk of any potential nutrients
89 or pollutants from leaving the field and reaching surface waters.

90 "300 animal units" means 300,000 pounds of live animal weight, or the following numbers and
91 types of animals:

- 92 a. 300 slaughter and feeder cattle;
- 93 b. 200 mature dairy cattle (whether milked or dry cows);
- 94 c. 750 swine each weighing over 25 kilograms (approximately 55 pounds);
- 95 d. 150 horses;
- 96 e. 3,000 sheep or lambs;
- 97 f. 16,500 turkeys;
- 98 g. 30,000 laying hens or broilers.

99 **9VAC25-192-15. Applicability of incorporated references based on the dates that they**
100 **became effective.**

101 Except as noted, when a regulation of the U.S. Environmental Protection Agency (EPA) set
102 forth in Title 40 of the Code of Federal Regulations is referenced or adopted in this chapter and
103 incorporated by reference, that regulation shall be as it exists and has been published as of July
104 1, 2023.

105 **9VAC25-192-20. Purpose; effective date of the general permit.**

106 A. ~~This~~ The Virginia Pollution Abatement Regulation and General Permit for Animal Feeding
107 Operations and Animal Waste Management (general permit) regulation governs the pollutant
108 management activities at animal feeding operations having 300 or more animal units utilizing a
109 liquid manure collection and storage system not covered by a Virginia Pollutant Discharge
110 Elimination System (VPDES) permit and animal waste utilized or stored by animal waste end-
111 users. ~~These~~ The owners of animal feeding operations may ~~operate~~ run and maintain treatment
112 works for waste storage, treatment, or recycling and may perform land application of manure,
113 wastewater, compost, or sludges.

114 B. This general permit will become effective on November 16, 2014 2024. This general permit
115 will expire ~~40 years from the effective date~~ on November 15, 2034.

116 **9VAC25-192-25. Duty to comply.**

117 A. ~~Any~~ No person who manages or proposes to manage pollutants regulated by 9VAC25-192
118 shall ~~operate~~ operate an animal feeding operation with 300 or more animal units utilizing a liquid manure
119 collection and storage system after July 1, 2000, without having submitted a registration statement
120 as provided in 9VAC25-192-60 or being covered by a Virginia Pollutant Discharge Elimination
121 System (VPDES) permit or an individual Virginia Pollution Abatement (VPA) permit ~~comply with~~
122 the applicable requirements of this chapter.

123 B. ~~In order to manage pollutants from an animal feeding operation, the owner shall be required~~
124 ~~to obtain coverage under the Virginia Pollution Abatement (VPA) general permit or an individual~~
125 ~~VPA permit provided that the owner has not been required to obtain a Virginia Pollutant Discharge~~
126 ~~Elimination System (VPDES) permit. The owner shall comply with all conditions of this general~~
127 permit and the requirements of this chapter and the permit regulation.

128 C. An animal waste end-user shall comply with the technical requirements outlined in
129 9VAC25-192-80 and 9VAC25-192-90.

130 **9VAC25-192-50. Authorization to manage pollutants.**

131 A. Owner of an animal feeding operation. ~~Any An~~ owner ~~governed by~~ of an animal feeding
132 operation that is subject to this general permit is hereby authorized to manage pollutants at the
133 animal feeding operations provided that the owner files ~~the~~ a registration statement ~~of~~ in
134 accordance with 9VAC25-192-60, complies with the requirements of 9VAC25-192-70, and
135 provided that:

136 1. The owner has not been required to obtain a Virginia Pollutant Discharge Elimination
137 System (VPDES) permit or an individual Virginia Pollution Abatement (VPA) permit
138 according to subdivision 2 of 9VAC25-32-260.

139 2. The operation of the animal feeding operation shall not contravene the Water Quality
140 Standards, 9VAC25-260, as amended, and adopted by the board, or any provision of the
141 State Water Control Law. There shall be no point source discharge of wastewater to
142 surface waters of the state except in the case of a storm event greater than the 25-year,
143 24-hour storm. Agricultural stormwater discharges are permitted. Domestic sewage shall
144 not be managed under this general permit. Industrial ~~waste~~ wastes shall not be managed
145 under this general permit, except for wastes that have been approved by the department
146 and are managed in accordance with 9VAC25-192-70.

147 3. The owner of any proposed pollutant management activities or those which have not
148 previously been issued a valid ~~Virginia Pollution Abatement (VPA) general permit or an~~
149 ~~individual VPA~~ permit or ~~Virginia Pollutant Discharge Elimination System (VPDES)~~ permit
150 must attach a Local Government Ordinance Form to the registration statement, ~~the Local~~
151 ~~Government Ordinance Form~~ (a notification from the governing body of the county, city or
152 town where the operation is located that the operation is consistent with all ordinances
153 adopted pursuant to Chapter 22 (§ 15.2-2200 et seq.) of Title 15.2 of the Code of Virginia).

154 4. The owner shall obtain Department of Conservation and Recreation approval of a
155 nutrient management plan for the animal feeding operation prior to the submittal of the
156 registration statement. The owner shall attach to the registration statement a copy of the
157 approved nutrient management plan and a copy of the letter from the Department of
158 Conservation and Recreation certifying approval of the nutrient management plan that
159 was developed by a certified nutrient management planner in accordance with § 10.1-
160 104.2 of the Code of Virginia. The owner shall implement the approved nutrient
161 management plan.

162 5. ~~a.~~ The owner shall give notice of the registration statement to all owners or residents of
163 property that adjoins the property on which the animal feeding operation will be located.

164 a. Such notice shall include (i) the types and maximum number of animals which will
165 be maintained at the animal feeding operation and (ii) the address and phone number
166 of the appropriate department regional office to which comments relevant to the
167 registration statement may be submitted. This notice requirement is waived whenever
168 registration is for the purpose of renewing coverage under this general permit and no
169 expansion is proposed and the department has not issued any special order or consent
170 order relating to violations under this existing general permit.

171 b. Any person may submit written comments on the proposed operation to the
172 department within 30 days of the date of the filing of the registration statement. If, ~~on~~
173 ~~the basis of~~ based on such written comments or his review, the director determines
174 that the proposed operation will not be capable of complying with the provisions of ~~the~~
175 this general permit, then the director shall require the owner to obtain an individual
176 VPA permit for the operation. Any such determination by the director shall be made in

177 writing and mailed to the owner not more than 45 days after the filing of the registration
178 statement or, if in the director's sole discretion additional time is necessary to evaluate
179 comments received from the public, then not more than 60 days after the filing of the
180 registration statement.

181 6. ~~As required by § 62.1-44.17:1 F of the Code of Virginia, each~~ Each owner of a facility
182 an animal feeding operation covered by this general permit shall have completed the
183 training program offered or approved by the department in the two years prior to submitting
184 the registration statement for general permit coverage, or shall complete such training
185 within one year after the registration statement has been submitted for general permit
186 coverage. All permitted owners shall complete the training program at least once every
187 three years.

188 B. Animal waste end-user. An animal waste end-user shall comply with the requirements
189 outlined in 9VAC25-192-80 and 9VAC25-192-90.

190 1. When an animal waste end-user does not comply with the requirements of 9VAC25-
191 192-80 and 9VAC25-192-90, the department may choose to do ~~any or all of~~ the following:

- 192 a. Initiate enforcement action based upon the violation of the regulation;
- 193 b. Require the animal waste end-user to register for coverage under ~~the~~ this general
194 permit or apply for an individual VPA permit; and
- 195 ~~c. Require the animal waste end-user to apply for the a VPA individual permit; or~~
- 196 ~~d. Take other actions set forth in the VPA Permit Regulation (9VAC25-32).~~

197 2. ~~An~~ When an animal waste end-user ~~governed by~~ is required to register for coverage
198 under this general permit, the end-user is hereby authorized to manage ~~pollutants relating~~
199 ~~to the utilization and storage of~~ store animal waste provided that the animal waste end-
200 user files the registration statement of 9VAC25-192-60, complies with the requirements of
201 9VAC25-192-70, and:

- 202 a. The animal waste end-user has not been required to obtain a an individual VPA
203 ~~individual~~ permit according to subdivision 2 of 9VAC25-32-260;
- 204 b. The activities of the animal waste end-user shall not contravene the Water Quality
205 Standards, 9VAC25-20-260, as amended, and adopted by the board, or any provision
206 of the State Water Control Law (~~§ 62.1-44 et seq. of the Code of Virginia~~). There shall
207 be no point source discharge of wastewater to surface waters of the state except in
208 the case of a storm event greater than the 25-year, 24-hour storm. Agricultural
209 stormwater discharges are permitted. Domestic sewage shall not be managed under
210 this general permit. Industrial ~~waste~~ wastes shall not be managed under this general
211 permit, except for wastes that have been approved by the department and are
212 managed in accordance with 9VAC25-192-70;
- 213 c. The animal waste end-user shall obtain Department of Conservation and Recreation
214 approval of a nutrient management plan for land application sites where animal waste
215 will be utilized or stored and managed prior to the submittal of the registration
216 statement. The animal waste end-user shall attach to the registration statement a copy
217 of the approved nutrient management plan and a copy of the letter from the
218 Department of Conservation and Recreation certifying approval of the nutrient
219 management plan that was developed by a certified nutrient management planner in
220 accordance with § 10.1-104.2 of the Code of Virginia. The animal waste end-user shall
221 implement the approved nutrient management plan; and

222 d. ~~As required by § 62.1-44.17:1 F of the Code of Virginia, each~~ Each permitted animal
223 waste end-user shall complete a training program offered or approved by the
224 department within one year of filing the registration statement for general permit
225 coverage. All permitted animal waste end-users shall complete a training program at
226 least once every three years.

227 C. Continuation of general permit coverage.

228 1. ~~Any owner that was authorized to manage pollutants under the general permit issued~~
229 ~~in 2004 and that submits a complete registration statement on or before November 15,~~
230 ~~2014, is authorized to continue to manage pollutants under the terms of the 2004 general~~
231 ~~permit until such time as the board either: In any case where the board, through no fault~~
232 ~~of the owner or permittee, does not issue the next consecutive general permit with an~~
233 ~~effective date on or before the expiration date of the expiring general permit, the following~~
234 ~~applies:~~

235 a. Any owner that was authorized to manage pollutants under this general permit and
236 that submits a complete registration statement in accordance with 9VAC25-192-60 on
237 or before the expiration date of the expiring general permit coverage, is authorized to
238 continue to manage pollutants under the terms of the previously issued general permit.
239 The conditions of the expiring general permit and any requirements of coverage
240 granted under it shall continue in force until the effective date of the next consecutive
241 general permit and until such time as the board either:

242 a. b. Issues coverage to the owner or permittee under this the next consecutive general
243 permit; or

244 b. c. Notifies the owner or permittee that coverage under this the next consecutive
245 general permit is denied.

246 2. When the permittee that was covered under the expiring or expired general permit has
247 violated or is violating the conditions of that general permit, the ~~board~~ department may
248 choose to do ~~any or all~~ of the following:

249 a. Initiate enforcement action based upon the expiring or expired general permit;

250 b. Issue a notice of intent to deny coverage under the reissued general permit. If the
251 general permit coverage is denied, then the owner ~~would then~~ will be required to cease
252 the activities authorized by the expiring or expired general permit or be subject to
253 enforcement action for operating without a general permit;

254 c. Issue an individual VPA permit with appropriate conditions; ~~or~~ and

255 d. Take other actions set forth in the VPA Permit Regulation (9VAC25-32).

256 D. Receipt of this general permit does not relieve any permittee of the responsibility to comply
257 with any other applicable federal, state, or local statute, ordinance, or regulation.

258 **9VAC25-192-60. Registration statement.**

259 A. The owner of an animal feeding operation. ~~In order to~~ To be covered under ~~the~~ this general
260 permit, the owner shall file a complete VPA General Permit Registration Statement for the
261 management of pollutants at animal feeding operations in accordance with this chapter. The
262 registration statement shall be deemed complete for registration under ~~the VPA General Permit~~
263 this general permit if it contains the following information:

264 1. The animal feeding operation owner's name, mailing address, email address (if
265 available), and telephone number;

- 266 2. The name, mailing address, email address (if available), and telephone number of the
267 operator or contact person other than the owner, if applicable;
- 268 3. The farm name (if applicable) and location of the animal feeding operation;
- 269 4. The best time of day and day of the week to contact the operator or the contact person;
- 270 5. ~~If The permit number, if the facility animal feeding operation has an existing general~~
271 ~~permit, individual VPA permit, or VPDES permit number, the permit number;~~
- 272 6. The type or types of animals (e.g., dairy cattle, slaughter and feeder cattle, swine, other)
273 and the maximum number and average weight of the type or types of animals to be
274 maintained at the animal feeding operation;
- 275 7. The types of wastes that will be managed at the ~~facility~~ animal feeding operation and
276 how much of each type of waste will be managed;
- 277 8. If waste will be transferred off-site, then the type of waste and how much will be
278 transferred;
- 279 9. The owner of any ~~proposed pollutant management activities~~ animal feeding operation
280 that will manage animal waste or those which have not previously been issued a valid
281 general permit, an individual VPA permit or VPDES permit must attach the Local
282 Government Ordinance Form to the registration statement, ~~the Local Government~~
283 ~~Ordinance Form (the notification from the governing body of the county, city or town where~~
284 ~~the operation is located that the operation is consistent with all ordinances adopted~~
285 ~~pursuant to Chapter 22 (§ 15.2-2200 et seq.) of Title 15.2 of the Code of Virginia);~~
- 286 10. A copy of the nutrient management plan approved by the Department of Conservation
287 and Recreation;
- 288 11. A copy of the Department of Conservation and Recreation nutrient management plan
289 approval letter that also certifies that the plan was developed by a certified nutrient
290 management planner in accordance with § 10.1-104.2 of the Code of Virginia; and
- 291 12. The following certification: "I certify that notice of the registration statement has been
292 given to all owners or residents of property that adjoins the property on which the animal
293 feeding operation will be located. This notice included the types and numbers of animals
294 ~~which~~ that will be maintained at the ~~facility~~ animal feeding operation and the address and
295 phone number of the appropriate Department of Environmental Quality regional office to
296 which comments relevant to ~~the~~ this general permit may be submitted. (The preceding
297 certification is waived if the registration is for renewing coverage under ~~the~~ this general
298 permit, and no expansion of the operation is proposed, and the department has not issued
299 any special order or consent order relating to violations under the existing general permit.)
300 I certify under penalty of law that all the requirements of the board for ~~the~~ this general
301 permit are being met and that this document and all attachments were prepared under my
302 direction or supervision in accordance with a system designed to assure that qualified
303 personnel properly gather and evaluate the information submitted. Based on my inquiry of
304 the person or persons who manage the system or those persons directly responsible for
305 gathering the information, the information submitted is to the best of my knowledge and
306 belief true, accurate, and complete. I am aware that there are significant penalties for
307 submitting false information including the possibility of fine and imprisonment for knowing
308 violations."
- 309 B. The animal waste end-user. ~~In order to~~ To be covered under ~~the~~ this general permit, the
310 animal waste end-user shall file a complete VPA General Permit Registration Statement in
311 accordance with this chapter. The registration statement shall be deemed complete for

312 registration under ~~the VPA General Permit~~ this general permit if it contains the following
313 information:

314 1. The animal waste end-user's name, mailing address, email address (if available), and
315 telephone number;

316 2. The name (if applicable) and location ~~of the facility~~ where the animal waste will be
317 utilized, stored, or managed;

318 3. The best time of day and day of the week to contact the animal waste end-user;

319 4. If The permit number, if the facility animal waste end-user has an existing general
320 permit, an individual VPA permit or VPDES permit number, the permit number;

321 5. If ~~confined~~ animals are ~~located at the facility~~ also confined, then indicate the type or
322 types of animals (e.g., dairy cattle, slaughter and feeder cattle, swine, other) and the
323 maximum number and average weight of the type or types of animals;

324 6. The types of wastes that will be managed ~~at the facility~~ by the animal waste end-user
325 and how much of each type of waste will be managed;

326 7. If waste will be transferred off-site, then the type of waste and how much will be
327 transferred;

328 8. A copy of the nutrient management plan approved by the Department of Conservation
329 and Recreation;

330 9. A copy of the Department of Conservation and Recreation nutrient management plan
331 approval letter that also certifies that the plan was developed by a certified nutrient
332 management planner in accordance with § 10.1-104.2 of the Code of Virginia; and

333 10. The following certification: "I certify under penalty of law that all the requirements of
334 the board for ~~the~~ this general permit are being met and that this document and all
335 attachments were prepared under my direction or supervision in accordance with a system
336 designed to assure that qualified personnel properly gather and evaluate the information
337 submitted. Based on my inquiry of the person or persons who manage the system or those
338 persons directly responsible for gathering the information, the information submitted is to
339 the best of my knowledge and belief true, accurate, and complete. I am aware that there
340 are significant penalties for submitting false information including the possibility of fine and
341 imprisonment for knowing violations."

342 C. The registration statement shall be signed in accordance with ~~Part II F of 9VAC25-32-70~~
343 1.

344 **9VAC25-192-70. Contents of the general permit.**

345 Any owner or animal waste end-user whose registration statement is accepted by the ~~board~~
346 department will receive the following general permit and shall comply with the requirements
347 therein and be subject to the VPA ~~permit regulation~~ Permit Regulation, 9VAC25-32.

348 General Permit No.: VPG1

349 Effective Date: November 16, ~~2014~~ 2024

350 Expiration Date: November 15, ~~2024~~ 2034

351 GENERAL PERMIT FOR POLLUTANT MANAGEMENT ACTIVITIES FOR ANIMAL
352 FEEDING OPERATIONS AND ANIMAL WASTE MANAGEMENT

353 AUTHORIZATION TO MANAGE POLLUTANTS UNDER THE VIRGINIA POLLUTION
354 ABATEMENT PROGRAM AND THE VIRGINIA STATE WATER CONTROL LAW

355 In compliance with the provisions of the State Water Control Law and State Water Control
356 Board regulations adopted pursuant thereto, owners of animal feeding operations having 300 or
357 more animal units utilizing a liquid manure collection and storage system, and animal waste end-
358 users are authorized to manage pollutants within the boundaries of the Commonwealth of Virginia,
359 except where board regulations prohibit such activities.

360 The authorized pollutant management activities shall be in accordance with the registration
361 statement, supporting documents submitted to the Department of Environmental Quality, this
362 cover page, Part I-Pollutant Management and Monitoring Requirements for Animal Feeding
363 Operations, Part II-Conditions Applicable to ~~all VPA Permits~~ this General Permit, and Part III-
364 Pollutant Management and Monitoring Requirements for Animal Waste End-Users, as set forth
365 herein.

366 Part I

367 Pollutant Management and Monitoring Requirements for Animal Feeding Operations

368 A. Pollutant management and monitoring requirements.

369 1. During the period beginning with ~~the~~ this general permit's effective date and lasting until
370 ~~the~~ this general permit's expiration date, the permittee is authorized to manage pollutants
371 at the location or locations identified in the registration statement and the facility's
372 approved nutrient management plan written for the animal feeding operation.

373 2. At earthen liquid waste storage facilities constructed after December 1, 1998, to an
374 elevation below the seasonal high water table or within one foot thereof, groundwater
375 monitoring wells shall be installed. A minimum of one up gradient and one down gradient
376 well shall be installed at each earthen waste storage facility that requires groundwater
377 monitoring. Existing wells may be utilized to meet this requirement if properly located and
378 constructed.

379 3. All ~~facilities~~ animal feeding operations previously covered under a general permit, an
380 individual VPA permit or VPDES permit that required groundwater monitoring shall
381 continue monitoring consistent with the requirements listed below regardless of where
382 they are located relative to the seasonal high water table.

383 4. At ~~facilities~~ animal feeding operations where groundwater monitoring is required, the
384 following conditions apply:

385 a. One data set shall be collected from each well prior to any waste being placed in
386 the storage facility.

387 b. The static water level shall be measured prior to bailing well water for sampling.

388 c. At least three well volumes of groundwater shall be withdrawn immediately prior to
389 sampling each monitoring well.

390 5. In accordance with subdivisions 2 and 3 of this subsection, the groundwater shall be
391 monitored by the permittee at the monitoring wells as specified ~~below~~ in Table 1 of Part I.
392 Additional groundwater monitoring may be required in the ~~facility's~~ approved nutrient
393 management plan written for the animal feeding operation.

394 6. If groundwater monitoring results for any monitored parameter demonstrate potential
395 noncompliance with this general permit related to the waste storage facility, then the

396 permittee shall submit an approvable groundwater monitoring action plan that outlines
 397 appropriate measures to be taken to address the noncompliance. The groundwater
 398 monitoring action plan shall be submitted to the department within 30 days of obtaining
 399 the monitoring results.

400 7. The analysis of the groundwater samples for ammonia nitrogen and nitrate nitrogen
 401 shall be performed by a laboratory accredited under the Virginia Environmental Laboratory
 402 Accreditation Program (VELAP) in accordance with 1VAC30-46-20. Field sampling,
 403 testing, and measurement of the static water level, pH, and conductivity where the sample
 404 is taken are not subject to the VELAP requirement.

TABLE 1.
GROUNDWATER MONITORING

PARAMETERS	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
Static Water Level	NL	Ft	1/3 years	Measured
Ammonia Nitrogen	NL	mg/L	1/3 years	Grab
Nitrate Nitrogen	NL	mg/L	1/3 years	Grab
pH	NL	SU	1/3 years	Grab
Conductivity	NL	umhos/cm umhos/cm	1/3 years	Grab

NL = No limit, this is a monitoring requirement only.

405 6. 8. Soil at the land application sites shall be monitored as specified below in Table 2 of
 406 Part I. Additional soils monitoring may be required in the facility's approved nutrient
 407 management plan written for the animal feeding operation.

TABLE 2.
SOILS MONITORING

PARAMETERS	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
pH	NL	SU	1/3 years	Composite
Phosphorus	NL	ppm or lbs/ac	1/3 years	Composite
Potash	NL	ppm or lbs/ac	1/3 years	Composite
Calcium	NL	ppm or lbs/ac	1/3 years	Composite
Magnesium	NL	ppm or lbs/ac	1/3 years	Composite

NL = No limit, this is a monitoring requirement only.

SU = Standard Units

408 7. 9. Soil monitoring shall be conducted at a depth of between 0-6 inches, unless otherwise
 409 specified in the facility's approved nutrient management plan written for the animal feeding
 410 operation.

411 8. 10. Waste shall be monitored as specified below in Table 3 of Part I. Additional waste
 412 monitoring may be required in the facility's approved nutrient management plan written for
 413 the animal feeding operation.

TABLE 3.
WASTE MONITORING

PARAMETERS	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
Total Kjeldahl Nitrogen	NL	*	1/year	Composite
Ammonia Nitrogen	NL	*	1/year	Composite
Total Phosphorus	NL	*	1/year	Composite
Total Potassium	NL	*	1/year	Composite
Calcium	NL	*	1/year	Composite
Magnesium	NL	*	1/year	Composite
Moisture Content	NL	%	1/year	Composite

NL = No limit, this is a monitoring requirement only.
 *Parameters for waste may be reported as a percent, as lbs/ton or lbs/1000 gallons, or as ppm where appropriate.

414 9. 11. Analysis of soil and waste shall be according to methods specified in the facility's
 415 approved nutrient management plan written for the animal feeding operation.

416 10. 12. All monitoring data collected as required by this section and any additional
 417 monitoring shall be maintained on site for a period of five years and shall be made
 418 available to department personnel upon request.

419 B. Other Site design, storage, and operations requirements or special conditions.

420 1. Any liquid manure collection and storage facility shall be designed and operated to (i)
 421 prevent point source discharges of pollutants to state waters except in the case of a storm
 422 event greater than the 25-year, 24-hour storm and (ii) provide adequate waste storage
 423 capacity to accommodate periods when the ground is frozen or saturated, periods when
 424 land application of nutrients should not occur due to limited or nonexistent crop nutrient
 425 uptake, and periods when physical limitations prohibit the land application of waste.

426 2. Waste storage facilities constructed after December 1, 1998, shall not be located on a
 427 100-year floodplain. For the purposes of determining the 100-year floodplain, a Federal
 428 Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), a FEMA
 429 Letter of Map Amendment (LOMA), or a FEMA Letter of Map Revision (LOMR) shall be
 430 used.

431 3. Earthen waste storage facilities constructed after December 1, 1998, shall include a
 432 properly designed and installed liner. Such liner shall be either a synthetic liner of at least
 433 20 mils thickness or a compacted soil liner of at least one foot thickness with a maximum
 434 permeability rating of 0.0014 inches per hour. A Virginia licensed professional engineer or
 435 an employee of the Natural Resources Conservation Service of the United States
 436 Department of Agriculture with appropriate engineering approval authority shall certify that

437 the siting, design, and construction of the waste storage facility comply with the
438 requirements of this general permit. This certification shall be maintained on site.

439 4. At earthen waste storage facilities constructed below the seasonal high water table, the
440 top surface of the waste must be maintained at a level of at least two feet above the water
441 table.

442 5. All liquid waste storage ~~or treatment~~ facilities shall maintain at least one foot of freeboard
443 at all times, up to and including a 25-year, 24-hour storm.

444 6. For new waste storage ~~or treatment~~ facilities constructed after November 16, 2014, the
445 facilities shall be constructed, operated, and maintained in accordance with the applicable
446 practice standard adopted by the Natural Resources Conservation Service of the U.S.
447 Department of Agriculture and approved by the department. A Virginia licensed
448 professional engineer or an employee of the Natural Resources Conservation Service of
449 the U.S. Department of Agriculture with appropriate engineering approval authority shall
450 certify that the siting, design, and construction of the waste storage facility comply with the
451 requirements of this general permit. This certification shall be maintained on site.

452 7. The permittee shall notify the department's regional office at least 14 days prior to (i)
453 animals being initially placed in the confined facility animal feeding operation or (ii) the
454 utilization of any new waste storage ~~or treatment~~ facilities.

455 8. Semi-solid and solid waste shall be stored in a manner that prevents contact with
456 surface water and groundwater. Waste that is stockpiled outside for more than 14 days
457 shall be kept in a waste storage facility or at a site that provides adequate storage.
458 Adequate storage shall, at a minimum, include the following:

459 a. Waste shall be covered to protect it from precipitation and wind;

460 b. Stormwater shall not run onto or under the stored waste;

461 c. A minimum of two feet separation distance to the seasonal high water table or an
462 impermeable barrier shall be used under the stored waste. All waste storage facilities
463 that use an impermeable barrier shall maintain a minimum of one foot separation
464 between the seasonal high water table and the impermeable barrier. "~~Seasonal high~~
465 ~~water table~~" means that portion of the soil profile where a color change has occurred
466 in the soil as a result of saturated soil conditions or where soil concretions have
467 formed. Typical colors are gray mottlings, solid gray, or black. The depth in the soil at
468 which these conditions first occur is termed the seasonal high water table.
469 Impermeable barriers shall be constructed of at least 12 inches of compacted clay, at
470 least four inches of reinforced concrete, or another material of similar structural
471 integrity that has a minimum permeability rating of 0.0014 inches per hour (1×10^{-6}
472 centimeters per second); and

473 d. For waste that is not stored in a waste storage facility or under roof, the storage site
474 must be at least 100 feet from any surface water, intermittent drainage, wells,
475 sinkholes, rock outcrops, and springs. For semi-solid and solid waste that is stored on
476 an impermeable barrier and where any stormwater runoff is collected in the waste
477 storage facility, the semi-solid and solid waste can be stored adjacent to the waste
478 storage facility regardless of the location of the waste storage facility so long as any
479 surface water, intermittent drainage, wells, sinkholes, rock outcrops, and springs are
480 protected from runoff from the stored semi-solid and solid waste.

481 Semi-solid and solid waste that is stored on an impermeable barrier and where any
482 stormwater runoff is collected in a waste storage facility is considered adequate storage
483 and is therefore not required to be covered.

484 9. All equipment needed for the proper operation of the permitted ~~facilities~~ animal feeding
485 operations shall be maintained in good working order. The manufacturer's operating and
486 maintenance manuals shall be retained for references to allow for timely maintenance and
487 prompt repair of equipment when appropriate. The permittee shall periodically inspect for
488 leaks on equipment used for land application of waste.

489 10. When wastes are treated by a digester or other manure treatment technologies, the
490 waste treatment process shall be approved by the department and shall be managed by
491 ~~a facility~~ the owner of an animal feeding operation covered under this general permit and
492 in accordance with the following conditions:

493 a. All treated wastes generated by a digester or other manure treatment technologies
494 must be managed through an approved nutrient management plan or transferred to
495 another entity in accordance with animal waste transfer requirements in Part 1 ~~B-15~~ C
496 6 and 16 7.

497 b. When ~~a facility~~ an animal feeding operation covered under this general permit
498 generates a treated waste from animal waste and other feedstock, the permittee shall
499 maintain records related to the production of the treated waste.

500 (1) If off-site wastes are added to generate the treated waste, then the permittee shall
501 record the following items:

502 (a) The amount of waste brought to the ~~facility~~ animal feeding operation; and

503 (b) From whom and where the waste originated.

504 (2) For all treated wastes generated by the ~~facility~~ animal feeding operation, the
505 permittee shall record the following items:

506 (a) The amount of treated waste generated;

507 (b) The nutrient analysis of the treated waste; and

508 (c) The final use of the treated waste.

509 (3) Permittees shall maintain the records required by Part I B 10 b (1) and (2) on site
510 for a period of three years. All records shall be made available to department personnel
511 upon request.

512 11. When the waste storage facility is no longer needed, the permittee shall close it in a
513 manner that (i) minimizes the need for further maintenance and (ii) controls, minimizes, or
514 eliminates, to the extent necessary to protect human health and the environment, the
515 postclosure escape of uncontrolled leachate, surface runoff, or waste decomposition
516 products to the groundwater, surface water, or the atmosphere. Prior to closure, the
517 permittee shall notify the department of any plans to close a liquid waste storage facility.
518 At closure, the permittee shall remove all waste residue from the animal waste storage
519 facility. Removed waste materials shall be utilized according to the approved NMP.

520 C. Animal waste use and transfer requirements.

521 14. 1. Animal waste generated by this facility an animal feeding operation that is subject
522 to this general permit shall not be applied to fields owned by or under the operational
523 control of either the permittee or a legal entity in which the permittee has an ownership

524 interest unless the fields are included in the ~~facility's~~ approved nutrient management plan
525 written for the animal feeding operation.

526 ~~12. 2.~~ The permittee shall implement a nutrient management plan (NMP) developed by a
527 certified nutrient management planner in accordance with § 10.1-104.2 of the Code of
528 Virginia and approved by the Department of Conservation and Recreation and maintain
529 the ~~plan~~ NMP on site. All revised and Department of Conservation and Recreation
530 approved NMPs shall be submitted to the department prior to the expiration of the previous
531 NMP. The NMP shall address the form, source, amount, timing, and method of application
532 of nutrients on each field to achieve realistic production goals, while minimizing nitrogen
533 and phosphorus loss to ground and surface waters. The terms of the NMP shall be
534 enforceable through this general permit. The NMP shall contain at a minimum the following
535 information:

- 536 a. Site map indicating the location of the waste storage facilities and the fields where
537 waste will be applied;
- 538 b. Site evaluation and assessment of soil types and potential productivities;
- 539 c. Nutrient management sampling including soil and waste monitoring;
- 540 d. Storage and land area requirements;
- 541 e. Calculation of waste application rates; and
- 542 f. Waste application schedules.

543 ~~13. 3.~~ Waste shall not be land applied within buffer zones. Buffer zones at waste
544 application sites shall, at a minimum, be maintained as follows:

- 545 a. Distance from occupied dwellings not on the permittee's property: 200 feet (unless
546 the occupant of the dwelling signs a waiver of the buffer zone);
- 547 b. Distance from water supply wells or springs: 100 feet;
- 548 c. Distance from surface water courses: 100 feet (without a ~~permanent~~ vegetated
549 buffer) or 35 feet (if a ~~permanent~~ vegetated buffer exists). Other site-specific
550 conservation practices may be approved by the department that will provide pollutant
551 reductions equivalent or better than the reductions that would be achieved by the 100-
552 foot buffer or 35-foot wide vegetated buffer;
- 553 d. Distance from rock outcropping (except limestone): 25 feet;
- 554 e. Distance from limestone outcroppings: 50 feet; and
- 555 f. Waste shall not be applied in such a manner that it would discharge to sinkholes that
556 may exist in the area.

557 ~~14. 4.~~ The following land application records shall be maintained:

- 558 a. The identification of the land application field sites where the waste is utilized or
559 stored;
- 560 b. The application rate;
- 561 c. The application dates; and
- 562 d. What crops have been planted.

563 These records shall be maintained on site for a period of five years after the date the
564 application is made and shall be made available to department personnel upon request.

565 5. In cases where a waste storage facility is threatened by emergencies such as fire or
566 flood or where these conditions are imminent, animal waste can be land applied outside
567 of the spreading schedule outlined in the NMP written for an animal feeding operation. If
568 this occurs, then the owner of the animal feeding operation shall document the land
569 application information in accordance with Part I C 4 and notify the department in
570 accordance with Part II F 3.

571 ~~15.~~ 6. Animal waste generated by this facility an animal feeding operation that is subject
572 to this general permit may be transferred from the permittee to another person if one or
573 more of the following conditions are met:

574 a. Animal waste generated by ~~this facility~~ an animal feeding operation that is subject
575 to this general permit may be transferred off-site for land application or another
576 acceptable use approved by the department, if:

577 (1) The sites where the animal waste will be utilized are included in ~~this permitted~~
578 ~~facility's~~ the animal feeding operation's approved nutrient management plan; or

579 (2) The sites where the animal waste will be utilized are included in another permitted
580 ~~facility's~~ entity's approved nutrient management plan.

581 b. Animal waste generated by ~~this facility~~ an animal feeding operation that is subject
582 to this general permit may be transferred off-site without identifying in the permittee's
583 approved nutrient management plan the fields where such waste will be utilized, if one
584 of the following conditions are met:

585 (1) The animal waste is registered with the Virginia Department of Agriculture and
586 Consumer Services in accordance with regulations adopted pursuant to subdivision A
587 2 of § 3.2-3607 of the Code of Virginia; or

588 (2) When the permittee transfers to another person more than 10 tons of solid or semi-
589 solid animal waste (solid or semi-solid animal waste contains less than 85% moisture)
590 or more than 6,000 gallons of liquid animal waste (liquid animal waste contains 85%
591 or more moisture) in any 365-day period, the permittee shall maintain records in
592 accordance with Part I ~~B-16~~ C 7.

593 ~~16.~~ 7. Animal waste may be transferred from a permittee to another person without
594 identifying the fields where such waste will be utilized in the permittee's approved nutrient
595 management plan if the following conditions are met:

596 a. When a permittee transfers to another person more than 10 tons of solid or semi-
597 solid animal waste (solid or semi-solid animal waste contains less than 85% moisture)
598 or more than 6,000 gallons of liquid animal waste (liquid animal waste contains 85%
599 or more moisture) in any 365-day period, the permittee shall provide that person with:

600 (1) Permittee's name, address, and permit number;

601 (2) A copy of the most recent nutrient analysis of the animal waste; and

602 (3) An animal waste fact sheet.

603 b. When a permittee transfers to another person more than 10 tons of solid or semi-
604 solid animal waste (solid or semi-solid animal waste contains less than 85% moisture)
605 or more than 6,000 gallons of liquid animal waste (liquid animal waste contains 85%
606 or more moisture) in any 365-day period, the permittee shall keep a record of the
607 following:

608 (1) The ~~recipient~~ recipient's name and address;

- 609 (2) The amount of animal waste received by the person;
 610 (3) The date of the transaction;
 611 (4) The nutrient analysis of the animal waste;
 612 (5) The locality in which the recipient intends to utilize the animal waste (i.e., nearest
 613 town or city and zip code);
 614 (6) The name of the stream or waterbody, if known, to the recipient that is nearest to
 615 the animal waste utilization or storage site; and
 616 (7) The signed waste transfer records form acknowledging the receipt of the following:
 617 (a) The animal waste;
 618 (b) The nutrient analysis of the animal waste; and
 619 (c) An animal waste fact sheet.
 620 c. Permittees shall maintain the records required by Part I B-16 C 7 a and b for at least
 621 three years after the date of the transaction and shall make them available to
 622 department personnel upon request.

623 ~~17. When the waste storage or treatment facility is no longer needed, the permittee shall~~
 624 ~~close it in a manner that (i) minimizes the need for further maintenance and (ii) controls,~~
 625 ~~minimizes, or eliminates, to the extent necessary to protect human health and the~~
 626 ~~environment, the postclosure escape of uncontrolled leachate, surface runoff, or waste~~
 627 ~~decomposition products to the groundwater, surface water, or the atmosphere. At closure,~~
 628 ~~the permittee shall remove all waste residue from the animal waste storage or treatment~~
 629 ~~facility. Removed waste materials shall be utilized according to the approved NMP.~~

630 18. ~~D. As required by § 62.1-44.17:1 F of the Code of Virginia, each~~ Each permittee covered
 631 under this general permit shall have completed the training program offered or approved by the
 632 department in the two years prior to submitting the registration statement for this general permit
 633 coverage; or shall complete such training within one year after the registration statement has been
 634 submitted for this general permit coverage. All permittees shall complete the training program at
 635 least once every three years.

636 Part II

637 Conditions Applicable to ~~all VPA Permits~~ this General Permit

638 A. ~~Sampling and analysis methods~~ Monitoring.

- 639 1. Samples and measurements taken as required by this general permit shall be
 640 representative of the ~~volume and nature of the~~ monitored activity.
 641 2. ~~Unless otherwise specified in this permit all sample preservation methods, maximum~~
 642 ~~holding times and analysis methods for pollutants~~ Groundwater monitoring shall ~~comply~~
 643 ~~with requirements set forth in Guidelines Establishing Test Procedures for the Analysis of~~
 644 ~~Pollutants~~ be conducted according to procedures listed under (40 CFR Part 136) unless
 645 otherwise specified in this general permit.
 646 3. ~~The sampling and analysis program to demonstrate compliance with the permit shall at~~
 647 ~~a minimum, conform to Part I of this permit.~~
 648 4. The permittee shall periodically calibrate and perform maintenance procedures on all
 649 monitoring and analytical instrumentation at intervals that will ensure accuracy of
 650 measurements.

651 4. If the permittee monitors any pollutant at the locations designated herein more
652 frequently than required by this general permit, using approved analytical methods as
653 specified above, the results of such monitoring shall be included in the calculation and
654 reporting of the values required in the project report. Such increased frequency shall also
655 be reported.

656 B. ~~Recording of results~~ Records. ~~For each measurement or sample taken pursuant to the~~
657 ~~requirements of this permit, the permittee shall record the following information:-~~

658 ~~1. The date, exact place and time of sampling or measurements;~~ Records of monitoring
659 information shall include:

660 ~~2. The persons who performed the sampling or measurements;~~

661 ~~3. The dates analyses were performed;~~

662 ~~4. The persons who performed each analysis;~~

663 ~~5. The analytical techniques or methods used; and~~

664 ~~6. The results of such analyses and measurements.~~

665 a. The date, exact place and time of sampling or measurements;

666 b. The name of the individuals who performed the sampling or measurements;

667 c. The dates analyses were performed;

668 d. The name of the individuals who performed each analysis;

669 e. The analytical techniques or methods used with supporting information such as
670 observations, readings, calculations and bench data; and

671 f. The results of such analyses.

672 2. The permittee shall retain records of all monitoring information, including all calibration
673 and maintenance records and all original strip chart recordings for continuous monitoring
674 instrumentation, copies of all reports required by this general permit, and records of all
675 data used to complete the application for this general permit for a period of at least three
676 years from the date of the sample, measurement, report or application. This period of
677 retention may be extended by request of the department at any time.

678 C. ~~Records retention~~ Reporting monitoring results. ~~All records and information resulting from~~
679 ~~the monitoring activities~~ If reporting is required by Part I or Part III of this general permit, including
680 ~~all records of analyses performed and calibration and maintenance of instrumentation and~~
681 ~~recording from continuous monitoring instrumentation~~ the permittee shall follow the requirements
682 of this subsection be retained on site for five years from the date of the sample, measurement or
683 report. This period of retention shall be extended automatically during the course of any
684 unresolved litigation regarding the regulated activity or regarding control standards applicable to
685 the permittee, or as requested by the director.

686 1. The permittee shall submit the results of the monitoring required by this general permit
687 not later than the 10th day of the month after the monitoring takes place, unless another
688 reporting schedule is specified elsewhere in this general permit. Monitoring results shall
689 be submitted to the department's regional office.

690 2. Monitoring results shall be reported on forms provided or specified by the department.

691 3. If the permittee monitors the pollutant management activity, at a sampling location
692 specified in this general permit, for any pollutant more frequently than required by this

693 general permit using approved analytical methods, the permittee shall report the results
694 of this monitoring on the monitoring report.

695 4. If the permittee monitors the pollutant management activity, at a sampling location
696 specified in this general permit, for any pollutant that is not required to be monitored by
697 the general permit, and uses approved analytical methods, the permittee shall report the
698 results with the monitoring report.

699 5. Calculations for all limitations that require averaging of measurements shall utilize an
700 arithmetic mean unless otherwise specified in this general permit.

701 D. Additional monitoring by permittee Duty to provide information. If the permittee monitors
702 any pollutant at the locations designated herein more frequently than required by this permit, using
703 approved analytical methods as specified above, the results of such monitoring shall be included
704 in the calculation and reporting of the values required in the project report. Such increased
705 frequency shall also be reported. The permittee shall furnish to the department, within a
706 reasonable time, any information which the director may request to determine whether cause
707 exists for modifying, revoking and reissuing, or terminating this general permit, or to determine
708 compliance with this general permit. The permittee shall also furnish to the department, upon
709 request, copies of records required to be kept by the permittee. Plans, specifications, maps,
710 conceptual reports, and other relevant information shall be submitted as requested by the director
711 prior to commencing construction.

712 E. Reporting requirements Unauthorized discharges. Except in compliance with this general
713 permit, or another issued by the department, it shall be unlawful for any person to:

714 1. If, for any reason, the permittee does not comply with one or more limitations, standards,
715 monitoring or management requirements specified in this permit, the permittee shall
716 submit to the department at least the following information: Discharge into state waters
717 sewage, industrial wastes, other wastes, or any noxious or deleterious substances; or

718 a. A description and cause of noncompliance;

719 b. The period of noncompliance, including exact dates and times or the anticipated
720 time when the noncompliance will cease; and

721 c. Actions taken or to be taken to reduce, eliminate, and prevent recurrence of the
722 noncompliance. Whenever such noncompliance may adversely affect state waters or
723 may endanger public health, the permittee shall submit the above required information
724 by oral report within 24 hours from the time the permittee becomes aware of the
725 circumstances and by written report within five days. The director may waive the
726 written report requirement on a case-by-case basis if the oral report has been received
727 within 24 hours and no adverse impact on state waters has been reported.

728 2. The permittee shall report any unpermitted, unusual or extraordinary discharge which
729 enters or could be expected to enter state waters. The permittee shall provide information,
730 specified in Part II E 1 a through c, regarding each such discharge immediately, that is, as
731 quickly as possible upon discovery, however, in no case later than 24 hours. A written
732 submission covering these points shall be provided within five days of the time the
733 permittee becomes aware of the circumstances covered by this paragraph. Otherwise
734 alter the physical, chemical, or biological properties of such state waters and make them
735 detrimental to the public health, or to animal or aquatic life, or to the use of such waters
736 for domestic or industrial consumption, or for recreation, or for other uses.

737 NOTE: The immediate (within 24 hours) reports required in Parts II E 1 and 2 may be made
738 to the department's regional office. Reports may be made by telephone. For reports outside

739 normal working hours, a message shall fulfill the immediate reporting requirement. For
740 emergencies, the Virginia Department of Emergency Management maintains a 24-hour telephone
741 service at 1-800-468-8892.

742 F. Signatory requirements Notice of planned changes, and reports of unauthorized
743 discharges, unusual or extraordinary discharges, noncompliance, and compliance schedules.
744 Any registration statement or certification required by this permit shall be signed as follows:

745 1. For a corporation, by a responsible corporate official Notice of planned changes. For
746 purposes of this section, a responsible corporate official means (i) a president, secretary,
747 treasurer, or vice president of the corporation in charge of a principal business function,
748 or any other person who performs similar policy or decision-making functions for the
749 corporation, or (ii) the manager of one or more manufacturing, production, or operating
750 facilities employing more than 250 persons or having gross annual sales or expenditures
751 exceeding \$25,000,000 (in second quarter 1980 dollars), if authority to sign documents
752 has been assigned or delegated to the manager in accordance with corporate procedures.

753 a. The permittee shall give notice to the department as soon as possible of any
754 planned physical alterations or additions to the design or operation of the pollutant
755 management activity.

756 b. The permittee shall give at least 10 days advance notice to the department of any
757 planned changes in the permitted facility or activity that may result in noncompliance
758 with the general permit requirements.

759 2. For a municipality, state, federal or other public agency by either a principal executive
760 officer or ranking elected official Reports of unauthorized discharges. (A principal
761 executive officer of a federal, municipal, or state agency includes the chief executive
762 officer of the agency or head executive officer having responsibility for the overall
763 operation of a principal geographic unit of the agency.) Any permittee who discharges or
764 causes or allows (i) a discharge of sewage, industrial wastes, other wastes, or any noxious
765 or deleterious substance into or upon state waters in violation of Part II E, or (ii) a discharge
766 that may reasonably be expected to enter state waters in violation of Part II E shall notify
767 the department of the discharge immediately upon discovery of the discharge, but in no
768 case later than 24 hours after said discovery. A written report of the unauthorized
769 discharge shall be submitted to the department within five days of discovery of the
770 discharge. The written report shall contain:

771 a. A description of the nature and location of the discharge;

772 b. The cause of the discharge;

773 c. The date on which the discharge occurred;

774 d. The length of time that the discharge continued;

775 e. The volume of the discharge;

776 f. If the discharge is continuing, how long it is expected to continue;

777 g. If the discharge is continuing, what the expected total volume of the discharge will
778 be; and

779 h. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the
780 present discharge or any future discharges not authorized by this general permit.

781 Discharges reportable to the department under the immediate reporting requirements of
782 other regulations are exempted from this requirement.

783 3. For a partnership or sole proprietorship, by a general partner or proprietor respectively
784 Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge
785 including a bypass or upset should occur from a treatment works and the discharge enters
786 or could be expected to enter state waters, the permittee shall promptly notify, in no case
787 later than 24 hours, the department by telephone after the discovery of the discharge. This
788 notification shall provide all available details of the incident, including any adverse effects
789 on aquatic life and the known number of fish killed. The permittee shall reduce the report
790 to writing and shall submit it to the department within five days of discovery of the
791 discharge in accordance with Part II F 4 b. Unusual and extraordinary discharges include
792 but are not limited to any discharge resulting from:

793 a. Unusual spillage of materials resulting directly or indirectly from processing
794 operations;

795 b. Breakdown of processing or accessory equipment;

796 c. Failure or taking out of service some or all of the treatment works; and

797 d. Flooding or other acts of nature.

798 4. Reports of noncompliance. The permittee shall report any noncompliance which may
799 adversely affect state waters or may endanger public health.

800 a. An oral report shall be provided within 24 hours from the time the permittee becomes
801 aware of the circumstances. The following shall be included as information which shall
802 be reported within 24 hours under this paragraph:

803 i. Any unanticipated bypass; and

804 ii. Any upset which causes a discharge to surface waters.

805 b. A written report shall be submitted within five days and shall contain:

806 i. A description of the noncompliance and its cause;

807 ii. The period of noncompliance, including exact dates and times, and, if the
808 noncompliance has not been corrected, the anticipated time it is expected to continue;
809 and

810 iii. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the
811 noncompliance.

812 The department may waive the written report on a case-by-case basis for reports of
813 noncompliance under Part II F 4 if the oral report has been received within 24 hours
814 and no adverse impact on state waters has been reported.

815 c. The permittee shall report all instances of noncompliance not reported under Part II
816 F 4 a or b in writing at the time the next monitoring reports are submitted. The reports
817 shall contain the information listed in Part II F 4 b.

818 NOTE: The immediate (within 24 hours) reports required in Part II F may be made to the
819 department's regional office. For reports outside normal working hours, leave a message
820 and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia
821 Department of Emergency Management maintains a 24-hour telephone service at 1-800-
822 468-8892.

823 5. Reports of compliance or noncompliance with, or any progress reports on, interim and
824 final requirements contained in any compliance schedule of this general permit shall be
825 submitted no later than 14 days following each schedule date.

826 G. ~~Change in management of pollutants~~ Proper operation and maintenance. All pollutant
827 management activities authorized by this permit shall be made in accordance with the terms and
828 conditions of the permit. The permittee shall submit a new registration statement 30 days prior to
829 all expansions, production increases, or process modifications, that will result in the management
830 of new or increased pollutants be responsible for the proper operation and maintenance of all
831 treatment works, systems and controls which are installed or used to achieve compliance with the
832 conditions of this permit. Proper operation and maintenance includes effective plant performance,
833 adequate funding, adequate staffing, and adequate laboratory and process controls, including
834 appropriate quality assurance procedures. The management of any pollutant at a level greater
835 than that identified and authorized by this permit, shall constitute a violation of the terms and
836 conditions of this permit.

837 H. ~~Treatment works operation and quality control~~ Signatory requirements.

838 1. ~~Design and operation of facilities or treatment works and disposal of all wastes shall be~~
839 ~~in accordance with the registration statement filed with the department. The permittee has~~
840 ~~the responsibility of designing and operating the facility in a reliable and consistent manner~~
841 ~~to meet the facility performance requirements in the permit. If facility deficiencies, design~~
842 ~~or operational, are identified in the future which could affect the facility performance or~~
843 ~~reliability, it is the responsibility of the permittee to correct such deficiencies~~ Applications.
844 All general permit applications shall be signed as follows:

845 a. For a corporation: by a responsible corporate officer. For the purpose of this section,
846 a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-
847 president of the corporation in charge of a principal business function, or any other
848 person who performs similar policy-making or decision-making functions for the
849 corporation or (ii) the manager of one or more manufacturing, production, or operating
850 facilities employing more than 250 persons or having gross annual sales or
851 expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to
852 sign documents has been assigned or delegated to the manager in accordance with
853 corporate procedures;

854 b. For a partnership or sole proprietorship: by a general partner or the proprietor,
855 respectively; or

856 c. For a municipality, state, federal, or other public agency: by either a principal
857 executive officer or ranking elected official. For purposes of this section, a principal
858 executive officer of a public agency includes: (i) the chief executive officer of the
859 agency or (ii) a senior executive officer having responsibility for the overall operations
860 of a principal geographic unit of the agency.

861 2. ~~All waste collection, control, treatment, management of pollutant activities and disposal~~
862 ~~facilities shall be operated in a manner consistent with the following~~ Reports, etc. All
863 reports required by general permits, and other information requested by the department
864 shall be signed by a person described in Part II H 1, or by a duly authorized representative
865 of that person. A person is a duly authorized representative only if:

866 a. At all times, all facilities and pollutant management activities shall be operated in a
867 prudent and workmanlike manner. The authorization is made in writing by a person
868 described in Part II H 1;

869 b. The permittee shall provide an adequate operating staff to carry out the operation,
870 maintenance and testing functions required to ensure compliance with the conditions
871 of this permit. authorization specifies either an individual or a position having
872 responsibility for the overall operation of the regulated facility or activity such as the

873 position of plant manager, operator of a well or a well field, superintendent, or a
874 position of equivalent responsibility. A duly authorized representative may thus be
875 either a named individual or any individual occupying a named position; and

876 ~~c. Maintenance of treatment facilities or pollutant management activities shall be~~
877 ~~carried out in such a manner that the monitoring and limitation requirements are not~~
878 ~~violated. The written authorization is submitted to the department.~~

879 ~~d. Collected solids shall be stored and utilized as specified in the approved nutrient~~
880 ~~management plan in such a manner as to prevent entry of those wastes (or runoff from~~
881 ~~the wastes) into state waters.~~

882 3. Changes to authorization. If an authorization under Part II H 2 is no longer accurate
883 because a different individual or position has responsibility for the overall operation of the
884 facility, a new authorization satisfying the requirements of Part II H 2 shall be submitted to
885 the department prior to or together with any reports, or information to be signed by an
886 authorized representative.

887 4. Certification. Any person signing a document under Part II H 1 or 2 shall make the
888 following certification: "I certify under penalty of law that this document and all attachments
889 were prepared under my direction or supervision in accordance with a system designed
890 to assure that qualified personnel properly gather and evaluate the information submitted.
891 Based on my inquiry of the person or persons who manage the system, or those persons
892 directly responsible for gathering the information, the information submitted is, to the best
893 of my knowledge and belief, true, accurate, and complete. I am aware that there are
894 significant penalties for submitting false information, including the possibility of fine and
895 imprisonment for knowing violations."

896 ~~I. Adverse impact Duty to comply. The permittee shall take comply with all feasible steps to~~
897 ~~minimize any adverse impact to state waters resulting from noncompliance with any limitation or~~
898 ~~limitations or conditions specified in of this general permit, and shall perform and report such~~
899 ~~accelerated or additional monitoring as is necessary to determine the nature and impact of the~~
900 ~~noncomplying limitation or limitations or conditions 9VAC25-192. Any noncompliance with this~~
901 ~~general permit or 9VAC25-192 constitutes a violation of the State Water Control Law. General~~
902 ~~permit noncompliance is grounds for enforcement action; for permit termination, revocation and~~
903 ~~reissuance, or modification; or denial of a permit renewal application. Compliance with this~~
904 ~~general permit during its term constitutes compliance, for purposes of enforcement, with the State~~
905 ~~Water Control Law.~~

906 ~~J. Duty to halt, reduce activity or to mitigate reapply. If the permittee wishes to continue an~~
907 ~~activity regulated by this general permit after the expiration date of this general permit, the~~
908 ~~permittee shall apply for and obtain a new permit. All permittees with a currently effective general~~
909 ~~permit shall submit a new application before the expiration date of the existing general permit~~
910 ~~unless permission for a later date has been granted by the board. The board shall not grant~~
911 ~~permission for applications to be submitted later than the expiration date of the existing general~~
912 ~~permit.~~

913 ~~1. It shall not be a defense for a permittee in an enforcement action that it would have~~
914 ~~been necessary to halt or reduce the permitted activity in order to maintain compliance~~
915 ~~with the conditions of this permit.~~

916 ~~2. The permittee shall take all reasonable steps to minimize, correct or prevent any~~
917 ~~discharge in violation of this permit which has a reasonable likelihood of adversely~~
918 ~~affecting human health or the environment.~~

919 K. ~~Structural stability Bypass. The structural stability of any of the units or parts of the facilities~~
920 ~~herein permitted is the sole responsibility of the permittee and the failure of such structural units~~
921 ~~or parts shall not relieve the permittee of the responsibility of complying with all terms and~~
922 ~~conditions of this permit.~~

923 1. Prohibition. "Bypass" means intentional diversion of waste streams from any portion of
924 a treatment works. A bypass of the treatment works is prohibited except as provided
925 herein.

926 2. Anticipated bypass. If the permittee knows in advance of the need for a bypass, he shall
927 notify the department promptly at least 10 days prior to the bypass. After considering its
928 adverse effects, the department may approve an anticipated bypass if:

929 a. The bypass will be unavoidable to prevent loss of human life, personal injury, or
930 severe property damage. "Severe property damage" means substantial physical
931 damage to property, damage to the treatment works that causes them to become
932 inoperable, or substantial and permanent loss of natural resources which can
933 reasonably be expected to occur in the absence of a bypass. "Severe property
934 damage" does not mean economic loss caused by delays in production; and

935 b. There are no feasible alternatives to bypass such as the use of auxiliary treatment
936 works, retention of untreated waste, or maintenance during normal periods of
937 equipment downtime. However, if bypass occurs during normal periods of equipment
938 downtime or preventive maintenance and in the exercise of reasonable engineering
939 judgment the permittee could have installed adequate backup equipment to prevent
940 such bypass, this exclusion shall not apply as a defense.

941 3. Unplanned bypass. If an unplanned bypass occurs, the permittee shall notify the
942 department as soon as possible, but in no case later than 24 hours, and shall take steps
943 to halt the bypass as early as possible. This notification will be a condition for defense to
944 an enforcement action that an unplanned bypass met the conditions in Part II K 2 a and b
945 and in light of the information reasonably available to the permittee at the time of the
946 bypass.

947 L. ~~Compliance with state law Upset. Compliance with this permit during its term constitutes~~
948 ~~compliance with the State Water Control Law. Nothing in this permit shall be construed to preclude~~
949 ~~the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities,~~
950 ~~or penalties established pursuant to any other state law or regulation. A permittee may claim an~~
951 ~~upset as an affirmative defense to an action brought for noncompliance. In any enforcement~~
952 ~~proceedings a permittee shall have the burden of proof to establish the occurrence of any upset.~~
953 ~~In order to establish an affirmative defense of upset, the permittee shall present properly signed,~~
954 ~~contemporaneous operating logs or other relevant evidence that shows:~~

955 1. That an upset occurred and that the cause can be identified;

956 2. That the permitted facility was at the time being operated efficiently and in
957 compliance with proper operation and maintenance procedures;

958 3. That the 24-hour reporting requirements to the department were met; and

959 4. That the permittee took all reasonable steps to minimize or correct any adverse
960 impact on state waters resulting from noncompliance with the permit.

961 M. ~~Property rights Inspection and entry. The issuance of this permit does not convey any~~
962 ~~property rights in either real or personal property, or any exclusive privileges, nor does it authorize~~
963 ~~any injury to private property or any invasion of personal rights, nor any infringement of federal,~~

964 ~~state, or local laws or regulations. Upon presentation of credentials, any duly authorized agent of~~
965 ~~the department may, at reasonable times and under reasonable circumstances:~~

966 ~~1. Enter upon any public or private property on which the pollutant management~~
967 ~~activities that are governed by this general permit are located and have access to~~
968 ~~records required by this general permit;~~

969 ~~2. Have access to, inspect and copy any records that must be kept as part of the~~
970 ~~conditions in this general permit;~~

971 ~~3. Inspect any facility's equipment (including monitoring and control equipment)~~
972 ~~practices or operations regulated or required under this general permit; and~~

973 ~~4. Sample or monitor any substances or parameters at any locations for the purpose~~
974 ~~of assuring general permit compliance or as otherwise authorized by the State Water~~
975 ~~Control Law.~~

976 ~~N. Severability Effect of a permit. The provisions of this permit are severable. This general~~
977 ~~permit does not convey any property rights in either real or personal property or any exclusive~~
978 ~~privileges, nor does it authorize any injury to private property or invasion of personal rights, or any~~
979 ~~infringement of federal, state, or local law or regulations.~~

980 ~~O. Duty to reregister State law. If the permittee wishes to continue to operate under a general~~
981 ~~permit after the expiration date of this permit, the permittee must submit a new registration~~
982 ~~statement at least 30 days prior to the expiration date of this permit. Nothing in this general permit~~
983 ~~shall be construed to preclude the institution of any legal action under, or relieve the permittee~~
984 ~~from any responsibilities, liabilities, or penalties established pursuant to any other state law or~~
985 ~~regulation or under authority preserved by § 510 of the federal Clean Water Act. Except as~~
986 ~~provided in general permit conditions on bypassing (Part II K), and upset (Part II L), nothing in~~
987 ~~this general permit shall be construed to relieve the permittee from civil and criminal penalties for~~
988 ~~noncompliance.~~

989 ~~P. Right of entry Oil and hazardous substance liability. The permittee shall allow, or secure~~
990 ~~necessary authority to allow, authorized state representatives, upon the presentation of~~
991 ~~credentials: Nothing in this general permit shall be construed to preclude the institution of any~~
992 ~~legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the~~
993 ~~permittee is or may be subject under §§ 62.1-44.34:14 through 62.1-44.34:23 of the State Water~~
994 ~~Control Law.~~

995 ~~1. To enter upon the permittee's premises on which the establishment, treatment works,~~
996 ~~pollutant management activities, or discharge or discharges is located or in which any~~
997 ~~records are required to be kept under the terms and conditions of this permit;~~

998 ~~2. To have access to inspect and copy at reasonable times any records required to be~~
999 ~~kept under the terms and conditions of this permit;~~

1000 ~~3. To inspect at reasonable times any monitoring equipment or monitoring method~~
1001 ~~required in this permit;~~

1002 ~~4. To sample at reasonable times any waste stream, process stream, raw material or by-~~
1003 ~~product; and~~

1004 ~~5. To inspect at reasonable times any collection, treatment, or pollutant management~~
1005 ~~activities required under this permit. For purposes of this section, the time for inspection~~
1006 ~~shall be deemed reasonable during regular business hours, and whenever the facility is~~
1007 ~~discharging or involved in managing pollutants. Nothing contained here shall make an~~
1008 ~~inspection time unreasonable during an emergency.~~

1009 Q. ~~Transferability of permits~~ Duty to mitigate. Coverage under this permit may be transferred
1010 to a new owner by a permittee if: The permittee shall take all reasonable steps to minimize or
1011 prevent any pollutant management activity in violation of this general permit which has a
1012 reasonable likelihood of adversely affecting human health or the environment.

1013 1. ~~The current permittee notifies the department 30 days in advance of the proposed~~
1014 ~~transfer of the title to the facility or property;~~

1015 2. ~~The notice to the department includes a written agreement between the existing and~~
1016 ~~proposed new permittee containing a specific date of transfer of permit responsibility,~~
1017 ~~coverage and liability between them; and~~

1018 3. ~~The department does not within the 30-day time period notify the existing permittee and~~
1019 ~~the proposed permittee of the board's intent to transfer coverage under the permit. Such~~
1020 ~~transferred coverage under this permit shall, as of the date of the transfer, be fully~~
1021 ~~effective.~~

1022 R. ~~Permit modification~~ Need to halt or reduce activity not a defense. ~~The permit may be~~
1023 ~~modified when a change is made in the promulgated standards or regulations on which the permit~~
1024 ~~was based. It shall not be a defense for a permittee in an enforcement action that it would have~~
1025 ~~been necessary to halt or reduce the permitted activity in order to maintain compliance with the~~
1026 ~~conditions of this general permit.~~

1027 S. ~~Permit termination action~~. ~~After public notice and opportunity for a hearing, coverage under~~
1028 ~~the general permit may be terminated for cause. Permits may be modified, revoked and reissued,~~
1029 ~~or terminated for cause upon the request of the permittee or interested persons, or upon the~~
1030 ~~department's initiative. If a permittee files a request for a general permit modification, revocation,~~
1031 ~~or termination, or files a notification of planned changes, or anticipated noncompliance, the~~
1032 ~~general permit terms and conditions shall remain effective until the request is acted upon by the~~
1033 ~~department. This provision shall not be used to extend the expiration date of the effective general~~
1034 ~~permit.~~

1035 T. When an individual VPA permit may be required. The director may require any permittee
1036 authorized to manage pollutants covered under this general permit to apply for and obtain an
1037 individual VPA permit. Cases where an individual VPA permit may be required include, but are
1038 not limited to, the following:

1039 1. The pollutant management activities violate the terms or conditions of this general
1040 permit;

1041 2. When additions or alterations have been made to the affected facility that require the
1042 application of permit conditions that differ from those of the existing general permit or are
1043 absent from it; and

1044 3. When new information becomes available about the operation or pollutant management
1045 activities covered under this general permit that was not available at the time of general
1046 permit coverage.

1047 Coverage under this general permit may be terminated as to an individual permittee for any
1048 of the reasons set forth above after appropriate notice and an opportunity for a hearing.

1049 U. When an individual VPA permit may be requested. Any permittee operating under this
1050 general permit may request to be excluded from the coverage under this general permit by
1051 applying for an individual VPA permit. When an individual VPA permit is issued to a permittee the
1052 applicability of this general permit to the individual permittee is automatically terminated on the
1053 effective date of the individual VPA permit.

1054 V. ~~Civil and criminal liability~~ Transfer of coverage under this general permit. Nothing in this
1055 permit shall be construed to relieve the permittee from civil and criminal penalties for
1056 noncompliance with the terms of this permit.

1057 1. Permits are not transferable to any person except after notice to the department.
1058 The department may require modification or revocation and reissuance of this general
1059 permit to change the name of the permittee and to incorporate such other requirements
1060 as may be necessary. Except as provided in Part II V 2, coverage under this general
1061 permit may be transferred by the permittee to a new owner or operator only if the
1062 general permit has been modified to reflect the transfer or has been revoked and
1063 reissued to the new owner or operator.

1064 2. As an alternative to transfers under Part II V 1, coverage under this general permit
1065 shall be automatically transferred to a new permittee if:

1066 a. The current permittee notifies the department within 30 days of the transfer of the
1067 title to the facility or property;

1068 b. The notice includes a written agreement between the existing and new permittees
1069 containing a specific date for transfer of general permit responsibility, coverage, and
1070 liability between them; and

1071 c. The department does not, within the 30-day time period, notify the existing permittee
1072 and the proposed new permittee of its intent to modify or revoke and reissue the
1073 coverage under this general permit. If the department notice is not received, the
1074 transfer is effective on the date specified in the agreement mentioned in Part II V 2 b.

1075 W. ~~Oil and hazardous substance liability~~ Severability. Nothing in this permit shall be construed
1076 to preclude the institution of any legal action or relieve the permittee from any responsibilities,
1077 liabilities, or penalties to which the permittee is or may be subject under § 311 of the Clean Water
1078 Act or §§ 62.1-44.34:14 through 62.1-44.34:23 of the Code of Virginia. The provisions of this
1079 general permit are severable and, if any provision of this permit or the application of any provision
1080 of this general permit to any circumstance is held invalid, the application of such provision to other
1081 circumstances and the remainder of this general permit shall not be affected thereby.

1082 X. ~~Unauthorized discharge of pollutants.~~ Except in compliance with this permit, it shall be
1083 unlawful for any permittee to:

1084 ~~1. Discharge into state waters sewage, industrial wastes, other wastes or any noxious or~~
1085 ~~deleterious substances; or~~

1086 ~~2. Otherwise alter the physical, chemical or biological properties of such state waters and~~
1087 ~~make them detrimental to the public health, or to animal or aquatic life, or to the uses of~~
1088 ~~such waters for domestic or industrial consumption, or for recreation, or for other uses.~~

1089 Part III
1090 Pollutant Management and Monitoring Requirements for Animal Waste End-Users

1091 A. Pollutant management and monitoring requirements.

1092 1. During the period beginning with ~~the~~ this general permit's effective date and lasting until
1093 ~~the~~ this general permit's expiration date, the permittee is authorized to manage pollutants
1094 at the location or locations identified in the registration statement and the facility's
1095 approved nutrient management plan written for the animal waste end-user.

1096 2. At earthen liquid waste storage facilities constructed after December 1, 1998, to an
1097 elevation below the seasonal high water table or within one foot thereof, groundwater
1098 monitoring wells shall be installed. A minimum of one up gradient and one down gradient

1099 well shall be installed at each earthen waste storage facility that requires groundwater
 1100 monitoring. Existing wells may be utilized to meet this requirement if properly located and
 1101 constructed.

1102 3. All ~~facilities~~ animal waste end-users previously covered under a general permit,
 1103 individual VPA permit or VPDES permit that required groundwater monitoring shall
 1104 continue monitoring consistent with the requirements listed below regardless of where
 1105 they are located relative to the seasonal high water table.

1106 4. At ~~facilities where~~ Where groundwater monitoring is required, the following conditions
 1107 apply:

1108 a. One data set shall be collected from each well prior to any waste being placed in
 1109 the storage facility.

1110 b. The static water level shall be measured prior to bailing well water for sampling.

1111 c. At least three well volumes of groundwater shall be withdrawn immediately prior to
 1112 sampling each monitoring well.

1113 5. In accordance with subdivisions 2 and 3 of this subsection, the groundwater shall be
 1114 monitored by the permittee at the monitoring wells as specified ~~below~~ in Table 1 of Part
 1115 III. Additional groundwater monitoring may be required in the ~~facility's~~ approved nutrient
 1116 management plan written for the animal waste end-user.

1117 6. If groundwater monitoring results for any monitored parameter demonstrate potential
 1118 noncompliance with this general permit related to the waste storage facility, then the
 1119 permittee shall submit an approvable groundwater monitoring action plan that outlines
 1120 appropriate measures to be taken to address the noncompliance. The groundwater
 1121 monitoring action plan shall be submitted to the department within 30 days of obtaining
 1122 the monitoring results.

1123 7. The analysis of the groundwater samples for ammonia nitrogen and nitrate nitrogen
 1124 shall be performed by a laboratory accredited under the Virginia Environmental Laboratory
 1125 Accreditation Program (VELAP) in accordance with 1VAC30-46-20. Field sampling,
 1126 testing, and measurement of the static water level, pH, and conductivity where the sample
 1127 is taken are not subject to the VELAP requirement.

TABLE 1.
 GROUNDWATER MONITORING

PARAMETERS	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
Static Water Level	NL	Ft	1/3 years	Measured
Ammonia Nitrogen	NL	mg/L	1/3 years	Grab
Nitrate Nitrogen	NL	mg/L	1/3 years	Grab
pH	NL	SU	1/3 years	Grab
Conductivity	NL	umhos/cm umhos/cm	1/3 years	Grab

NL = No limit, this is a monitoring requirement only.

1128 6. 8. Soil at the land application sites shall be monitored as specified below in Table 2 of
 1129 Part III. Additional soils monitoring may be required in the facility's approved nutrient
 1130 management plan written for the animal waste end-user.

TABLE 2.
SOILS MONITORING

PARAMETERS	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
pH	NL	SU	1/3 years	Composite
Phosphorus	NL	ppm or lbs/ac	1/3 years	Composite
Potash	NL	ppm or lbs/ac	1/3 years	Composite
Calcium	NL	ppm or lbs/ac	1/3 years	Composite
Magnesium	NL	ppm or lbs/ac	1/3 years	Composite

NL = No limit, this is a monitoring requirement only.
 SU = Standard Units

1131 7. 9. Soil monitoring shall be conducted at a depth of between 0-6 inches, unless otherwise
 1132 specified in the facility's approved nutrient management plan written for the animal waste
 1133 end-user.

1134 8. 10. Waste shall be monitored as specified below in Table 3 of Part III. Additional waste
 1135 monitoring may be required in the facility's approved nutrient management plan written for
 1136 the animal waste end-user.

TABLE 3.
WASTE MONITORING

PARAMETERS	LIMITATIONS	UNITS	MONITORING REQUIREMENTS	
			Frequency	Sample Type
Total Kjeldahl Nitrogen	NL	*	1/year	Composite
Ammonia Nitrogen	NL	*	1/year	Composite
Total Phosphorus	NL	*	1/year	Composite
Total Potassium	NL	*	1/year	Composite
Calcium	NL	*	1/year	Composite
Magnesium	NL	*	1/year	Composite
Moisture Content	NL	%	1/year	Composite

NL = No limit, this is a monitoring requirement only.

*Parameters for waste may be reported as a percent, as lbs/ton or lbs/1000 gallons, or as ppm where appropriate.

1137 9. 11. Analysis of soil and waste shall be according to methods specified in the facility's
 1138 approved nutrient management plan written for the animal waste end-user.

1139 40. ~~12.~~ All monitoring data collected as required by this section and any additional
1140 monitoring shall be maintained on site for a period of five years and shall be made
1141 available to department personnel upon request.

1142 B. ~~Other~~ Site design, storage, and operation requirements or special conditions.

1143 1. Any liquid manure collection and storage facility shall be designed and operated to (i)
1144 prevent point source discharges of pollutants to state waters except in the case of a storm
1145 event greater than the 25-year, 24-hour storm and (ii) provide adequate waste storage
1146 capacity to accommodate periods when the ground is frozen or saturated, periods when
1147 land application of nutrients should not occur due to limited or nonexistent crop nutrient
1148 uptake, and periods when physical limitations prohibit the land application of waste.

1149 2. Waste storage facilities constructed after December 1, 1998, shall not be located on a
1150 100-year floodplain. For the purposes of determining the 100-year floodplain, a Federal
1151 Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), a FEMA
1152 Letter of Map Amendment (LOMA), or a FEMA Letter of Map Revision (LOMR) shall be
1153 used.

1154 3. Earthen waste storage facilities constructed after December 1, 1998, shall include a
1155 properly designed and installed liner. Such liner shall be either a synthetic liner of at least
1156 20 mils thickness or a compacted soil liner of at least one foot thickness with a maximum
1157 permeability rating of 0.0014 inches per hour. A Virginia licensed professional engineer or
1158 an employee of the Natural Resources Conservation Service of the U.S. Department of
1159 Agriculture with appropriate engineering approval authority shall certify that the siting,
1160 design, and construction of the waste storage facility comply with the requirements of this
1161 general permit. This certification shall be maintained on site.

1162 4. At earthen waste storage facilities constructed below the seasonal high water table, the
1163 top surface of the waste must be maintained at a level of at least two feet above the water
1164 table.

1165 5. All liquid waste storage ~~or treatment~~ facilities shall maintain at least one foot of freeboard
1166 at all times, up to and including a 25-year, 24-hour storm.

1167 6. For new waste storage ~~or treatment~~ facilities constructed after November 16, 2014, the
1168 facilities shall be constructed, operated, and maintained in accordance with the applicable
1169 practice standard adopted by the Natural Resources Conservation Service of the U.S.
1170 Department of Agriculture and approved by the department. A Virginia licensed
1171 professional engineer or an employee of the Natural Resources Conservation Service of
1172 the U.S. Department of Agriculture with appropriate engineering approval authority shall
1173 certify that the siting, design, and construction of the waste storage facility comply with the
1174 requirements of this general permit. This certification shall be maintained on site.

1175 7. The permittee shall notify the department's regional office at least 14 days prior to (i)
1176 animals being initially placed ~~in the confined facility~~ into confinement or (ii) the utilization
1177 of any new waste storage ~~or treatment~~ facilities.

1178 8. Semi-solid and solid waste shall be stored in a manner that prevents contact with
1179 surface water and groundwater. Waste that is stockpiled outside for more than 14 days
1180 shall be kept in a waste storage facility or at a site that provides adequate storage.
1181 Adequate storage shall, at a minimum, include the following:

1182 a. Waste shall be covered to protect it from precipitation and wind;

1183 b. Stormwater shall not run onto or under the stored waste;

1184 c. A minimum of two feet separation distance to the seasonal high water table or an
1185 impermeable barrier shall be used under the stored waste. All waste storage facilities
1186 that use an impermeable barrier shall maintain a minimum of one foot separation
1187 between the seasonal high water table and the impermeable barrier. "~~Seasonal high~~
1188 ~~water table~~" means ~~that portion of the soil profile where a color change has occurred~~
1189 ~~in the soil as a result of saturated soil conditions or where soil concretions have~~
1190 ~~formed. Typical colors are gray mottlings, solid gray, or black. The depth in the soil at~~
1191 ~~which these conditions first occur is termed the seasonal high water table.~~
1192 Impermeable barriers shall be constructed of at least 12 inches of compacted clay, at
1193 least four inches of reinforced concrete, or another material of similar structural
1194 integrity that has a minimum permeability rating of 0.0014 inches per hour (1X10⁻⁶
1195 centimeters per second); and

1196 d. For waste that is not stored in a waste storage facility or under roof, the storage site
1197 must be at least 100 feet from any surface water, intermittent drainage, wells,
1198 sinkholes, rock outcrops, and springs. For semi-solid and solid waste that is stored on
1199 an impermeable barrier and where any stormwater runoff is collected in the waste
1200 storage facility, the semi-solid and solid waste can be stored adjacent to the waste
1201 storage facility regardless of the location of the waste storage facility so long as any
1202 surface water, intermittent drainage, wells, sinkholes, rock outcrops, and springs are
1203 protected from runoff from the stored semi-solid and solid waste.

1204 Semi-solid and solid waste that is stored on an impermeable barrier and where any
1205 stormwater runoff is collected in a waste storage facility is considered adequate storage
1206 and is therefore not required to be covered.

1207 9. All equipment needed for ~~the proper operation of the permitted facilities~~ shall be
1208 maintained in good working order. The manufacturer's operating and maintenance
1209 manuals shall be retained for references to allow for timely maintenance and prompt repair
1210 of equipment when appropriate. The permittee shall periodically inspect for leaks on
1211 equipment used for land application of waste.

1212 10. All treated wastes generated by a digester or other manure treatment technologies
1213 shall be approved by the department and shall be managed by a ~~facility~~ the animal waste
1214 end-user covered under this general permit and in accordance with the following
1215 conditions:

1216 a. All treated wastes generated by a digester or other manure treatment technologies
1217 must be managed through an approved nutrient management plan or transferred to
1218 another entity in accordance with animal waste transfer requirements in Part III ~~B-15~~
1219 C 6 and 46 7.

1220 b. When a ~~facility~~ animal waste end-user covered under this general permit generates
1221 a treated waste from animal waste and other feedstock, the permittee shall maintain
1222 records related to the production of the treated waste.

1223 (1) If off-site wastes are added to generate the treated waste, then the permittee shall
1224 record the following items:

1225 (a) The amount of waste brought to the ~~facility~~ animal waste end-user; and

1226 (b) From whom and where the waste originated.

1227 (2) For all treated wastes generated by the ~~facility~~ animal waste end-user, the
1228 permittee shall record the following items:

1229 (a) The amount of treated waste generated;

- 1230 (b) The nutrient analysis of the treated waste; and
 1231 (c) The final use of the treated waste.
 1232 (3) Permittees shall maintain the records required by Part III B 10 b (1) and (2) on site
 1233 for a period of three years. All records shall be made available to department personnel
 1234 upon request.

1235 11. When the waste storage facility is no longer needed, the permittee shall close it in a
 1236 manner that (i) minimizes the need for further maintenance and (ii) controls, minimizes, or
 1237 eliminates, to the extent necessary to protect human health and the environment, the
 1238 postclosure escape of uncontrolled leachate, surface runoff, or waste decomposition
 1239 products to the groundwater, surface water, or the atmosphere. Prior to closure, the
 1240 permittee shall notify the department of any plans to close a liquid waste storage facility.
 1241 At closure, the permittee shall remove all waste residue from the animal waste storage
 1242 facility. Removed waste materials shall be utilized according to the approved NMP.

1243 C. Animal waste use and transfer requirements.

1244 ~~14.~~ 1. Animal waste generated by this facility an animal waste end-user that is subject to
 1245 this general permit shall not be applied to fields owned by or under the operational control
 1246 of either the permittee or a legal entity in which the permittee has an ownership interest
 1247 unless the fields are included in the facility's approved nutrient management plan written
 1248 for this animal waste end-user.

1249 ~~12.~~ 2. The permittee shall implement a nutrient management plan (NMP) developed by a
 1250 certified nutrient management planner in accordance with § 10.1-104.2 of the Code of
 1251 Virginia and approved by the Department of Conservation and Recreation and maintain
 1252 the plan on site. All revised and Department of Conservation and Recreation approved
 1253 NMPs shall be submitted to the department prior to the expiration of the previous NMP.
 1254 The NMP shall address the form, source, amount, timing, and method of application of
 1255 nutrients on each field to achieve realistic production goals, while minimizing nitrogen and
 1256 phosphorus loss to ground and surface waters. The terms of the NMP shall be enforceable
 1257 through this general permit. The NMP shall contain at a minimum the following information:

- 1258 a. Site map indicating the location of the waste storage facilities and the fields where
- 1259 waste will be applied;
- 1260 b. Site evaluation and assessment of soil types and potential productivities;
- 1261 c. Nutrient management sampling including soil and waste monitoring;
- 1262 d. Storage and land area requirements;
- 1263 e. Calculation of waste application rates; and
- 1264 f. Waste application schedules.

1265 ~~13.~~ 3. Waste shall not be land applied within buffer zones. Buffer zones at waste
 1266 application sites shall, at a minimum, be maintained as follows:

- 1267 a. Distance from occupied dwellings not on the permittee's property: 200 feet (unless
- 1268 the occupant of the dwelling signs a waiver of the buffer zone);
- 1269 b. Distance from water supply wells or springs: 100 feet;
- 1270 c. Distance from surface water courses: 100 feet (without a ~~permanent~~ vegetated
- 1271 buffer) or 35 feet (if a ~~permanent~~ vegetated buffer exists). Other site-specific
- 1272 conservation practices may be approved by the department that will provide pollutant

- 1273 reductions equivalent or better than the reductions that would be achieved by the 100-
1274 foot buffer or 35-foot wide vegetated buffer;
- 1275 d. Distance from rock outcropping (except limestone): 25 feet;
- 1276 e. Distance from limestone outcroppings: 50 feet; and
- 1277 f. Waste shall not be applied in such a manner that it would discharge to sinkholes that
1278 may exist in the area.
- 1279 14. 4. The following land application records shall be maintained:
- 1280 a. The identification of the land application field sites where the waste is utilized or
1281 stored;
- 1282 b. The application rate;
- 1283 c. The application dates; and
- 1284 d. What crops have been planted.
- 1285 These records shall be maintained on site for a period of five years after the date the
1286 application is made and shall be made available to department personnel upon request.
- 1287 5. In cases where a waste storage facility is threatened by emergencies such as fire or
1288 flood or where these conditions are imminent, animal waste can be land applied outside
1289 of the spreading schedule outlined in the NMP written for the animal waste end-user. If
1290 this occurs, then the animal waste end-user shall document the land application
1291 information in accordance with Part III C 4 and notify the department in accordance with
1292 Part II F 3.
- 1293 ~~15. 6.~~ Animal waste generated by ~~this facility~~ an animal waste end-user that is subject to
1294 this general permit may be transferred from the permittee to another person, if one or more
1295 of the following conditions are met:
- 1296 a. Animal waste generated by ~~this facility~~ an animal waste end-user that is subject to
1297 this general permit may be transferred off-site for land application or another
1298 acceptable use approved by the department, if:
- 1299 (1) The sites where the animal waste will be utilized are included in ~~this permitted~~
1300 ~~facility's~~ the animal waste end-user's approved nutrient management plan; or
- 1301 (2) The sites where the animal waste will be utilized are included in another permitted
1302 ~~facility's~~ entity's approved nutrient management plan.
- 1303 b. Animal waste generated by ~~this facility~~ an animal waste end-user that is subject to
1304 this general permit may be transferred off-site without identifying in the permittee's
1305 approved nutrient management plan the fields where such waste will be utilized, if the
1306 following conditions are met:
- 1307 (1) The animal waste is registered with the Virginia Department of Agriculture and
1308 Consumer Services in accordance with regulations adopted pursuant to subdivision A
1309 2 of § 3.2-3607 of the Code of Virginia; or
- 1310 (2) When the permittee transfers to another person more than 10 tons of solid or semi-
1311 solid animal waste (solid or semi-solid animal waste contains less than 85% moisture)
1312 or more than 6,000 gallons of liquid animal waste (liquid animal waste contains 85%
1313 or more moisture) in any 365-day period, the permittee shall maintain records in
1314 accordance with Part III B-46 C 7.

1315 46. 7. Animal waste may be transferred from a permittee to another person without
1316 identifying the fields where such waste will be utilized in the permittee's approved nutrient
1317 management plan if the following conditions are met:

1318 a. When a permittee transfers to another person more than 10 tons of solid or semi-
1319 solid animal waste (solid or semi-solid animal waste contains less than 85% moisture)
1320 or more than 6,000 gallons of liquid animal waste (liquid animal waste contains 85%
1321 or more moisture) in any 365-day period, the permittee shall provide that person with:

1322 (1) Permittee's name, address, and the general permit number;

1323 (2) A copy of the most recent nutrient analysis of the animal waste; and

1324 (3) An animal waste fact sheet.

1325 b. When a permittee transfers to another person more than 10 tons of solid or semi-
1326 solid animal waste (solid or semi-solid animal waste contains less than 85% moisture)
1327 or more than 6,000 gallons of liquid animal waste (liquid animal waste contains 85%
1328 or more moisture) in any 365-day period, the permittee shall keep a record of the
1329 following:

1330 (1) The ~~recipient~~ recipient's name and address;

1331 (2) The amount of animal waste received by the person;

1332 (3) The date of the transaction;

1333 (4) The nutrient analysis of the animal waste;

1334 (5) The locality in which the recipient intends to utilize the animal waste (i.e., nearest
1335 town or city and zip code);

1336 (6) The name of the stream or waterbody, if known, to the recipient that is nearest to
1337 the animal waste utilization or storage site; and

1338 (7) The signed waste transfer records form acknowledging the receipt of the following:

1339 (a) The animal waste;

1340 (b) The nutrient analysis of the animal waste; and

1341 (c) An animal waste fact sheet.

1342 c. Permittees shall maintain the records required by Part III ~~B-16~~ C 7 a and b for at
1343 least three years after the date of the transaction and shall make them available to
1344 department personnel upon request.

1345 ~~17. When the waste storage or treatment facility is no longer needed, the permittee shall~~
1346 ~~close it in a manner that (i) minimizes the need for further maintenance and (ii) controls,~~
1347 ~~minimizes, or eliminates, to the extent necessary to protect human health and the~~
1348 ~~environment, the postclosure escape of uncontrolled leachate, surface runoff, or waste~~
1349 ~~decomposition products to the groundwater, surface water, or the atmosphere. At closure,~~
1350 ~~the permittee shall remove all waste residue from the animal waste storage or treatment~~
1351 ~~facility. Removed waste materials shall be utilized according to the approved NMP.~~

1352 18. ~~D. As required by § 62.1-44.17:1 F of the Code of Virginia, each~~ Each permittee covered
1353 under this general permit shall have completed the training program offered or approved by the
1354 department in the two years prior to submitting the registration statement for general permit
1355 coverage or shall complete such training within one year after the registration statement has been

1356 submitted for general permit coverage. All permittees shall complete the training program at least
1357 once every three years.

1358 **9VAC25-192-80. Tracking and accounting requirements for animal waste end-users.**

1359 A. When an animal waste end-user is the recipient of more than 10 tons of solid or semi-solid
1360 animal waste (solid or semi-solid animal waste contains less than 85% moisture) or more than
1361 6,000 gallons of liquid animal waste (liquid animal waste contains 85% percent or more moisture)
1362 in any 365-day period from an owner or operator of an animal feeding operation covered by a
1363 general permit, an individual VPA permit, or VPDES permit, the end-user shall maintain records
1364 regarding the transfer and land application of animal waste.

1365 1. The animal waste end-user shall provide the permittee with the following items:

1366 a. ~~End-user~~ End-user's name and address;

1367 b. The locality in which the end-user intends to utilize the waste (i.e., nearest town or
1368 city and zip code);

1369 c. The name of the stream or waterbody, if known, to the end-user that is nearest to
1370 the waste utilization or storage site; and

1371 d. Written acknowledgement of receipt of:

1372 (1) The waste;

1373 (2) The nutrient analysis of the waste; and

1374 (3) An animal waste fact sheet.

1375 2. The animal waste end-user shall record the following items regarding the waste transfer:

1376 a. The ~~source~~ source's name, address, and permit number (if applicable);

1377 b. The amount of animal waste that was received;

1378 c. The date of the transaction;

1379 d. The final use of the animal waste;

1380 e. The locality in which the waste was utilized (i.e., nearest town or city and zip code);
1381 and

1382 f. The name of the stream or waterbody, if known, to the recipient that is nearest to the
1383 waste utilization or storage site.

1384 Records regarding animal waste transfers shall be maintained on site for a period of three
1385 years after the date of the transaction. All records shall be made available to department
1386 personnel upon request.

1387 3. If waste is land applied, then the animal waste end-user shall keep a record of the
1388 following items regarding the land application of the waste:

1389 a. The nutrient analysis of the waste;

1390 b. Maps indicating the animal waste land application fields and storage sites;

1391 c. The land application rate;

1392 d. The land application dates;

1393 e. What crops were planted;

1394 f. Soil test results, if obtained;

1395 g. NMP, if applicable; and

1396 h. The method used to determine the land application rates (i.e., phosphorus crop
1397 removal, waste nutrient analysis rate, soil test recommendations, or a nutrient
1398 management plan).

1399 Records regarding land application of animal waste shall be maintained on site for a period
1400 of three years after the date the application is made. All records shall be made available
1401 to department personnel upon request.

1402 B. Any duly authorized agent of the ~~board~~ department may, at reasonable times and under
1403 reasonable circumstances, enter any establishment or upon any property, public or private, for
1404 the purpose of obtaining information or conducting surveys or investigations necessary in the
1405 enforcement of the provisions of this regulation.

1406 **9VAC25-192-90. ~~Utilization and storage~~ Storage and land application requirements for**
1407 **transferred animal waste.**

1408 A. An animal waste end-user who receives animal waste from an owner or operator of an
1409 animal feeding operation covered by a general permit, an individual VPA permit, or VPDES permit
1410 shall comply with the requirements outlined in this section.

1411 B. Storage requirements. An animal waste end-user who receives animal waste from an
1412 owner or operator of an animal feeding operation covered by a general permit, an individual VPA
1413 permit, or VPDES permit shall comply with the requirements outlined in this subsection regarding
1414 storage of animal waste in his possession or under his control.

1415 1. ~~Animal~~ Semi-solid and solid waste shall be stored in a manner that prevents contact
1416 with surface water and groundwater. ~~Animal~~ Semi-solid and solid waste that is stockpiled
1417 outside for more than 14 days shall be kept in a waste storage facility or at a site that
1418 provides adequate storage. Adequate storage shall, at a minimum, include the following:

1419 a. ~~Animal~~ Semi-solid and solid waste shall be covered to protect it from precipitation
1420 and wind;

1421 b. Stormwater shall not run onto or under the stored ~~animal~~ semi-solid and solid waste;

1422 c. A minimum of two feet separation distance to the seasonal high water table or an
1423 impermeable barrier shall be used under the stored waste. All waste storage facilities
1424 that use an impermeable barrier shall maintain a minimum of one foot separation
1425 between the seasonal high water table and the impermeable barrier. "~~Seasonal high~~
1426 ~~water table~~" means that portion of the soil profile where a color change has occurred
1427 in the soil as a result of saturated soil conditions or where soil concretions have
1428 formed. Typical colors are gray mottlings, solid gray, or black. The depth in the soil at
1429 which these conditions first occur is termed the seasonal high water table.
1430 Impermeable barriers shall be constructed of at least 12 inches of compacted clay, at
1431 least four inches of reinforced concrete, or another material of similar structural
1432 integrity that has a minimum permeability rating of 0.0014 inches per hour (1X10⁻⁶
1433 centimeters per second); and

1434 d. For ~~animal~~ semi-solid and solid waste that is not stored in a waste storage facility
1435 or under roof, the storage site must be at least 100 feet from any surface water,
1436 intermittent drainage, wells, sinkholes, rock outcrops, and springs. For semi-solid and
1437 solid waste that is stored on an impermeable barrier and where any stormwater runoff
1438 is collected in the waste storage facility, the semi-solid and solid waste can be stored
1439 adjacent to the waste storage facility regardless of the location of the waste storage

1440 facility so long as surface water, intermittent drainage, wells, sinkholes, rock outcrops,
1441 and springs are protected from runoff from the stored semi-solid and solid waste.

1442 Semi-solid and solid waste that is stored on an impermeable barrier and where any
1443 stormwater runoff is collected in a waste storage facility is considered adequate storage
1444 and is therefore not required to be covered.

1445 2. Any liquid animal waste collection and storage facility shall be designed and operated
1446 to (i) prevent point source discharges of pollutants to state waters except in the case of a
1447 storm event greater than the 25-year, 24-hour storm and (ii) provide adequate waste
1448 storage capacity to accommodate periods when the ground is frozen or saturated, periods
1449 when land application of nutrients should not occur due to limited or nonexistent crop
1450 nutrient uptake, and periods when physical limitations prohibit the land application of
1451 waste.

1452 3. Waste storage facilities constructed after December 1, 1998, shall not be located on a
1453 100-year floodplain. For the purposes of determining the 100-year floodplain, a Federal
1454 Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM), a FEMA
1455 Letter of Map Amendment (LOMA), or a FEMA Letter of Map Revision (LOMR) shall be
1456 used.

1457 4. Earthen waste storage facilities constructed after December 1, 1998, shall include a
1458 properly designed and installed liner. Such liner shall be either a synthetic liner of at least
1459 20 mils thickness or a compacted soil liner of at least one foot thickness with a maximum
1460 permeability rating of 0.0014 inches per hour. A Virginia licensed professional engineer or
1461 an employee of the Natural Resources Conservation Service of the U.S. Department of
1462 Agriculture with appropriate engineering approval authority shall certify that the siting,
1463 design, and construction of the waste storage facility comply with the requirements of this
1464 subsection. This certification shall be maintained on site.

1465 5. At earthen waste storage facilities constructed below the seasonal high water table, the
1466 top surface of the waste must be maintained at a level of at least two feet above the water
1467 table.

1468 6. All liquid waste storage or treatment facilities shall maintain at least one foot of freeboard
1469 at all times, up to and including a 25-year, 24-hour storm.

1470 C. Land application requirements. An animal waste end-user who (i) receives more than 10
1471 tons of solid or semi-solid animal waste (solid or semi-solid animal waste contains less than 85%
1472 moisture) or more than 6,000 gallons of liquid animal waste (liquid animal waste contains 85% or
1473 more moisture) from an owner or operator of an animal feeding operation covered by a general
1474 permit, an individual VPA permit, or VPDES permit and (ii) land applies animal waste shall follow
1475 appropriate land application requirements as outlined in this subsection. The application of animal
1476 waste shall be managed to minimize adverse water quality impacts.

1477 1. The maximum application rates can be established by the following methods:

1478 a. Phosphorus crop removal application rates can be used when:

1479 (1) Soil test phosphorus levels do not exceed the values listed in the Phosphorus
1480 Environmental Thresholds table below:

<u>Phosphorus Environmental Thresholds</u>	
Region	Soil Test P (ppm) VPI & SU Soil Test (Mehlich I) *

Eastern Shore and Lower Coastal Plain	135
Middle and Upper Coastal Plain and Piedmont	136
Ridge and Valley	162

* If results are from another laboratory, then the Department of Conservation and Recreation approved conversion factors must be used.

- 1481 (2) The phosphorus crop removal application rates are set forth by regulations
1482 promulgated by the Department of Conservation and Recreation in accordance with §
1483 10.1-104.2 of the Code of Virginia.
- 1484 b. Animal waste may be applied to any crop once every three years at a rate of no
1485 greater than 80 pounds of plant available phosphorus per acre when:
- 1486 (1) The plant available phosphorus supplied by the animal waste is based on a waste
1487 nutrient analysis obtained in the last two years;
- 1488 (2) In the absence of current soil sample analyses and recommendations; and
- 1489 (3) Nutrients have not been supplied by an organic source, other than pastured
1490 animals, to the proposed land application sites within the previous three years of the
1491 proposed land application date of animal waste.
- 1492 c. Soil test recommendations can be used when:
- 1493 (1) Accompanied by analysis results for soil tests that have been obtained from the
1494 proposed field or fields in the last three years;
- 1495 (2) The analytical results are from procedures in accordance with 4VAC50-85-140 A
1496 2 f; and
- 1497 (3) Nutrients from the waste application do not exceed the nitrogen or phosphorus
1498 recommendations for the proposed crop or double crops. The recommendations shall
1499 be in accordance with 4VAC50-85-140 A 2 a.
- 1500 d. A nutrient management plan developed by a certified nutrient management planner
1501 in accordance with § 10.1-104.2 of the Code of Virginia.
- 1502 2. The timing of land application of animal waste shall be appropriate for the crop, and in
1503 accordance with 4VAC50-85-140 A 4, except that no waste may be applied to ice covered
1504 or snow covered ground or to soils that are saturated.
- 1505 3. Animal waste shall not be land applied within buffer zones. Buffer zones at waste
1506 application sites shall, at a minimum, be maintained as follows:
- 1507 a. Distance from occupied dwellings: 200 feet (unless the occupant of the dwelling
1508 signs a waiver of the buffer zone);
- 1509 b. Distance from water supply wells or springs: 100 feet;
- 1510 c. Distance from surface water courses: 100 feet (without a ~~permanent~~ vegetated
1511 buffer) or 35 feet (if a ~~permanent~~ vegetated buffer exists). Other site-specific
1512 conservation practices may be approved by the department that will provide pollutant
1513 reductions equivalent or better than the reductions that would be achieved by the 100-
1514 foot buffer;
- 1515 d. Distance from rock outcropping (except limestone): 25 feet;

- 1516 e. Distance from limestone outcroppings: 50 feet; and
- 1517 f. Waste shall not be applied in such a manner that it would discharge to sinkholes that
- 1518 may exist in the area.
- 1519 4. In cases where the waste storage facility is threatened by emergencies such as fire or
- 1520 flood or where these conditions are imminent, animal waste can be land applied outside
- 1521 of the spreading schedule outlined in the Animal Waste Fact Sheet. If this occurs, then
- 1522 the animal waste end-user shall document the land application information in accordance
- 1523 with 9VAC25-192-80 A 3.
- 1524 D. Animal waste end-users shall maintain the records demonstrating compliance with the
- 1525 requirements of subsections B and C of this section for at least three years and make them
- 1526 available to department personnel upon request.
- 1527 E. The activities of the animal waste end-user shall not contravene the Water Quality
- 1528 Standards, 9VAC25-260, as amended, and adopted by the board, or any provision of the State
- 1529 Water Control Law (~~§ 62.1-44 et seq. of the Code of Virginia~~).
- 1530 F. Any duly authorized agent of the ~~board~~ department may, at reasonable times and under
- 1531 reasonable circumstances, enter any establishment or upon any property, public or private, for
- 1532 the purpose of obtaining information or conducting surveys or investigations necessary in the
- 1533 enforcement of the provisions of this regulation.
- 1534 FORMS (9VAC25-192)
- 1535 [Virginia DEQ Registration Statement for VPA General Permit for Animal Feeding Operations](#)
- 1536 [and Animal Waste Management for Owners of Animal Feeding Operations, RS AFO Owners,](#)
- 1537 [VPG1 \(rev. 3/14 11/2024\)](#)
- 1538 [Virginia DEQ Registration Statement for VPA General Permit for Animal Feeding Operations](#)
- 1539 [and Animal Waste Management for Animal Waste End-Users, RS End-Users, VPG1 \(rev. 3/14](#)
- 1540 [11/2024\)](#)
- 1541 Local Government Ordinance Form (eff. 11/94)
- 1542 [Virginia DEQ Fact Sheet for Animal Waste Use and Storage \(rev. 4/14 11/2024\)](#)

Office of Regulatory Management
Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC 25-192 et seq.
VAC Chapter title(s)	Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding Operations and Animal Waste Management
Action title	2024 Reissue and amend, as necessary, the Virginia Pollution Abatement (VPA) Regulation and General Permit for Animal Feeding Operations and Animal Waste Management
Date this document prepared	July 24, 2023; Revised November 3, 2023
Regulatory Stage (including Issuance of Guidance Documents)	Proposed exempt

Cost Benefit Analysis

Complete Tables 1a and 1b for all regulatory actions. You do not need to complete Table 1c if the regulatory action is required by state statute or federal statute or regulation and leaves no discretion in its implementation.

Table 1a should provide analysis for the regulatory approach you are taking. Table 1b should provide analysis for the approach of leaving the current regulations intact (i.e., no further change is implemented). Table 1c should provide analysis for at least one alternative approach. You should not limit yourself to one alternative, however, and can add additional charts as needed.

Report both direct and indirect costs and benefits that can be monetized in Boxes 1 and 2. Report direct and indirect costs and benefits that cannot be monetized in Box 4. See the ORM Regulatory Economic Analysis Manual for additional guidance.

§ 62.1-44.17:1.B. of the Code of Virginia requires that the State Water Control Board utilize a General Virginia Pollution Abatement (VPA) permit to permit Animal Feeding Operations (AFOs) that meet the requirements of the Code. VPA general permits expire every 10 years and must be re-issued in order for permit coverage to be available to new permittees and existing covered permittees. If the general permit is not re-issued, the regulated community will need to obtain an individual permit to conduct the regulated

activity. For this reason, the costs associated with obtaining an individual permit are compared with the costs associated with general permit coverage. General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity.

Table 1a: Costs and Benefits of the Proposed Changes (Primary Option)

<p>(1) Direct & Indirect Costs & Benefits (Monetized)</p>	<p>Direct Costs:</p> <p>Regulating AFOs through the reissuance of a general permit regulation is an alternate streamlined approach that is used to regulate entities that conduct similar activities. A benefit of this general permit is its lower cost to permittees relative to the cost of obtaining an individual permit. While the Code of Virginia exempts AFOs from permit fees for both individual and general permits, the exemption does not include the cost of publication of a public notice advertisement required for an individual permit, which would average approximately \$500. The individual permit application is also longer and more detailed, requiring more time to prepare, and some applicants might choose to pay a consultant to prepare an individual permit application. This general permit thus represents a savings of at least \$500. There are currently 110 AFOs covered under this permit representing a total savings of approximately \$55,000 for the permit sector.</p> <p>These costs do not account for the longer lead time to obtain an individual permit and the increased burden on DEQ staff resources that would result.</p> <p>Costs and benefits of significant amendments to the current general permit include:</p> <ul style="list-style-type: none"> • 9 VAC25-192-10 – Definitions – The regulation was updated to include additional definitions and modifications of existing definitions. <p>Direct Costs: None</p> <p>Direct Benefits: No direct economic benefits to regulated entities.</p> <p>Indirect Costs: None</p> <p>Indirect Benefits: The additions and amendments to the definitions section will facilitate a better understanding of the terms used throughout the regulation sections and reduces regulatory burden by making the terms and style used throughout the regulations consistent with other sections and chapters. These amendments will also make this regulation consistent with the</p>
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VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-10 et seq.).

- 9VAC25-192-70. Part I.A. & Part III.A.– Groundwater Monitoring Requirements:
 - Added a permit condition that describes when a permittee is required to submit a groundwater monitoring action plan. This process is already required by the department; adding it to the permit makes it clear to the permittee in what cases that the action plan is expected.
 - Added a permit condition that outlines which parameters must be analyzed by a laboratory accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) in accordance with 1VAC30-46-20. This requirement is already in place; adding it to the permit conditions makes it clear to the permittee.

Direct Costs: None to the permittee. All of the amendments make the regulation consistent with other requirements already being implemented by DEQ.

Direct Benefits: No direct economic benefits to regulated entities.

Indirect Costs: None

Indirect Benefits: The amendments make permit requirements clear. Clarity reduces administrative burden and time on the permittee to ensure compliance with the permit.

- 9VAC25-192-70 Part I.B.2 & Part III.B.2 – Site design, storage, and operations requirements: Added clarification as to which tools are to be used to determine the floodplain when siting waste storage facilities. Adding the language ensures that the permittee will know what tools must be used to make this determination.

Direct Costs: None

Direct Benefits: No direct economic benefits to regulated entities.

Indirect Costs: None

Indirect Benefits: The amendments make permit requirements clear. Clarity reduces administrative burden and time on the permittee to ensure compliance with the permit.

	<ul style="list-style-type: none"> • 9VAC25-192-70 Part I.B.8.d. & Part III.B.8.d. – Site design, storage, and operations requirements: The proposal includes amended permit conditions outlining what is considered adequate storage of semi-solid and solid waste. <p>Direct Costs: None</p> <p>Direct Benefits: The amendment would reduce the cost to cover certain manure storage for which covering would provide no environmental benefit. Actual costs would vary widely depending upon storage practices.</p> <p>Indirect Costs: None</p> <p>Indirect Benefits: The amendments make permit requirements clear. Clarity reduces administrative burden and time on the permittee to ensure compliance with the permit.</p> <ul style="list-style-type: none"> • 9VAC25-192-70 Part I.B.11. & Part III.B.11. – Site design, storage, and operations requirements: The proposal includes a notification to the department prior to the closure of a liquid waste storage facility. This notification is an addition to an existing permit condition related to the closure of a waste storage facility. <p>Direct Costs: None</p> <p>Direct Benefits: No direct economic benefits to regulated entities.</p> <p>Indirect Costs: None to the permittee other than the time to notify DEQ of the pending closure.</p> <p>Indirect Benefits: Adding this notification will facilitate the ability of DEQ staff to provide compliance assistance and proper closure procedures to the permittee. Additional communication with DEQ prior to commencing a regulated activity increases the probability of compliance with the permit, adequate environmental protection, and reduces the possibility the permittee will spend money on activities that do not meet regulatory requirements.</p> <ul style="list-style-type: none"> • 9VAC25-192-70 Part I.C.2. & Part III.C.2. – Animal waste use and transfer requirements: The proposal adds a requirement for the permittee to submit revised Nutrient Management Plans (NMPs) approved by the Department of Conservation and
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	<p>Recreation (DCR) before the expiration date of the previous NMP.</p> <p>Direct Costs: None</p> <p>Direct Benefits: No direct economic benefits to regulated entities.</p> <p>Indirect Costs: None other than the time for the permittee to send the NMP to DEQ. Permit holders are already required to maintain a valid plan and provide it to DEQ.</p> <p>Indirect Benefits: The amendment makes permit requirements clear and ensures that the permittee has the most accurate nutrient management guidelines for the current crop needs. Clarity reduces administrative burden and time on the permittee to ensure compliance with the permit.</p> <ul style="list-style-type: none"> • 9VAC25-192-70 Part I.C.5. & Part III.C.5 – Animal waste use and transfer requirements: The proposal includes a new special condition that addresses situations where animal waste storage can be threatened by emergencies such as fire or flood. The new condition provides criteria for the land application of animal waste outside of the land application schedule found in the NMP so long as land application information is documented, and the Department is notified. <p>Direct Costs: None</p> <p>Direct Benefits: This condition provides permittees with practical options to avoid catastrophic failure of an animal waste storage structure and clear requirements related to waste storage and land application when the permittee is faced with an emergency. Costs to repair an animal waste structure would vary depending upon the size and nature of the failure.</p> <p>Indirect Costs: None</p> <p>Indirect Benefits: The condition makes the option available to respond to an emergency clear to the permittee, reducing the amount of time a permittee might spend corresponding with DEQ when immediate action is necessary.</p> <ul style="list-style-type: none"> • 9VAC25-192-70 Part II – Conditions Applicable to this General Permit - The proposal includes amending, re-organizing, and
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	<p>renumbering the conditions found in Part II of Section 70 (the contents of the general permit).</p> <p>Direct Costs: None</p> <p>Direct Benefits: No direct economic benefits to regulated entities.</p> <p>Indirect Costs: None</p> <p>Indirect Benefits: The amendments will make this regulation consistent with the VPA Regulation and General Permit for Poultry Waste Management (9VAC25-630-10 et seq.). Consistency between the general permits provides for clarity for permittees who may be covered by both permit types as well as for DEQ inspectors verifying compliance with both permit types.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) see above	(b) see above
(3) Net Monetized Benefit	See above	
(4) Other Costs & Benefits (Non-Monetized)		
(5) Information Sources	9VAC25-20 Fees for Permits and Certificates Staff estimates of costs for publishing public notices for individual permits	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Direct Costs: Maintaining the current requirements would have no direct costs to regulated entities.</p> <p>Indirect Costs: Maintaining the current requirements would have no indirect costs to regulated entities.</p> <p>Direct Benefits: Maintaining the current requirements would have no direct benefits to regulated entities.</p> <p>Indirect Benefits: Maintaining the current requirements would have no indirect benefits to regulated entities.</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits

	(a) NA	(b) NA
(3) Net Monetized Benefit	NA	
(4) Other Costs & Benefits (Non-Monetized)	NA	
(5) Information Sources	NA	

Table 1c: Costs and Benefits under Alternative Approach(es)

(1) Direct & Indirect Costs & Benefits (Monetized)	Direct Costs: DEQ is not aware of any alternatives to the current proposal other than (1) reissuance of the current general permit with no modifications and (2) allowing the general permit regulation to lapse and issuing individual permits.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) NA	(b) NA
(3) Net Monetized Benefit	NA	
(4) Other Costs & Benefits (Non-Monetized)	NA	
(5) Information Sources	NA	

Impact on Local Partners

Use this chart to describe impacts on local partners. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 2: Impact on Local Partners

(1) Direct & Indirect Costs & Benefits (Monetized)	This general permit regulation is for Animal Feeding Operations (AFOs) and animal waste end-users which are activities that are not conducted by local governments. Direct Costs:
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	None. Indirect Costs: None. Direct Benefits: None. Indirect Benefits: None.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) NA	(b) NA
(3) Other Costs & Benefits (Non-Monetized)	NA	
(4) Assistance	NA	
(5) Information Sources	NA	

Impacts on Families

Use this chart to describe impacts on families. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 3: Impact on Families

(1) Direct & Indirect Costs & Benefits (Monetized)	Most of the regulated entities are family farms, and the direct and indirect costs and benefits to these families would be as described in Table 1a.	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) see table 1a	(b) see table 1a
(3) Other Costs & Benefits (Non-Monetized)	see table 1a	
(4) Information Sources	see table 1a	

Impacts on Small Businesses

Use this chart to describe impacts on small businesses. See Part 8 of the ORM Cost Impact Analysis Guidance for additional guidance.

Table 4: Impact on Small Businesses

(1) Direct & Indirect Costs & Benefits (Monetized)	<p>Small businesses would have the same impact as described in 1a above.</p> <p>General permits provide the regulated community with a streamlined, less burdensome approach to obtain coverage for conducting a specific regulated activity. Without this general permit regulation, an individual permit would be required to conduct the regulated activity at a cost of approximately \$500 more for each small business covered under the general permit. DEQ does not have access to information necessary to determine how many of the 110 facilities covered under this general permit qualify as small business as defined under the Administrative Process Act but there are likely some entities that are small businesses</p>	
(2) Present Monetized Values	Direct & Indirect Costs	Direct & Indirect Benefits
	(a) see table 1a.	(b) see table 1a
(3) Other Costs & Benefits (Non-Monetized)	see table 1a	
(4) Alternatives	see table 1a	
(5) Information Sources	see table 1a	

Changes to Number of Regulatory Requirements

Table 5: Regulatory Reduction

For each individual action, please fill out the appropriate chart to reflect any change in regulatory requirements, costs, regulatory stringency, or the overall length of any guidance documents.

Change in Regulatory Requirements

VAC Section(s) Involved*	Authority of Change	Initial Count	Additions	Subtractions	Net Change
9VAC25-192-10	Statutory:	0	0	0	0
	Discretionary:	0	0	0	0

9VAC25-192-15	Statutory:	0	0	0	0
	Discretionary:	0	0	0	0
9VAC25-192-20	Statutory:	0	0	0	0
	Discretionary:	0	0	0	0
9VAC25-192-25	Statutory:	1	0	0	0
	Discretionary:	3	0	-1	-1
9VAC25-192-50	Statutory:	15	0	0	0
	Discretionary:	18	0	0	0
9VAC25-192-60	Statutory:	10	0	0	0
	Discretionary:	19	0	0	0
9VAC25-192-70 Part I	Statutory:	53	3 ^{A,B,C}	0	+3
	Discretionary:	65	5 ^{D,E,F,G}	1 ^H	+4
9VAC25-192-70 Part II	Statutory:	9	32 ^I	0	+32
	Discretionary:	35	0	20	-20
9VAC25-192-70 Part III	Statutory:	53	3 ^J	0	+3
	Discretionary:	65	5	1	+4
9VAC25-192-80	Statutory:	0	0	0	0
	Discretionary:	25	0	0	0
9VAC25-192-90	Statutory:	6	1 ^K	0	+1
	Discretionary:	35	2 ^{L,M}	1	+1
Total Net Change of Statutory Requirements:					+39
Total Net Change of Discretionary Requirements:					-12

Not all regulatory requirements apply to all permittees, and some requirements are only applicable if certain conditions exist.

^A Incorporated Virginia Environmental Laboratory Accreditation Program requirements for sample analysis to comply with Division of Consolidated Laboratory Services requirements in Va. Code § 2.2-1105 and 1VAC30-46.

^B Clarifies statutory requirement that waste storage facilities shall not be located on a 100-yr floodplain by requiring use of FEMA data to determine the location of the floodplain.

^C Adds requirement to provide notification of closure.

^D Codified established practice of preparing groundwater monitoring action plan when monitoring results indicate potential noncompliance (2 requirements).

^E Clarifies requirements for storage of semi-solid and solid waste that is not stored in a waste storage facility or under roof. Provides certainty for operator and regulatory agencies.

^F Provides regulatory flexibility for permittees where a waste storage facility is threatened by an emergency such as fire or flood. Adds requirement to document information if land application occurs as a result of the emergency situation.

^G Clarifies when permittee is required to provide a copy of an approved Nutrient Management Plan to DEQ.

^H Removes requirement to use cover when stormwater is collected in a waste storage facility.

^I Revisions to Part II make it consistent with the Virginia Pollutant Abatement (VPA) Permit Regulation, 9VAC25-32, the base regulation for all VPA permits, which has been amended since the last AFO GP was issued in 2014, and the Virginia Pollution Abatement Regulation and General Permit for Poultry Waste Management, 9VAC25-630, which was amended and reissued for a 10-year term in February 2021.

^J Part III of 9VAC25-192-70 contains the same requirements as Part I, but is applicable to animal waste end users; Part I is applicable to animal feeding operations.

^K Clarifies statutory requirement that waste storage facilities shall not be located on a 100-yr floodplain by requiring use of FEMA data to determine the location of the floodplain. This is the same requirement as in 9VAC25-192-70, but is applicable to animal waste end-users that are not required to have a general permit.

^L Provides regulatory flexibility for end users where a waste storage facility is threatened by an emergency such as fire or flood. Adds requirement to document information if land application occurs as a result of the emergency situation. This is the same requirement as in 9VAC25-192-70, but is applicable to animal waste end-users that are not required to have a general permit.

^M Clarifies requirements for storage of semi-solid and solid waste that is not stored in a waste storage facility or under roof. Provides certainty for operator and regulatory agencies. Removes requirement to use cover when stormwater is collected in a waste storage facility. This is the same requirement as in 9VAC25-192-70, but is applicable to animal waste end-users that are not required to have a general permit.

Cost Reductions or Increases (if applicable)

VAC Section(s) Involved	Description of Regulatory Requirement	Initial Cost	New Cost	Overall Cost Savings/Increases
9VAC25-192	Cost of individual permit vs general permit regulation	Cost associated with public notice requirements of Individual permit if general permit is not reissued-\$500	There is no cost to permittees associated with public notice requirements for the General permit - \$0	The general permit represents a savings of \$500 per facility (for public notice costs) or a total of \$55,000 for the sector over a 10-year permit term based on the 110 facilities currently covered by the general permit. No additional expenses are expected from the additional provisions included in Table 5. These additional provisions would also be included in any individual permits issued so they do not

				represent an increase in requirements/costs over the individual permit alternative.
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Other Decreases or Increases in Regulatory Stringency (if applicable)

VAC Section(s) Involved	Description of Regulatory Change	Overview of How It Reduces or Increases Regulatory Burden
NA	NA	The regulatory burden of reissuing the general permit is much reduced compared to requiring an individual permit. See 1a above.

TAB H



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219

P.O. Box 1105, Richmond, Virginia 23218

(800) 592-5482

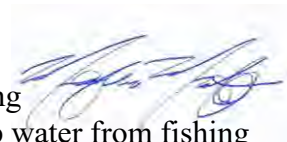
www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

MEMORANDUM

TO: State Water Control Board Members
FROM: Meghan Mayfield, Director, Division of Water Permitting
SUBJECT: Petition to adopt or amend regulations for vacuum pump water from fishing vessels
Date: November 8, 2023



I. Petition for New or Amended Regulations

By letter dated June 29, 2023, and received July 12, 2023, Andy Cortez submitted a petition to the Virginia Department of Environmental Quality (DEQ) and the State Water Control Board (Board) requesting the agency regulate commercial fishing vessel pump water as a point source pollutant. See Attachment 1.

Pursuant to Code of Virginia §2.2-4007 and the Public Participation Guidelines (9VAC25-11-60), any person may petition an agency to request the agency develop a new regulation or amend an existing regulation. In this case, Mr. Cortez requested the Board amend the existing Virginia Pollution Discharge Elimination System (VPDES) Permit Regulation (9VAC25-31) or develop a new regulation.

Mr. Cortez’s petition states that vacuum pumps are used to transfer netted fish from a waterbody into a hopper on the ship, the water is discharged overboard via a pipe, and the fish are emptied into the hold of the ship. Mr. Cortez contends that the discharge of the vacuum pump water is contaminated with dissolved organic matter, including nitrogen, phosphorus, suspended solids, and high BOD (biochemical oxygen demand) and is thus not in compliance with §§ 62.1-44.2, 62.1-44.5 A.1, or 62.1-44.5 A.3 of the Code of Virginia or 9VAC25-31-50.A.1 or 9VAC25-31-50.A.2.

In accordance with provisions of the Administrative Process Act (§ 2.2-4007 of the Code of Virginia), a 21-day public comment period on the petition was published in the *Virginia Register of Regulations* on August 14, 2023, and written comments were accepted through September 4, 2023. Members of the public could submit comments during the period through the Virginia Regulatory Town Hall public comment forum or by sending mail or email directly to DEQ.

II. Summary of Comments Received on the Petition

A. Comments in Support:

Ninety-eight (98) individuals submitted a total of 103 comments in support of the petition. Ninety-seven (97) comments were submitted via the Virginia Regulatory Town Hall website public comment forum and 6 comments were received via email directly to the DEQ point of contact.

Of those comments, three were submitted on behalf of organizations: the Cape Henry Audubon Society, the National Audubon Society (on behalf of 563 individuals), and the Theodore Roosevelt Conservation Partnership (on behalf of 1,644 individuals).

The below bullets summarize the main issues in support of the petition that are directly related to vacuum pump water:

- 1) Vacuum pump water should be considered a process wastewater and regulated as a point source discharge of pollution.
- 2) The pump water appears frothy/foamy, produces an odor, and contains fish particulate matter (e.g., scales, guts, oils, slime, excrement) which is a source of nitrogen, phosphorus, and organic matter.
- 3) There should be further evaluation and examination of the practice, including exploring alternatives, studies, and testing.

Many comments in support of this petition reference general opposition to the menhaden fishing industry and/or support for regulating discharges from fishing vessels unrelated to vacuum pump water.

B. Comments in Opposition:

One hundred seven (107) individuals provided comments in opposition to the petition. All 107 comments were received via the Virginia Regulatory Town Hall website public comment forum.

Of those comments, two were submitted on behalf of organizations: the Virginia Chamber of Commerce and the Virginia Watermen's Association.

The below bullets summarize the main issues in opposition to the petition that are directly related to vacuum pump water:

- 1) Vacuum pump water is seawater used to extract fish from purse seines (nets) onto a dewatering screen and is returned back to the sea within seconds. Nothing is discharged to the sea that did not already exist in the water when extracted by the pump.
- 2) The pump water is no different than water discharged overboard during commercial and recreational fishing operations through direct runoff, drain plugs, live wells, or washdown systems.
- 3) All recreational and commercial fishers would be impacted if this is deemed a point source discharge of pollution.

Many comments in opposition to this petition reference general support for the menhaden fishing industry.

Attachment 2 contains a summary of the public comments that DEQ received.

III. Is Vacuum Pump Water a “Pollutant”?

Vacuum pumps are used to transfer netted fish and seawater from a waterbody into a hopper on the ship, the water is discharged overboard from the hopper via a pipe, and the fish are emptied into the hold of the ship. At issue is whether the discharge of the vacuum pump water from the hopper is subject to regulation. Mr. Cortez asserts that it is contaminated with dissolved organic matter, including nitrogen, phosphorus, suspended solids, and high BOD.

A. Federal Clean Water Act

Section 301 of the federal Clean Water Act prohibits “the discharge of any pollutant by any person” except as in compliance with the act’s permit requirements, effluent limitations, or other provisions. 33 USC § 1311.

The Clean Water Act, at 33 USC § 1362 (12), defines “Discharge of a pollutant” as:

(A) any addition of any pollutant to navigable waters from any point source, (B) any addition of any pollutant to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft.

Further, the Clean Water Act, at 33 USC § 1362 (6), defines “Pollutant” as:

dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

The National Pollutant Discharge Elimination System (NPDES) permit program (§ 402 of the Clean Water Act) implements the prohibition on unauthorized discharges by requiring a permit for every discharge of pollutants from a point source to waters of the United States. 33 USC § 1342. Under § 402(b), states can, with approval from the U.S. Environmental Protection Agency (EPA), administer a state program to carry out the federal requirements. State programs have to implement provisions of the NPDES program and must be administered in conformance with them. 40 CFR § 123.25 (a). Virginia, through DEQ, has delegated authority from EPA to implement the VPDES program, which, consistent with 40 CFR Part 123, is no less stringent than the federal NPDES requirements in 40 CFR Parts 122 and 124.

B. VPDES

Consistent with the Clean Water Act and NPDES permit program, Virginia’s VPDES Regulation at 9VAC25-31-100 A.1 (Duty to Apply) requires that “any person who discharges or proposes to discharge pollutants” apply for a VPDES permit.

The VPDES Regulation at 9VAC25-31-10 defines “Discharge of a pollutant” as:

1. Any addition of any pollutant or combination of pollutants to surface waters from any point source; or,
2. Any addition of any pollutant or combination of pollutants to the waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.

Further, the VPDES Regulation at 9VAC25-31-10 defines “Pollutant” as:

Dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act of 1954, as amended (42 USC § 2011 et seq.)), heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.

The act of pumping fish and water from a waterbody into a hopper on vessel by use of a vacuum pump, then discharging that water back into the same waterbody, does not alter the physical, chemical or biological properties of state waters. Nothing in the process adds anything to or removes anything from the water aside from the fish that are removed by the hopper and transferred into the hold of the vessel. None of this activity is within the scope of the definition of a “pollutant,” “discharge of a pollutant,” or otherwise subject to regulation under the VPDES permit program.

This analysis is consistent with a recent decision from the Fourth Circuit Court of Appeals. On August 7, 2023, the Court published its decision in *North Carolina Coastal Fisheries Reform Group v. Capt. Gaston LLC et al.*¹ In the case, Fisheries Reform Group alleged that shrimp trawlers operating in North Carolina’s Pamlico Sound were violating the Clean Water Act by engaging in two types of unpermitted activity: throwing bycatch (fish and marine organisms inadvertently snared in trawlers’ nets) overboard and disturbing sediment with their trawl nets. In its decision, the Court concluded these activities do not qualify as “pollutants” within the scope of the Clean Water Act (Act). The Act forbids the unpermitted discharge of a pollutant. Returning bycatch to the ocean is not discharging a pollutant, so throwing it overboard without a permit is not forbidden by the Act. Likewise, because the trawl nets merely kick up sediment already present in the Sound, their use does not discharge any pollutants either. Accordingly, the Court affirmed the district court’s dismissal of Fisheries Reform Group’s complaint.

C. Other Regulatory Authority

Section 62.1-44.33 of the Code of Virginia empowers and directs the Board to adopt all necessary regulations for the purpose of controlling the discharge of sewage and other wastes from both documented and undocumented boats and vessels on all navigable and nonnavigable waters within the Commonwealth. However, the Regulations Governing the Discharge of Sewage and Other

¹ 76 F.4th 291 (4th Cir. 2023)

Wastes from Boats, 9VAC25-71, are not applicable to the harvesting of seafood and fisheries products:

No person shall discharge other wastes from any vessel on any navigable or nonnavigable waters into state waters. This provision shall not prohibit discharges incidental to the normal operation of a vessel and shall not be applicable to the harvesting of seafood and fisheries products.

9VAC25-71-40, emphasis added.

In the context of this petition, discharges of vacuum pump water would be discharges “applicable to the harvesting of seafood and fisheries products” per 9VAC25-71-40 and are specifically exempt from the prohibition of “miscellaneous waste discharges” in the subject regulation. Such discharges are also distinct from and not considered discharges of sewage or discharges incidental to the normal operation of a vessel.

IV. Conclusion

Since there is no addition of any pollutant or combination of pollutants to surface waters through the discharge of vacuum pump water, such discharges would not be considered a discharge of a pollutant per federal law and the VPDES Regulation. This is consistent with the ruling in the *North Carolina Coastal Fisheries Reform Group v. Capt. Gaston LLC et al.* case where returning bycatch to the ocean was not considered a discharge of a pollutant.

V. Recommendation

After review of the above facts and information, DEQ staff recommend the Board not initiate a rulemaking in response to the petition.

Attachment 1 – Petition from Andy Cortez
Attachment 2 – Summary of Public Comments

Attachment 1
Petition from Andy Cortez

RECEIVED

JUL 12 2023

DO

Mr. David Paylor Director
Department of Environmental Quality
P.O. Box 1105
Richmond, VA 23218

June 29, 2023

Dear Director Paylor:

Enclosed you will find a petition to change an existing regulation. Please forward this petition and attachments to the appropriate personnel in your agency.

Kind regards,



Andy Cortez
6457 Lakeway Drive
Mechanicsville, VA 23111
(804) 572-8770

June 29, 2023

A petition to request an agency to develop a new regulation or amend an existing regulation pursuant to Code of Virginia § 2.2-4007.

Regulation of Commercial Fishing Vessel Vacuum Pump Water

This petition requests that the Department of Environmental Quality regulate commercial fishing vessel pump water as a point source pollutant so the discharge of vacuum pump water into state waters shall be compliance with a VPDES permit, or another permit, issued by the department or a general permit issued as a regulation adopted by the board or other entity authorized by the board or department.

Purpose

Virginia allows the commercial purse seine fishery to harvest 329.5 million pounds of menhaden from state waters annually. The majority of these fish are caught in the main stem of the Chesapeake Bay. Once a large school of menhaden is captured, the fish are transferred from the water to a mother ship via a vacuum pump. The fish are sucked into a hopper, the water is discharged overboard via a pipe and the fish are emptied into the hold of the ship. The capacity of a menhaden ship is typically 2 million fish. At present, 10 or 11 of these ships operate in state waters during the spring, summer and fall.

The vacuum pump water is contaminated with dissolved organic matter, including nitrogen, phosphorus, suspended solids, high BOD. This discharge, into state waters, is not in compliance with § 62.1-44.2, § 62.1-44.5.9A.1.3, VAC25-31-50A.1 or 9VAC25-31-50A.2.

Note: While there is an exclusion in 9VAC25-31-40, it does not address this type of discharge from a vessel.

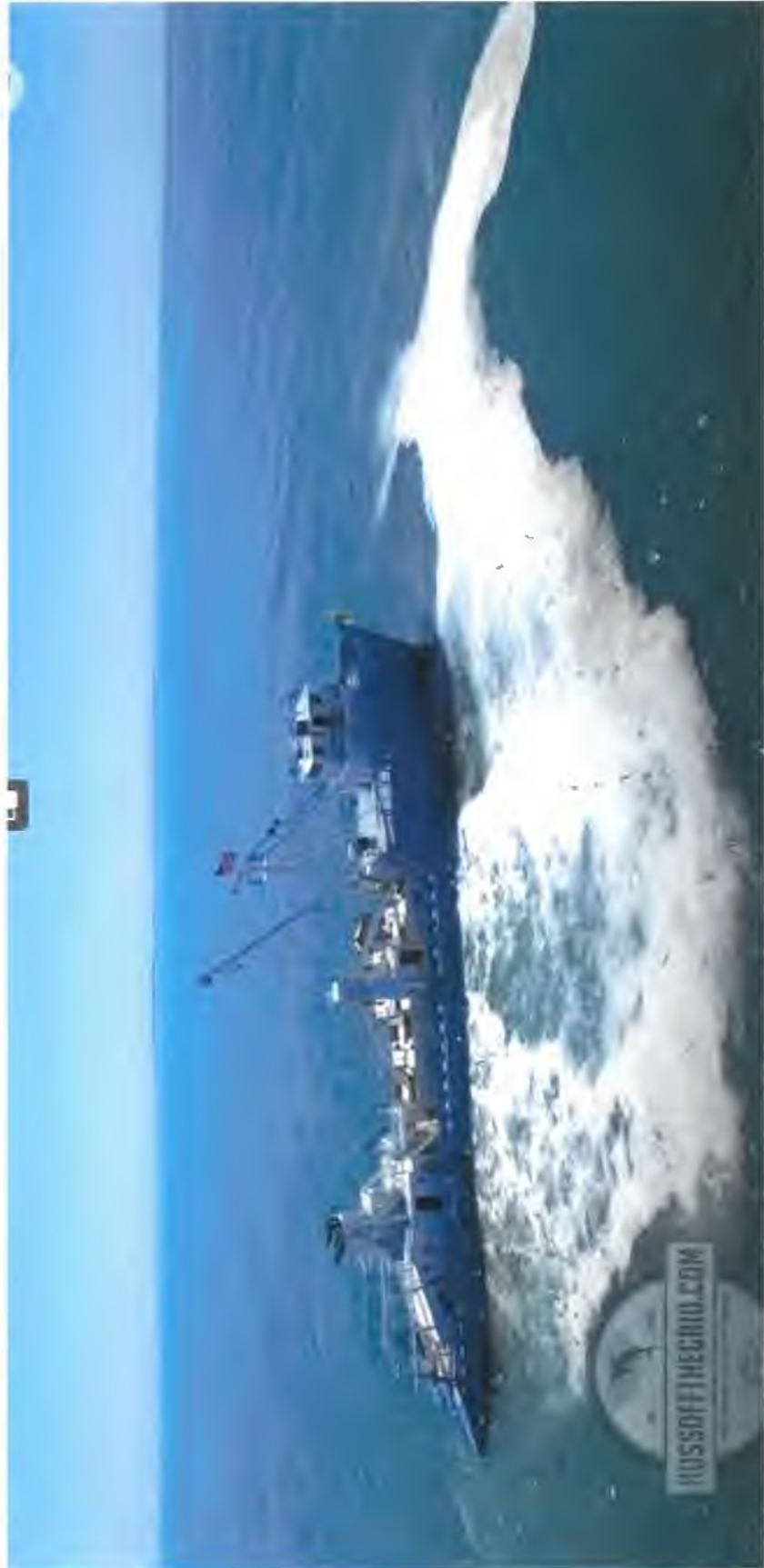
Note: § 62.1-44.4.(1) No right to continue existing quality degradation in any state water shall exist nor shall such right be or be deemed to have been acquired by virtue of past or future discharge of sewage, industrial wastes or other wastes or other action by any owner.

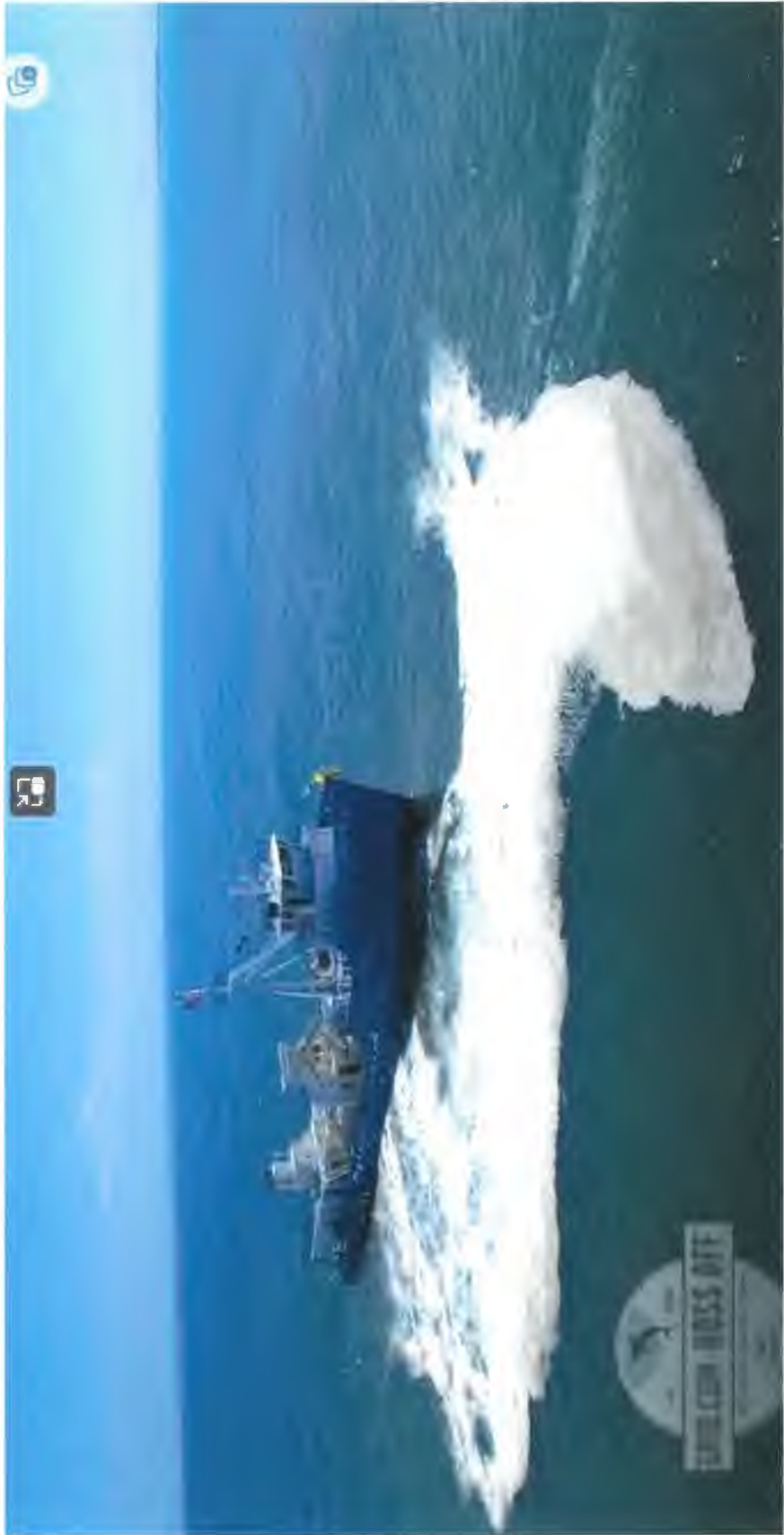
Regulatory Authority

The Department of Environmental Quality has regulatory authority for this matter under Code of Virginia § 62.1-44.2

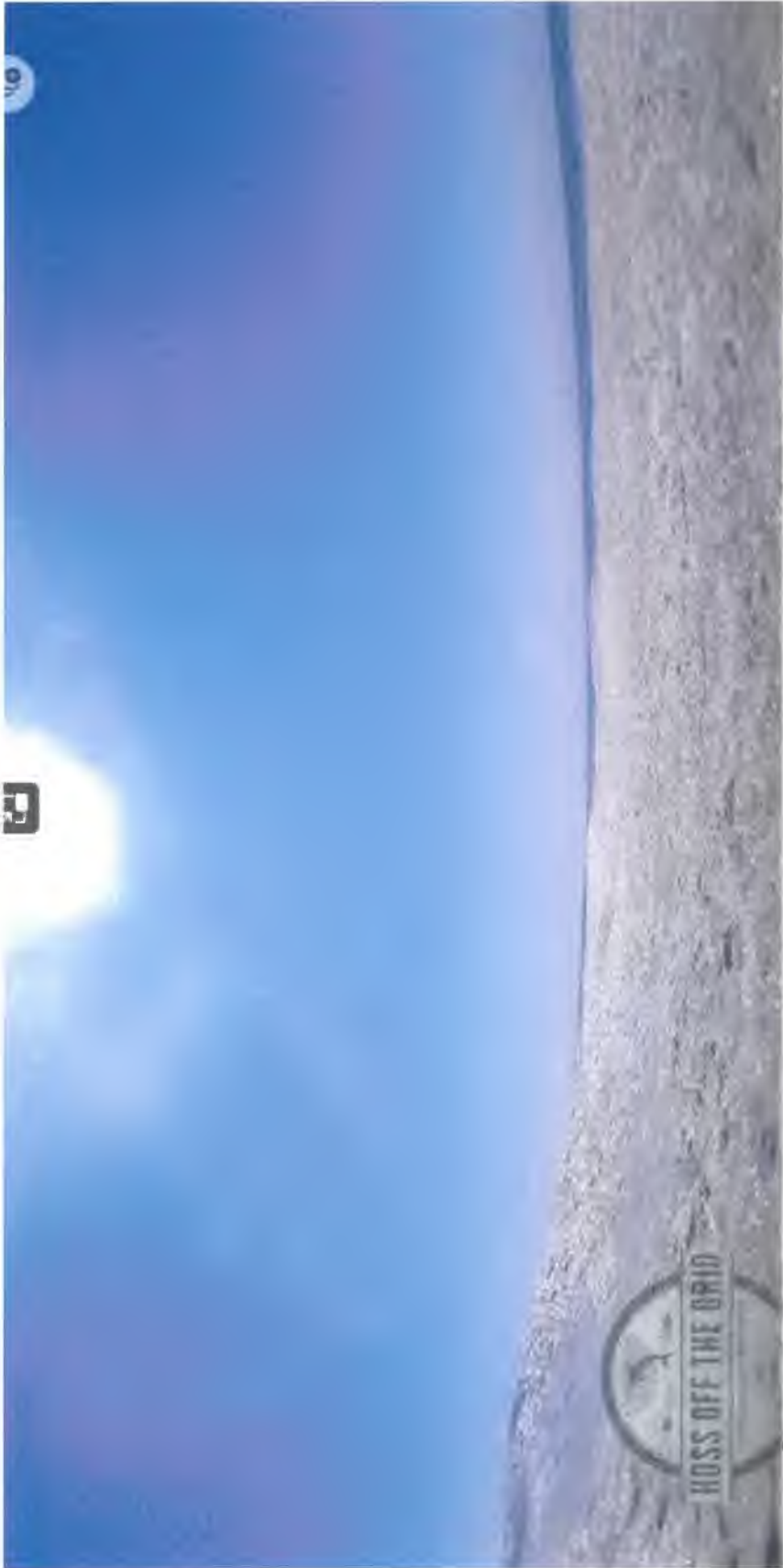
Citizen Petitioner

Mr. Andy Cortez
6457 Lakeway Drive
Mechanicsville, VA 23111
(804) 572-8770





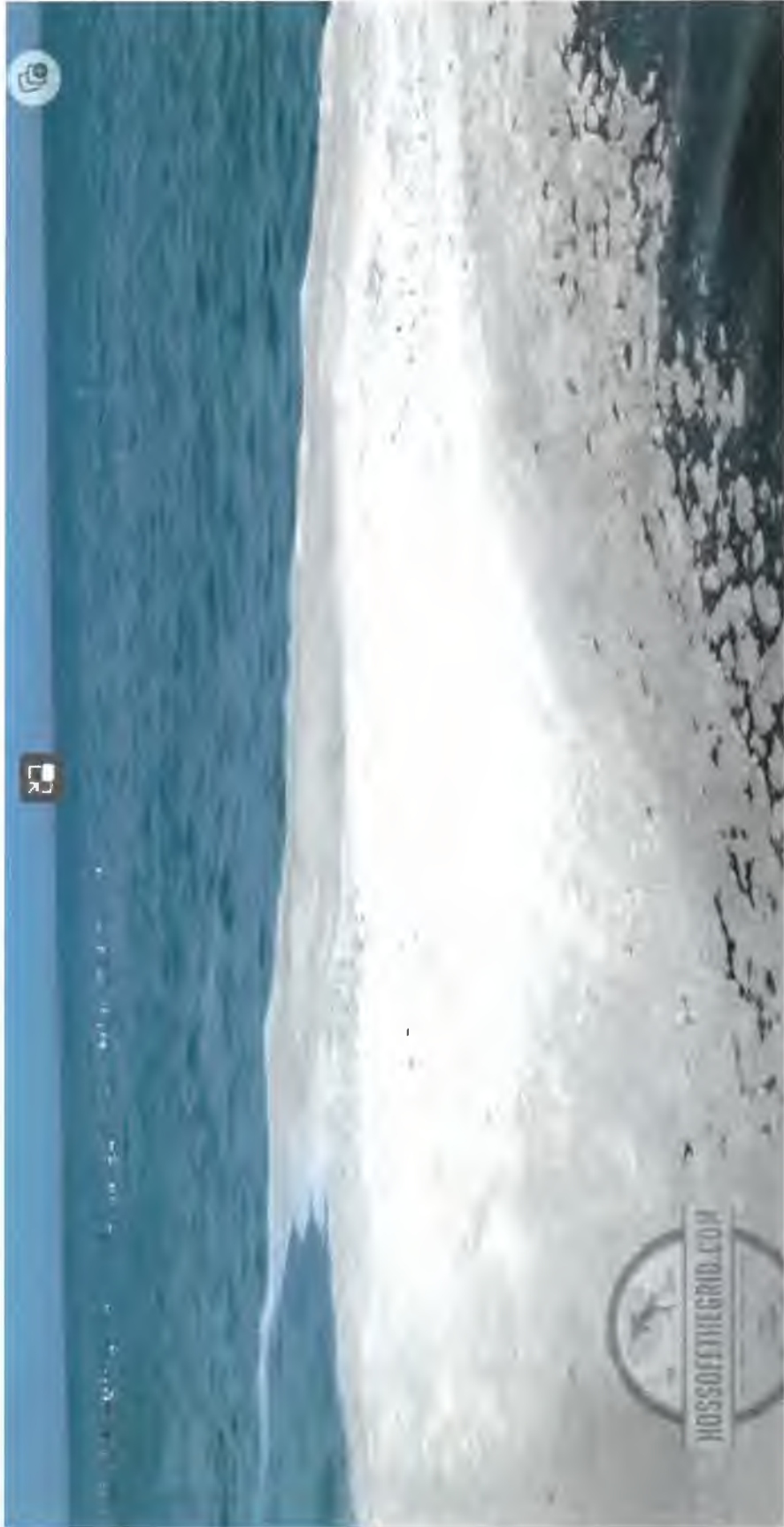


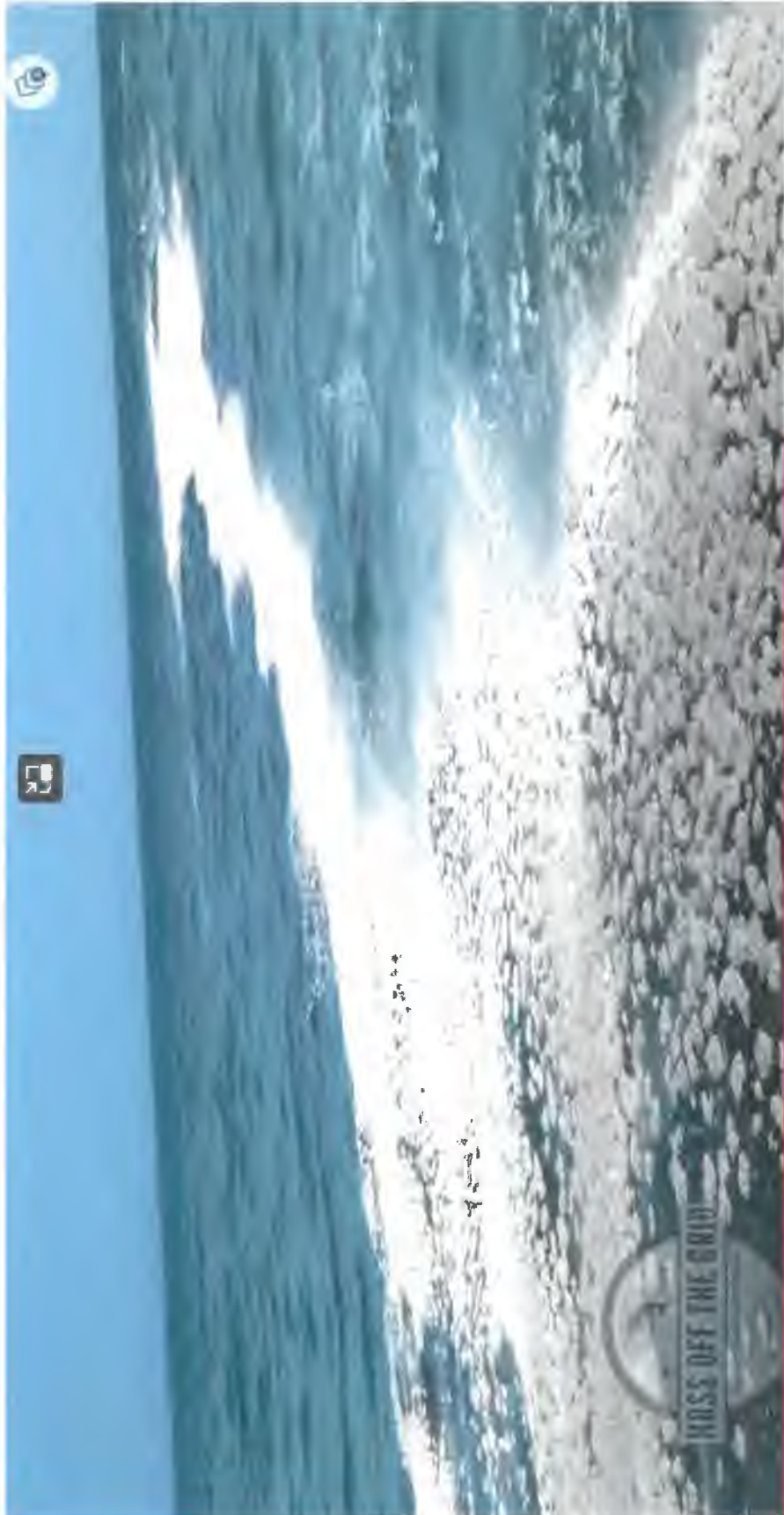






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Attachment 2

Summary of Public Comments

Summary of Comments Received During Petition Comment Period (August 14 – September 4, 2023)

Total number of comments supporting = 103

Organizations supporting: the Cape Henry Audubon Society, the National Audubon Society (on behalf of 563 individuals), and the Theodore Roosevelt Conservation Partnership (on behalf of 1,644 individuals).

Total number of comments opposing = 107

Organizations opposing: the Virginia Chamber of Commerce and the Virginia Watermen’s Association.

Commenter	Comment Summary - Supporting
98 Individuals	<ol style="list-style-type: none"> 1. Vacuum pump water fits the definition of a process wastewater and needs to be regulated as a point source discharge of pollution. 2. Vacuum pump water is discharged in large volumes and is concentrated, frothy, contains fish particulate matter, scales, nitrogen, phosphorus, excrement, fish guts, slime, bacteria, high BOD, stinks, and fails to meet water quality standards. 3. When nets are pulled they leave fish parts and foamy waste in the water. 4. Further evaluation and examination of the practice is supported, including exploring alternatives, studies, and testing. 5. Regulations should be adopted for testing of vacuum pump water discharges. 6. Stop the menhaden fishery from dumping bilge water and bail water. 7. Menhaden are a life-blood resource to the Bay (bunker fish), both for other predatory fish and for birds (osprey, eagle). 8. Sport fishing suffers from overfishing of menhaden. 9. Other fish are being caught during these operations that may be out of season or out of limits.
Cape Henry Audubon Society	<p>While this discharge may be associated with the fish just harvested from the bay waters, once the fish have been removed as functioning parts of the ecosystem, any discharge from this harvesting process, including nitrogen, phosphorous, and suspended solids like feces and scales, should be considered waste and managed appropriately.</p> <p>Researchers within The William and Mary Center for Conservation Biology believe that the ongoing decline in Osprey young production is driven by overharvest of Atlantic menhaden. Although osprey do feed on other fish species within the lower Chesapeake Bay, none of these species offer comparable nutrient content.</p>

	<p>The Cape Henry Audubon Society urges DEQ to manage the menhaden fishery to better protect the overall ecosystem of the Chesapeake Bay.</p>
<p>National Audubon Society and Theodore Roosevelt Conservation Partnership</p>	<p>The estimated water quality standards in Chesapeake Bay are 70% below the target necessary to fully support the survival, growth, and reproduction of its living resources. Nutrient inputs like nitrogen and phosphorus harm bird survival, especially in summer months when surface temperatures rise.</p> <p>While the wastewater discharge from the menhaden reduction industry's factory in Reedville is regulated and permitted, the daily discharge from menhaden fishing vessels of vacuum pump water, which contains contaminants including nitrogen, phosphorous, and suspended solids like feces and scales, is not. This nutrient-laden, oxygen-deprived, contaminated water is currently discharged overboard. It is time to regulate this contamination from the industrial menhaden fishery, which pollutes Virginia waters each day by discharging into them what is akin to liquid fertilizer.</p> <p>Managing the amount of surface water contamination, especially as Chesapeake Bay water temperatures rise and critical seagrass habitat is in danger, is paramount. Implementing permitting regulations to limit wastewater discharge from menhaden fishing vessels in Virginia waters is just common sense. Our water quality, our communities, and our iconic birds and wildlife will benefit greatly through this act of stewardship.</p>

Commenter	Comment Summary - Opposing
<p>107 Individuals</p>	<ol style="list-style-type: none"> 1. Seawater is used to remove catch from the water onto a dewatering screen and then returned to the sea. 2. Nothing is added to the discharged water for the few seconds it is on the vessel. 3. The discharge of vacuum pump water is no different than water discharged overboard during commercial and recreational fishing operations via direct runoff, drain plugs, live wells, and floor washdowns. 4. The discharge is aerated seawater that contains residual fish parts and oils that birds and other fish feed on. 5. If this is deemed a point source of pollution, all recreational and commercial fishers would be impacted including oystermen, crabbers, pound netters, and gill netters. 6. Acting on this petition would limit the ability to washdown boats, use chum lines during recreational fishing, or even fish with live bait.

	<p>7. Acting on this petition would result in taking away the livelihoods of a large part of our community and state and would greatly impact the price and availability of fresh seafood, as bait would be limited.</p> <p>8. The menhaden population is near historic highs and is healthy and sustainable. The reduction fleet catches 1/2 of 1% of the biomass. The last thing these commercial fishermen want is to jeopardize their very workplace.</p>
<p>Virginia Chamber of Commerce</p>	<p>The Virginia Chamber supports regulations that are environmentally safe and economically sound. However, we cannot support regulations devised to create unnecessary barriers to commercial or recreational use of our waters or whose goals cannot be achieved through reasonable compliance. For these reasons, we request that the State Water Control Board deny the petition to regulate commercial fishing vessel pump water as a point source pollutant.</p>
<p>Virginia Watermen's Association</p>	<p>Menhaden fisheries have to use sea water to be able to pump the fish out of their nets, once the fish is on board the water is returned back to the sea. It only contains some slurry and scales with fish mucous causing the foaming. This in no way is a pollutant to the water, this is an all-natural happening that occurs naturally when a school of fish attacks a school of menhaden.</p> <p>Some 7000 recreational boats are on the Chesapeake Bay and they all have bilge pumps and most have live wells that pump water overboard, is this a pollutant? What about other user groups: pound net fisherman bailing their nets, hard crab potters washing their crab pots, up-wellers for oyster larvae production, pressure washing oyster cages.</p> <p>This petition is bad policy and I hope that the DEQ see's what a mess this could become.</p>

TAB I



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

1111 E. Main Street, Suite 1400, Richmond, Virginia 23219

P.O. Box 1105, Richmond, Virginia 23218

(800) 592-5482

www.deq.virginia.gov

Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

Memorandum

To: State Water Control Board Members

From: Melissa Porterfield, Office of Regulatory Affairs

Date: October 15, 2023

Subject: Withdrawal of regulatory actions pertaining to Proposed Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91)- Amendment of the AST Regulation and Proposed James River (Richmond Regional West) Surface Water Management Area (9VAC25-760)

At the November 30, 2023, meeting of the State Water Control Board (Board), DEQ staff will request that the Board withdraw outdated incomplete regulatory actions pertaining to the Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91)- Amendment of the AST Regulation and Proposed James River (Richmond Regional West) Surface Water Management Area (9VAC25-760).

Background

On March 25, 2003, the State Water Control Board approved proposed amendments to the Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91) for public comment. The proposed regulation was withdrawn before the Department of Planning and Budget completed their review of the proposed regulation. There has been no action on this amendment since 2003.

The state Water Control Board approved new Proposed James River (Richmond Regional West) Surface Water Management Area (9VAC25-760) - Adoption of the James River (Richmond Regional West) Surface Water Management Area (adoption of a new regulation) for public comment at their meeting held Jul 8-9, 2002. There has been no action on this amendment since 2003.

State Water Control Board

October 15, 2023

Page 2

Staff recommendation

Due to the length of time that has passed since these actions were proposed it would not be appropriate to continue to use these actions to amend the regulation or adopt a new regulation. Staff recommends the Board withdraw the following regulatory actions:

Proposed Facility and Aboveground Storage Tank (AST) Regulation (9VAC25-91)- Amendment of the AST Regulation - Action 966 / Stage 2249. There has been no activity on this action since 2003.

Proposed James River (Richmond Regional West) Surface Water Management Area (9VAC25-760) - Adoption of the James River (Richmond Regional West) Surface Water Management Area -Action 886 / Stage 1875. There has been no activity on this action since 2003.

Contact Information:

Melissa Porterfield

Board Coordinator

804-698-4238

Melissa.porterfield@deq.virginia.gov

TAB J



Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Travis A. Voyles
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
(804) 698-4020

MEMORANDUM

TO: State Water Control Board Members

FROM: Karen M. Doran, Clean Water Financing and Assistance Program Manager

DATE: October 20, 2023

Handwritten signature of Karen M. Doran in black ink.

SUBJECT: FY 2024 Virginia Clean Water Revolving Loan Fund Final Authorizations

Purpose

Title IV of the Clean Water Act requires the annual submission of a Project Priority List and Intended Use Plan in conjunction with Virginia's Clean Water Revolving Loan Fund (VCWRLF) Capitalization Grant application. Section 62.1-229 of Chapter 22, Code of Virginia, authorizes the Board to establish to whom loans are made, the loan amounts, and repayment terms. The next step in this process is for the Board to set the loan terms and authorize the execution of the loan agreements.

Background

On June 5, 2023, Clean Water Financing and Assistance Program (CWFAP) staff solicited applications from the Commonwealth's localities, wastewater authorities and potential land conservation, living shoreline, and brownfield remediation applicants. July 28, 2023 was established as the deadline for receiving applications. DEQ received 34 wastewater improvement applications requesting \$583,698,953 (including 4 Southwest Virginia Pilot Program construction projects), three (3) stormwater applications requesting \$23,928,474, and one (1) land conservation application requesting \$5,000,000. In total, DEQ received 38 applications for \$612,627,427.

CWFAP staff reviewed an updated capacity assessment of the VCWRLF to determine the level of authorizations the fund could manage while maintaining the ability to provide funds for requests in future years. Based on this assessment, CWFAP staff determined that all projects could not be funded by the VCWRLF and proceeded to eliminate 12 projects from the funding list and reduced requests of 6 projects based on compliance with Virginia Code, multiple applications from a single

applicant, applicant cash flow need projections, and previously established project bypass procedures. By memorandum dated September 8, 2023, the Director of DEQ tentatively approved the list of 26 projects for a total of \$189,548,275 in loan assistance from available and anticipated FY 2024 resources and authorized staff to accept public comments from September 21, 2023 through October 20, 2023. A listing of the projects in priority order, a brief description of each, and amount of assistance requested is included in Attachment A. A public meeting was convened on October 19, 2023. Notice of the meeting was posted on the Virginia Regulatory Town Hall and DEQ's CWFAP website. No comments were received.

Discussion

The staff has finalized the recommended loan amounts, interest rates, and loan terms in accordance with the Board's guidelines. No changes from the tentative approval list previously approved are being recommended.

The loan rates and terms listed in the table below are submitted for Board consideration. In accordance with Board guidelines, a residential user charge impact analysis was conducted for each project. This analysis determines the anticipated user charges as a result of the project relative to the affordable rate as a percentage of the applicant's median household income. Projects involving higher user charges relative to income generally receive lower interest rates than those with relatively lower user charges.

Congress has not finalized the federal State Revolving Fund appropriation for FY 2024. As such, we are unsure as to the amount, if any, that could be made available as principal forgiveness in FY 2024. The staff will analyze the projects with regard to the program's hardship affordability criteria and will be prepared to work with the Director on providing principal forgiveness to some projects as allowed by previous delegations if it is provided for by the federal appropriation.

As in the last several years, we are proposing that the subsidized program rate for wastewater related projects differ depending on the term of the loan, such that 20-year term program rates are set at 1.50% (150 basis points) below market, 25-year term program rates are 1.25% (125 basis points) below market, and 30-year term program rates are 1.00% (100 basis points) below market. Market rates would be based on an evaluation by Virginia Resource Authority (VRA) of the market conditions that exist about a month prior to each loan closing. The program is recommending the interest rate for the Southwest Virginia Pilot Program construction projects be set at 0%, the hardship interest rate be set at 0.5%, and a minimum interest rate of 1% for all other loans.

For projects such as wastewater treatment plants and pump stations that involve significant mechanical equipment, the maximum loan term would be up to 25 years, whereas the term for projects that primarily involve wastewater conveyance piping installation or improvements and projects funded using programmatic financing could be up to 30 years and no longer than the expected useful life of the project.

FY 2024 Proposed Interest Rates and Loan Term Authorizations		
<i>Applicant</i>	<i>Loan Amount</i>	<i>Rates and Loan Terms</i>
Upper Occoquan Service Authority	\$10,268,000	0%, up to 20 years
Maury Service Authority	\$350,000	0%, up to 20 years
Town of Honaker	\$1,958,000	0%, up to 30 years
City of Norton	\$1,891,000	0%, up to 30 years
Town of Pennington Gap	\$2,697,130	0%, up to 30 years
Town of Gate City	\$704,000	0%, up to 30 years
City of Portsmouth	\$6,608,064	0.5%, up to 30 years
HRSD	\$30,000,000	PR, up to 25 years
Sanitary Board of Bluefield	\$2,407,909	0.5%, up to 30 years
Henry County PSA	\$3,563,000	0.5%, up to 30 years
BVU Authority	\$7,294,000	PR, up to 30 years
Sussex Service Authority	\$3,950,000	0.5%, up to 30 years
Town of Buchanan	\$1,842,000	0.5%, up to 25 years
City of Danville	\$15,000,000	0.5%, up to 25 years
Smyth County	\$6,337,600	0.5%, up to 30 years
City of Waynesboro	\$9,040,000	0.5%, up to 25 years
Bland County	\$4,126,000	0.5%, up to 25 years
Town of Abingdon	\$2,101,500	0.5%, up to 25 years
City of Radford	\$3,695,000	PR, up to 25 years
City of Richmond	\$30,000,000	0.5%, up to 25 years
County of Greene	\$13,400,000	PR, up to 30 years
Tazewell County PSA	\$3,577,980	0.5%, up to 25 years
Prince William County	\$20,000,000	PR, up to 25 years
Middlesex County	\$341,092	0.5%, up to 30 years
Town of Glasgow	\$1,396,000	0.5%, up to 25 years
Town of Kilmarnock	\$7,000,000	0.5%, up to 25 years
TOTAL		\$189,548,275
PR = Program Rate *minimum 1%		

Staff Recommendations

Authorize the execution of loan agreements for the projects, loan amounts, interest rates and terms listed above, and that 20-year term program rates are set at 1.5% (150 basis points) below market, 25-year term program rates are 1.25% (125 basis points) below market, and 30-year term program rates are 1.00% (100 basis points) below market, based on VRA’s evaluation of the market conditions that exist about a month prior to each loan closing. The interest rate for Southwest Virginia Pilot Program construction projects will be 0%, the hardship interest rate will be 0.5%, and the minimum interest rate will be 1% for all other loans. Loan closings will be subject to receipt of a favorable financial capability analysis report and supporting recommendation from VRA for each loan recipient.

Applications Received and Evaluated during the FY 24 Virginia Clean Water Revolving Loan Fund Solicitation

FY 2024 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Wastewater - Southwest Virginia Pilot Program Phase 1 Step 2 Projects				
Town of Honaker	\$ 1,958,000.00	Tunnel Hill/Downtown Sewerline Replacement/Rehabilitation: This project consists of the replacement and/or rehabilitation of approximately 3,590 linear feet of sanitary sewer and 18 manholes. The project addresses inflow and infiltration issues identified in a sanitary sewer evaluation study financed by DEQ as a part of the SW Pilot Program. The repairs identified in the study and resulting PER are the highest priority repairs needed to address sanitary sewer overflows.	415.05	Fall 2024
City of Norton	\$ 1,891,000.00	Spring Avenue Collector Replacement/Rehabilitation: This project finances the replacement/rehabilitation of approximately 4,060 linear feet of sanitary sewer and 19 manholes. The project addresses inflow and infiltration issues identified in a sanitary sewer evaluation study financed by DEQ as a part of the SW Pilot Program. The repairs identified in the study and resulting PER are the highest priority repairs needed to address sanitary sewer overflows.	356.26	Fall 2024
Town of Pennington Gap	\$ 2,697,130.00	Wallen Creek Stream Crossing and Cane Creek Interceptor - Phase I Projects: This project finances the replacement of approximately 4,307 linear feet of sanitary sewer and 22 manholes. The project addresses inflow and infiltration issues identified in a sanitary sewer evaluation study financed by DEQ as a part of the SW Pilot Program. The repairs identified in the study and resulting PER are the highest priority repairs needed to address sanitary sewer overflows.	349.99	Fall 2024
Town of Gate City	\$ 704,000.00	High School Area Collector Line Replacement Project: This project consists of the replacement of approximately 982 linear feet of sanitary sewer and 6 manholes. The project addresses inflow and infiltration issues identified in a sanitary sewer evaluation study financed by DEQ as a part of the SW Pilot Program. The repairs identified in the study and resulting PER are the highest priority repairs needed to address sanitary sewer overflows.	344.20	Fall 2024

SWVAPP Phase 1 Step 2

Projects Subtotal: \$ 7,250,130.00

Wastewater Projects				
City of Portsmouth	\$ 6,608,064.00	Bunche Boulevard Force Main Replacement: This project replaces an existing force main that is at the end of its useful life and has a history of failures that have lead to sanitary sewer overflows. This project will replace and relocate the force main to improve system reliability and locate the force main in an area that is easier to operate and maintain.	456.47	Winter 2024

VCWRLF FY24 PPL - Attachment A

FY 2024 Applicants	Amount Requested	Project Description	Points	Projected Project Start
City of Portsmouth	\$ 2,125,000.00	Pump Stations No. 17 and 18 Rehabilitation Project: This project will rehabilitate two existing pump stations (No. 17 & 18) that have a history of failures which result in sanitary sewer overflows. The aging pump stations have also become difficult to repair due to antiquated equipment for which replacement parts are not readily available.	456.47	Winter 2024
Hampton Roads Sanitation District	\$ 150,000,000.00	FY 2024 Program: This loan will finance the capital construction program, which includes 37 projects within HRSD's Capital Improvement Plan. Of those projects, the James River and Nansemond River SWIFT facility projects comprise a majority of the scope funded by this assistance agreement.	456.42	Winter 2024
City of Lynchburg	\$ 60,200,000.00	CSO 52 Storage Tunnel and Pump Station Project: This project will address requirements for the consent order LTCP priority number 9 project. Installation of a new solids and floatable controllable regulator. In addition a storage tunnel and pump station will be constructed to reduced combined sewer overflow volumes.	450.32	Winter 2024
Sanitary Board of Bluefield	\$ 2,407,909.00	Wintercreek Collection System Replacement: This project will replace over 7,000 linear feet of gravity sewer line and 28 manholes, as well as add new manholes and sewer connections in the Wintercreek service area. Currently the area is experiencing 118,000 gallons of inflow and infiltration a day, resulting in sewer backups and overflows.	432.49	Fall 2024
City of Portsmouth	\$ 6,585,814.00	Douglas Avenue Vacuum Sewer Replacement Project: This project will replace approximately 3,000 linear feet of cast-iron vacuum sewer, which collects flow from seven of 11 suction wells. Over a 12-month period (June 2022 - July 2023) the wells experienced six breaks that resulted in gravity sewer overflows.	431.47	Summer 2024
Henry County Public Service Authority	\$ 3,563,000.00	Henry County Sanitary Sewer and Manhole Rehabilitation: This project addresses inflow and infiltration to the Koehler sanitary sewer system by rehabilitating 80 manholes and over 9,000 linear feet of sewer line. The goals of this project are to increase capacity within the system and reduce sanitary sewer overflows within their system, which should have a positive impact on the Smith River, to which the discharge from the system (via WWTP) is released.	413.97	Winter 2024
BVU Authority	\$ 7,294,000.00	Beaver Creek Sewer Shed Improvements Project - Phase 2: This project will address sewer system improvements identified in a consent order, specifically manhole rehabilitation and replacements, replacement lateral connections, and pipe lining and repair totaling over 22,000 linear feet.	388.72	Fall 2024
City of Portsmouth	\$ 2,512,299.00	Elm Avenue Force Main & Gravity Sewer Rehabilitation Project: This project will replace approximately 1,500 linear feet of existing sanitary sewer force main and rehabilitate approximately 850 linear feet of existing gravity sanitary sewer and associated manholes. The sewer line and manholes to be replaced have reached the end of their useful life.	381.47	Winter 2024

VCWRLF FY24 PPL - Attachment A

FY 2024 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Sussex Service Authority	\$ 3,950,000.00	Wakefield and Waverly Sanitary Sewer Systems: This project finances rehabilitation of two sanitary sewer systems in Sussex County serving a total of 1,749 connections. Together, the systems have nearly 29 miles of sewer line and nearly 600 manholes. Rehabilitation work required by a Consent Order includes CIPP lining, replacement, lateral rehabilitation, and manhole rehabilitation.	377.96	Summer 2024
Town of Buchanan	\$ 1,842,000.00	Town of Buchanan Water Street Pump Station and Force Main: This project will replace the Water Street pump station and force main, which are over 60 years old. Only one of the two pumps at the pump station is operational, but it was also significantly leaking into the dry pit. The project will modernize and update the system components in order to maintain permit compliance.	375.54	Summer 2024
City of Danville	\$ 30,300,000.00	New Southside Pump Station: This project will replace the Southside Pump Station, which pumps approximately one third of the City's wastewater and has reached the end of its useful life. The implementation of this project will result better operations, maintenance and capacity, as well as decrease the potential for sanitary sewer overflows.	360.04	Winter 2025
Sanitary Board of Bluefield	\$ 2,307,416.00	Collection System Rehabilitation and Replacement - Stockton Street Project: This project will correct inflow and infiltration issues due to PVC and vitrified clay pipe with high potential for leaks. Approximately 1,570 linear feet of 24-inch sanitary sewer will be rehabilitated and 855 linear feet of 12-inch sewer line and 1,930 linear feet of 24-inch sewer line will be replaced in the downtown area of Bluefield, VA. These improvements are expected to reduce sanitary sewer back-ups and overflows.	357.49	Summer 2024
Smyth County	\$ 6,337,600.00	Gloseclose Sewer: This project finances sewer system improvements necessary to provide public sewer service to the Groseclose area of Smyth County. In particular, the project will construct approximately 26,000 linear feet of gravity sewer line, manholes, and related improvements. As a result of this project, public sewer service will be made available to approximately 72 single-family residences, 8 non-residential buildings, industrial site, church, motel, restaurant, gas stations, garage, and car lot.	341.12	Winter 2025
City of Waynesboro	\$ 9,040,000.00	Wastewater Treatment Plant (WWTP) Digester: This project will upgrade/replace the majority of the anaerobic digester components at the WWTP. These components were not upgraded when the rest of the WWTP was upgraded in 2010. In particular, the primary digester cover tore in May 2023, which is resulting in additional methane released into the air instead of captured by the heat exchanger. As a result, the head exchanger may be unable to properly destroy pathogens, which would affect the ability of the WWTP to produce Class B Biosolids.	327.74	Summer 2024

VCWRLF FY24 PPL - Attachment A

FY 2024 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Bland County	\$ 4,126,000.00	Bastian Wastewater Treatment Plant Upgrades Project: This project will address operational challenges to meeting permit limits and operator safety concerns through the implementation of new processes (new UV system, tighter wasting control, improved aeration control in SBRs and digesters). The existing equipment is nearing the end of its service life and needs to be replaced to improve the operability of the facility.	327.51	Winter 2025
Town of Abingdon	\$ 2,101,500.00	Southview Sewer Lift Station & Forcemain Improvements Project: This project will finance the relocation of and improvements to the Southview pumping station. The pump station is currently located on a small parcel that is too small for adequate maintenance and potential upgrades. This project will move the pump station to an adjacent, larger lot and require the acquisition of that lot. In addition to relocating the pumping station, this project will replace aging pumps and valves, electrical panel, wet well and the building. Lastly, this project will also replace 5,186 linear feet of 6-inch force main that delivers flow from the pump station to the gravity sewer. The force main has experienced several breaks in recent years that have resulted in sewer system overflows.	324.19	Fall 2024
City of Radford	\$ 3,695,000.00	Lift Station Rehabilitation Project: This project will implement improvements to six pump stations, including updates to station equipment, controls, electrical, and piping/valves, which have reached the end of their service life. These improvements are necessary for the pump stations to continue operations in order to avoid sanitary sewer overflows. In addition to the pump station upgrades, this loan would finance preliminary engineering and design.	318.42	Fall 2024
City of Richmond	\$ 58,160,176.00	WWTP Sludge Thickening and Dewatering Facilities Improvements: This project finances the replacement of centrifuges utilized in the dewatering and thickening facilities at the Richmond WWTP. Additional upgrades to the piping, structural, electrical and other components will be made to improve functioning processes.	315.61	Spring 2024
County of Greene	\$ 13,400,000.00	Stanardsville Sewer System Improvements: This project replaces aging sewer lines serving approximately 441 connections in the Stanardsville area. Specifically, the project will replace gravity sewer lines within the Town limits, increase capacity at pump stations and decommission and demolition of the Greene County Wastewater Treatment Plant (flow will be diverted to the Rapidan Wastewater Treatment Plant).	314.09	Spring 2025
Tazewell County Public Service Authority	\$ 3,577,980.00	Falls Mills Wastewater Treatment Plant Rehabilitation: This project will replace equipment at the Falls Mills WWTP that is past its expected service life. Updates include more efficient blowers and new monitoring equipment that while in service, are not as accurate as more modern meters that will be installed.	312.49	Summer 2024

VCWRLF FY24 PPL - Attachment A

FY 2024 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Prince William County Service Authority	\$ 120,000,000.00	HL Mooney Advanced Water Reclamation Facility (AWRF) Facility Wide Improvements: This project involves 19 components of the processes at the H.L. Mooney Advanced Water Reclamation Facility and includes upgrades and improvements necessary to address aging infrastructure, process improvements, and operational efficiencies for current and future demand. Specific improvements expected: equalization basin modifications, centralized odor control improvements, UV system improvements, and support facility improvements. Additionally, this project will finance the installation of solar panels and EV charging stations.	305.71	Summer 2024
Middlesex County	\$ 341,092.00	Saluda Low Pressure Sanitary Sewer Collection System: This project expands sewer service to the Saluda area in Middlesex County which is currently reliant on onsite septic. The project will result in up to 35 new sewer connections.	299.67	Fall 2024
Henry County Public Service Authority	\$ 2,632,350.00	Philpott WFP Residuals Management System Project: This project will replace a storage lagoon with a new residuals storage tank and install a pump station and force main to convey the residuals to the downstream sanitary sewer. This updated method for disposal will reduce O&M costs and improve the redundancy of the water filtration plant.	288.97	Spring 2024
Town of Glasgow	\$ 1,396,000.00	Town of Glasgow Wastewater Treatment Plant: This project includes improvements to the wastewater treatment plant and a maintenance building. The improvements are necessary as the last significant upgrade to the plant was in 1990 and some equipment has reached the end of its useful life. Additionally, the project will address some portions of the sewer system that have not yet been rehabilitated.	285.70	Winter 2025
Town of Abingdon	\$ 2,600,000.00	Wolf Creek Water Reclamation Facility Improvements Project - Phase 1t: This project entails improvements to the Wolf Creek WWTP, a 4.95 MGD facility. Specific improvements include replacement of sludge dewatering centrifuge, replacement of UV disinfection system, electrical improvements, and reactivation of the Special Wastes facility.	284.19	Fall 2024
Upper Occoquan Service Authority	\$ 36,747,347.00	Ozone Biofiltration (OBF) System: This project will convert a carbon treatment system at the Millard H. Robbins, Jr. water reclamation plant into an Ozone Bio-Filtration (OBF) process, which will address pathogenic micro-organisms, bulk organics, and specific compounds of emerging concern (pharmaceuticals and personal care products, flame retardants, PFAS, nitrosamines, 1-4 Dioxane, and bromate).	276.60	Winter 2024

VCWRLF FY24 PPL - Attachment A

FY 2024 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Middlesex County	\$ 14,722,776.00	Wastewater Collection System - Deltaville Service Area Project: This project expands sewer service to three areas in Middlesex County that are currently reliant on onsite septic. The project proposes a low-pressure system consisting of a collection of individual grinder pumps connected via two- to eight-inch force mains that convey flow to the proposed terminal pump station that will connect to another force main to discharge flow to an HRSD interceptor which will convey the wastewater to the York River Treatment Plant for treatment and discharge. The project will result in up to 510 new sewer connections.	269.67	Spring 2025
Town of Kilmarnock	\$ 17,525,500.00	Town of Kilmarnock Wastewater Treatment Plant Improvements Phase 2: This project will make improvements to the Town of Kilmarnock Wastewater Treatment Plant, specifically replacement of the influent screen, grit removal system, pump station, and aerobic digester blower and diffuser, new SCADA system, improvements to the equalization basins, conversion of biological reactors, chemical feed upgrades, and miscellaneous improvements.	265.54	Spring 2024
Maury Service Authority	\$ 350,000.00	Evaluation of Biosolids Processing Options: This project is to fund a study of the land application of biosolids as either liquid or solid and determine whether processing options exist to land apply or dispose of biosolids in the local landfill. Project addresses PFAS.	77.79	Spring 2024

Wastewater Projects Subtotal: \$ 576,448,823.00

Stormwater Projects				
City of Norfolk	\$ 20,000,000.00	St. Paul's Blue-Greenway Phase II Project: This project funds the final phase of the St. Paul's Blue-Greenway, which is a planned stormwater wetland and retention BMP that will serve a central feature of Norfolk's St. Paul's Area Redevelopment. This phase entails daylighting of a large box culvert, significant rough and fine grading, installation of water control and outlet structures, construction of maintenance features, and planting of extensive wetland and buffering vegetation.	635	Fall 2024
City of Norfolk	\$ 1,928,474.00	Silver Lake Retrofit Project: This project will retrofit Silver Lake, a historic estuary impounded in the 1950s to create a stormwater management retention pond. The current BMP did not meet standards and this project will convert it to a wet pond (Level II by DEQ standards). The new wet pond is expected to improve water quality draining from the neighborhood before reaching Broad Creek. A net reduction of 15 lbs of phosphorus and 58 lbs. of nitrogen are expected as a result of the project.	585	Fall 2024

VCWRLF FY24 PPL - Attachment A

FY 2024 Applicants	Amount Requested	Project Description	Points	Projected Project Start
City of Norfolk	\$ 2,000,000.00	Riverside Memorial Cemetery Shoreline Stabilization Project: This project restores a highly erosive shoreline at the Riverside Memorial Cemetery. Erosion of banks up to 12 feet in height along 1500 feet of shoreline threaten graves in the adjacent cemetery. In addition, development has resulted in loss of significant marsh area. Funding will be used to stabilize the bank and restore native wetland vegetation through the use of structural and nature-base solutions, which will improve water quality in the adjacent creek and improve resilience for an important community asset.	575	Winter 2024

Stormwater Projects Subtotal: \$ 23,928,474.00

Land Conservation Projects				
The Trust for Public Land	\$ 5,000,000.00	Lynnhaven River Estuary Protection - Phase II Project: This project finances the acquisition of additional land for the Please House Point Natural Area, which buffers the natural area and conserves additional maritime forest for the benefit of water quality.	322.70	Winter 2024

Land Conservation Projects Subtotal: \$ 5,000,000.00

Total Requested \$ 612,627,427.00

Fully funded projects are unshaded
Reduced funding projects are shaded light grey
Unfunded projects are shaded dark grey