Mini-Board Book- Tab B to G materials only
revised 11/23/22 – Tab E materials updated

TENTATIVE AGENDA
STATE WATER CONTROL BOARD MEETING

TUESDAY, NOVEMBER 29, 2022

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 – 10:30 A.M

Agenda Item	Presenter		Tab
Minutes (August 25, 2022) * mini book excludes minutes	Porterfield		A
Final Regulations			
Reissuance of Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Non-Contact Cooling Water Discharges of 50,000 Gallons Per Day or Less 9VAC25-196	Bryan	pg 4	B
Reissuance of Virginia Pollutant Discharge Elimination System General Permit for Potable Water Treatment Plants 9VAC25-860	Daub	pg 62	C
Proposed Regulations			
Reissuance of Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Concrete Products Facilities 9VAC25-193	Daub	pg 120	D
Reissuance of General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems 9VAC25-890	Winn	pg 196	E
9VAC25-210 Virginia Water Protection Permit Regulation, 9VAC25-610 Ground Water Withdrawal Regulations - Amendments Establishing Criteria for Water Auditing Plans and Leak Detection and Repair Plans and Requiring Applications to Include Plans (required by Chapter 100 of the 2021 Special Session I Acts of Assembly)	Kudlas	pg 405	F
Other Business			
Solar Project Siting Study update (HB206 2022)	**Dowd**		
Stormwater Guidance update	**Hammond**		
FY 2023 Virginia Clean Water Revolving Loan Fund Final Authorizations	**Doran**	pg 454	G
Report to the Board Regarding Controversial Permits	**Porterfield**		
Division Director's Report	**Morris/Schneider**		
Virginia's Response to Per- and Polyfluoroalkyl Substances (PFAS)	**Steers**		
Mountain Valley Pipeline - Update	**DEQ Staff**		
Future Meeting date- March 23, 2023	**Porterfield**		
Public Forum (time not to exceed 45 minutes - no public comment on Mountain Valley Pipeline)			
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.

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 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

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Additional Meeting Information:

- 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.

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Travis A. Voyles
Acting Secretary of Natural and Historic Resources

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

November 1, 2022

MEMORANDUM

TO: State Water Control Board Members
FROM: Joseph Bryan, Office of VPDES Permits
SUBJECT: Reissuance of General VPDES Permit Regulation for Non-Contact Cooling Water Discharges of 50,000 Gallons Per Day Or Less 9VAC25-196

The current VPDES Non-Contact Cooling Water General Permit will expire on March 1, 2023 and the regulation establishing this general permit is being amended to reissue another term. The staff is bringing this final regulation amendment before the State Water Control Board (Board) to request the adoption of the amendments.

The Board's authorization of the proposal was received at the June 22, 2022 meeting. A Notice of Public Comment Period (NOPC) was held July 18, 2022 through September 16, 2022 with a public hearing held on August 17, 2022. There we no public attendees at the public hearing and no comments were received. Public comments were received from EPA Region 3. 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 Fact Sheet are also attached. Substantive changes to the existing regulation are:

- 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, 2022.

- Section 40 – Effective Date of Permit - Updated effective dates to April 1, 2023 – March 31, 2028 in order to begin the permit at the start of April to help ensure continuous e-DMR submittal using full calendar quarters (April – June, July – September, October – December, January – March, etc.). Currently the permit abruptly ends before a full monitoring period is covered (March 1, 2023). This extends the current permit by 30 days for facilities currently covered under the general permit; however, no new coverage is available to new facilities between March 1, 2023 and April 1, 2023.

- Section 50 – Authorization to Discharge – Revised section B.4 in order to clarify that a discharge is not eligible for coverage under this general permit if it is not consistent with the assumptions and requirements of a TMDL approved prior to the term of this general permit.

  Added section B.5 indicating that facilities subject to the substantive provisions of the federal regulations at 40 CFR 125 Subparts I or J will be deemed not eligible for this general permit. These provisions of the federal regulations apply to new and existing facilities with both cooling water intake flows greater than 2.0 million gallons per day and which make use of greater than 25 percent of their intake flow exclusively for cooling. These federal provisions would not apply to any facility that meets the 50,000 gallons per day maximum threshold for the discharge of cooling water under this general permit.

  Continuation of permit coverage is now contingent upon submittal of a registration statement 60 days prior to expiration, or a later submittal established by the department. This replaces the previous 30 day requirement in order to be consistent with other general permits.

- Section 60 - Registration Statement – Added a section requiring general cooling water intake structure information in order to inform any necessary 316(b) Best Technology Available (BTA) determinations. Section 316(b) of the Clean Water Act (CWA) requires that "the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact." Under state and federal regulations (9VAC25-31-165 C; 40 CFR 125.80(c) and 125.90(b)) cooling water intake requirements for facilities covered under this general permit must meet the requirements of CWA § 316(b) on a case-by-case, best professional judgement (BPJ) basis. The requested information will inform those case-by-case decisions, where necessary.

  Registration statement deadlines for new and existing facilities changed from 30 days to 60 days prior to expiration of the general permit or commencement of discharge. Registration statement deadlines for facilities currently covered under an individual VPDES permit changed from 210 days to 240 days prior to expiration of the individual permit. State Corporation Commission entity number now required for a complete registration statement. 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 Part I A – Effluent Limitations – The numerical limitations from the Water Quality Standards (9VAC25-260) for chlorine in freshwater and saltwater replace "nondetectable" and the quantification limit (QL) for chlorine is moved from footnote (3) to footnote (4) for clarity. Reporting requirements remain unchanged.

- Section 70 Part I B – Special Conditions - MS4 notification now requires an email to be provided to the owner of the MS4.

- Section 70 Part II – Conditions Applicable to All Permits – Under reporting monitoring results, added the requirement for electronic reporting as noted in section 60 above. Also, updated the website link for reports of noncompliance.

A Notice of Intended Regulatory Action (NOIRA) for the amendment was published October 12, 2020. One comment was received via the Town Hall website and was considered during the technical advisory committee (TAC) meeting held on August 9, 2021. The proposed regulation took into consideration the recommendations of the TAC formed for this regulatory action. A list of the TAC membership is attached.

The Office of the Attorney General reviewed the proposed regulation and provided certification of statutory authority in a memo dated June 30, 2022.

Attachments: TAC Membership, Final General Permit Regulation, Agency Background Document (Town Hall), Fact Sheet, ORM Economic Impact Form

TECHNICAL ADVISORY COMMITTEE MEMBERSHIP NON-CONTACT COOLING WATER GENERAL PERMIT REGULATION

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DEQ Staff: **Allan Brockenbrough** – CO VPDES **Joseph Bryan** – CO VPDES	**DEQ Staff Technical Liaisons:** Troy Nipper – CO Compliance Susan Edwards – BRRO Permits Ann Zimmerman – NRO Permits Peter Sherman – CO VPDES

townhall.virginia.gov

Exempt Action: Final Regulation
Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC25-196
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Noncontact Cooling Water Discharges of 50,000 Gallons Per Day or Less
Action title	Amendment and reissuance of the VPDES general permit for Noncontact Cooling Water Discharges of 50,000 Gallons Per Day or Less
Final agency action date	November 29, 2022
Date this document prepared	October 12, 2022

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 Noncontact Cooling Water Discharges of 50,000 Gallons Per Day or Less. The existing general permit regulation establishes limitations, monitoring requirements and other special conditions for point source discharges of noncontact cooling water of 50,000 gallons per day or less to surface waters in order to maintain surface water quality. This regulatory action is proposed to amend and reissue the existing general permit, which expires on March 1, 2023. A periodic/small business impact review in support of this regulation has been conducted separately.

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 (9VAC25-196) constitutes a VPDES general permit administered by Virginia DEQ, a U.S. EPA authorized permitting authority under Clean Water Act (CWA) § 402(b). Under CWA § 402(b)(1)(B), VPDES permits must be for fixed terms not to exceed five years. The existing general permit expires on March 1, 2023 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 TAC meeting input have identified areas where the general permit could be updated and potentially 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
BTA- Best Technology Available
CWA- Clean Water Act
EPA (U.S. EPA): United States Environmental Protection Agency
DEQ: Department of Environmental Quality
NOIRA: Notice of Intended Regulatory Action
NPDES: National Pollutant Discharge Elimination System
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 29, 2022 the State Water Control Board adopted 9VAC25-196 Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Noncontact Cooling Water Discharges of 50,000 Gallons Per Day or Less as a final regulation.

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

waste 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, § 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 in order to establish permitting requirements for discharges of noncontact cooling water in quantities of 50,000 gallons per day or less 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 March 1, 2023 and must be reissued to cover existing and new facilities that use processes that require the use of noncontact cooling water.

As part of the reissuance process, the effluent limits, monitoring requirements and special conditions in the general permit were reviewed to ensure that the permit is still protective of water quality

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 will establish limitations and monitoring requirements for point source discharges of noncontact cooling water in quantities of 50,000 gallons per day or less to surface waters. The effluent limits, monitoring requirements and special conditions in the general permit were reviewed to ensure that the permit is still protective of water quality. The primary issue being addressed is that the existing general permit expires on March 1, 2023 and must be reissued in order to continue making it available after that date. The review of effluent limitations resulted in the updating of chlorine limits to match the criteria set forth in the Virginia Water Quality Standards. Additional requirements were also added to the Registration Statement in order to collect information necessary to inform 316(b) Best Technology Available (BTA) determinations for cooling water intake structures.

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 advantage of (eventual) electronic submission of registration statements or combined applications and DMRs is that this approach complies with U.S. EPA program requirements for e-reporting. Once in place, this system will also allow for greater efficiency in the submittal, management, and transfer of program data.

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.

Other State Agencies Particularly Affected:
There are no other state agencies particularly affected by the final regulation.

Localities Particularly Affected:
There are no localities particularly affected by the final regulation.

Other Entities Particularly Affected:
There are no other entities particularly affected by the final regulation.

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
U.S. EPA	The draft permit allows for automatic transfer of coverage to a new permittee if the current permittee notifies the department within 30 days of the transfer of the title to the facility or property. This permit condition appears to be inconsistent with 40 CFR 122.61(b)(1) which requires the permittee to notify the Director at	DEQ reviewed the differences between the Federal regulation at 40 CFR 122.61(b)(1), the VPDES regulation, and the draft language proposed in 9VAC25-196. DEQ intends to retain the language as drafted to ease the burden of administering the general permit on staff.

	least 30 days in advance of the proposed transfer date. EPA recommends VADEQ revisit the automatic transfer of coverage condition in the permit to ensure its consistency with the regulations.	

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
9VAC25-196-15. Applicability of incorporated references based on the dates that they became effective.		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, 2021.	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, 2022.	*Revised date to "July 1, 2022" based on the most recent federal update prior to this reissuance.*
9VAC25-196-50. Authorization to discharge.		B.4. The discharge is not consistent with the assumptions and requirements of an approved TMDL	B.4. The discharge is not consistent with the assumptions and requirements of a TMDL approved prior to the term of this general permit;	*Clarifies that only TMDLs approved prior to the term of the general permit will be considered for the purposes of this section.*
9VAC25-196-60. Registration Statement.	~~C.13.c.~~	Requirement removed.	Requirement removed.	*The initial requirement for hydropower facilities to provide a water use efficiency calculation was based on EPA's 2021* Framework for Considering Existing Hydroelectric Facility

				Technologies in Establishing Case-by-Case, BPJ 316(b) NPDES Permit Conditions. *EPA released a revised Framework document in July 2022 that removed the water use efficiency calculation as an option for BPJ 316(b) determinations. Thus, the requirement was removed from the Final Regulation.*

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**
9VAC25-196-15. Applicability of incorporated references based on the dates that they became effective.		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, 2017.	*Revised date to "July 1, 2022" based on the most recent federal update prior to this reissuance.*
9VAC25-196-40. Effective date of the permit		This general permit will become effective on March 2, 2018. This general permit will expire on March 1, 2023.	This general permit will become effective on April 1, 2023. This general permit will expire on March 31, 2028. *Amended dates to reflect new 5-year term. Started term at the beginning of the month consistent with DEQ VPDES monitoring policy.*

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-196-50. Authorization to discharge. B.3.		B.3. The discharge violates or would violate the antidegradation policy in the Water Quality Standards at 9VAC25-260-30; or	*Struck "or" and moved it to the end of section 9VAC25-196-50.B.4 due to the addition of section 9VAC25-196-50.B.5*
9VAC25-196-50. Authorization to discharge. B.4.		B.4. The discharge is not consistent with the assumptions and requirements of an approved TMDL.	B.4. The discharge is not consistent with the assumptions and requirements of a TMDL approved prior to the term of this general permit; or *Clarifies that only TMDLs approved prior to the term of the general permit will be considered for the purposes of this section.* *Inserted "or" at the end of the section due to the addition of section 9VAC25-196-50.B.5*
9VAC25-196-50. Authorization to discharge. B.5.	B.5.	None.	B.5. The facility is subject to the substantive provisions of 40 CFR 125 Subparts I or J. *Added section to indicate that facilities subject to the referenced federal regulations are not eligible for coverage under this general permit.*
9VAC25-196-50. Authorization to discharge. G.1.		G.1. Permit coverage shall expire at the end of its term. However, expiring permit coverages are automatically continued if the owner has submitted a complete registration statement at least 30 days prior to the expiration date of the permit, or a later submittal established by the board, which cannot extend beyond the expiration date of the original permit.	*Replaced "30 days" with "60 days" to be consistent with other general permits.*
9VAC25-196-50. Authorization to discharge. G.2.b.		G.2.b. Issue a notice of intent to deny coverage under the reissued general permit. If the general permit coverage is denied, the owner would then be required to cease the discharges authorized by the continued general permit or be subject to enforcement	*Replaced "reissued" with "amended".* *Added "coverage" to "… the continued general permit …"*

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
		action for discharging without a permit;	
9VAC25-196-60. Registration Statement. A.		A. Deadlines for submitting registration statements. The owner seeking coverage under this general permit shall submit a complete VPDES general permit registration statement in accordance with this section, which shall serve as a notice of intent for coverage under the VPDES general permit for noncontact cooling water discharges of 50,000 gallons per day or less.	*Replaced "section" with "chapter".* *Added "regulation" following "VPDES general permit"*
9VAC25-196-60. Registration Statement. A.1.		A.1. New facilities. Any owner proposing a new discharge shall submit a complete registration statement at least 30 days prior to the date planned for commencing operation of the new discharge.	*Replaced "30 days" with "60 days" to be consistent with other general permits.*
9VAC25-196-60. Registration Statement. A.2.a.		A.2.a. Any owner covered by a VPDES individual permit who is proposing to be covered by this general permit shall submit a complete registration statement at least 210 days prior to the expiration date of the VPDES individual permit.	*Replaced "210 days" with "240 days" to be consistent with other general permits.* *Added "or a later submittal established by the board" which is consistent with other general permits and provides flexibility to address submittals later than 240 days prior to the expiration date of the VPDES individual permit.*
9VAC25-196-60. Registration Statement. A.2.b.		A.2.b. Any owner that was authorized to discharge under the expiring or expired VPDES general permit and that intends to continue coverage under this general permit shall submit a complete registration statement to the board at least 30 days prior to the expiration date of the existing general permit or a later submittal established by the board.	*Added "for noncontact cooling water discharges of 50,000 gallons per day or less," after "VPDES general permit".* *Replaced "30 days" with "60 days" to be consistent with other general permits.*
9VAC25-196-60.	C.3.	None.	C.3. State Corporation Commission entity identification number if the

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
Registration Statement.			facility is required to obtain an entity identification number by law. *Inserted this registration statement requirement to be consistent with other general permits. It ensures the facility is able to conduct business in Virginia and aides potential enforcement.* *Existing sections C.3 through C.12 renumbered accordingly.*
9VAC25-196-60. Registration Statement. C.11.	C.12.	MS4 notification: "… The notice shall include the following information: the name of the facility, a contact person and telephone number, the location of the discharge, the nature of the discharge, and the facility's VPDES general permit registration number if a reissuance; …"	*Added the requirement to provide an email address to the owner of the MS4 as part of the notification:* "The notice shall include the following information: the name of the facility, a contact person and contact information (telephone number and email), the location of the discharge, the nature of the discharge, and the facility's VPDES general permit registration number if a reissuance."
9VAC25-196-60. Registration Statement.	C.13.	None.	"C.13. The following cooling water intake structure information:" *Section 316(b) of the Clean Water Act (CWA) requires that "the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact." Under state and federal regulations cooling water intake requirements for facilities covered under this general permit must meet the requirements of CWA § 316(b) on a case-by-case, best professional judgement (BPJ) basis.* *Thus, general cooling water intake structure information is now required on the registration statement, as applicable, in order to inform any necessary 316(b) Best Technology Available (BTA) determination.*

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
9VAC25-196-60. Registration Statement.	C.13.a.	None.	"C.13.a. A determination of the cooling water intake source (i.e. groundwater, surface water, third party supplier)." *Identifies the source of the cooling water to the facility, which will indicate whether a 316(b) BPJ decision will be necessary.*
9VAC25-196-60. Registration Statement.	C.13.b.	None.	"C.13.b. For surface water intakes or non-potable surface water received from a third party supplier, the following information: (1) Source water physical data (water body description, hydrology, chemistry, and area of influence of intake structure). (2) Cooling water intake structure data (screen size, through screen velocity, configuration of intake, flows, a water balance diagram, and typical operations). (3) Source water baseline biological characterization data (any available studies). (4) Cooling water system data (configuration of the cooling water system and water reuse). (5) Operational status (description of current and future production schedules)." *Gathers general information regarding the cooling water intake structures of applicable facilities. This information will inform 316(b) BPJ decisions.*
9VAC25-196-60. Registration Statement.	~~C.13.c.~~ Removed.	None.	Requirement removed for the Final Regulation following EPA's release of a revised Framework document in July 2022 that removed the water use efficiency calculation as an option for BPJ 316(b) determinations. ~~"C.13.c. For hydroelectric facilities, the following calculation: (1) A water-use efficiency calculation of megawatts produced in megawatt hours (MWh) divided~~

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
			~~by the cooling water used in billion gallons per day (BGD).~~" ~~*For hydropower facilities, a water use efficiency calculation is required in addition to information under C.13.b. This calculation will inform 316(b) BPJ decisions for hydropower facilities.*~~ ~~*Per EPA's* Framework for Considering Existing Hydroelectric Facility Technologies in Establishing Case-by-Case, BPJ 316(b) NPDES Permit Conditions*, a water use efficiency ratio greater than or equal to 460 megawatt hours per billion gallons per day (MWh/BGD) indicates that a hydroelectric plant has a cooling water withdrawal efficiency comparable to or better than closed-cycle cooling at steam electric power plants. The framework document concludes that in such cases, consistent with the Existing Facilities Rule BPJ provisions in 125.90(b), the facility would be deemed to meet BTA requirements to minimize entrainment and impingement mortality.*~~
9VAC25-196-60. Registration Statement. E.		E. The registration statement shall be delivered by either postal or electronic mail to the DEQ regional office serving the area where the facility is located.	*Added the following contingent e-reporting language:* "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."

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
			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).
9VAC25-196-70. General permit.		Effective and expiration dates.	*Revised as indicated above.*
9VAC25-196-70. General permit.		Second paragraph: The authorized discharge shall be in accordance with the information submitted with the registration statement, this cover page, Part I - Effluent Limitations and Monitoring Requirements, and Part II - Conditions Applicable to all VPDES Permits, as set forth in this general permit.	*Revised as below:* "The authorized discharge shall be in accordance with the information submitted with the registration statement, this cover page, Part I - Effluent Limitations, Monitoring Requirements, Special Conditions, and Part II - Conditions Applicable to all VPDES Permits, as set forth in this general permit."
9VAC25-196-70. General permit. Part I A 1. Effluent Limitations and Monitoring Requirements for Freshwater		Total Residual Chlorine limit – Nondetectable	Total Residual Chlorine limit – 0.011 mg/L *The numerical chlorine limitation from the Water Quality Standards is now listed rather than "nondetectable". The chronic criteria for TRC in freshwater is 0.011 mg/L.* *Reporting requirements for permittees remain unchanged.* *Reference to footnote (4) was added, indicating the quantification level (QL) for chlorine.*
9VAC25-196-70. General permit. Part I A 1. Effluent Limitations and Monitoring Requirements for Freshwater		Footnote (3) Chlorine limitation of nondetectable (<0.1 mg/l) and chlorine monitoring only apply to outfalls directly discharging to surface waters where …	*Revised Footnote (3) to remove reference to "nondetectable" in accordance with the above as follows:* "Chlorine limitation and monitoring only apply to outfalls directly discharging to surface waters where …"
9VAC25-196-70. General permit.		Footnote (4) – QL table	*Revised Footnote (4) QL table to add the chlorine QL and list the*

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
Part I A 1. Effluent Limitations and Monitoring Requirements for Freshwater			*units of each material alongside the concentration.*
9VAC25-196-70. General permit. Part I A 2. Effluent Limitations and Monitoring Requirements for Saltwater		Total Residual Chlorine limit – Nondetectable	Chlorine Producing Oxidant limit – 0.0075 mg/L *The chlorine parameter in saltwater is Chlorine Producing Oxidant.* *The numerical chlorine limitation from the Water Quality Standards is now listed rather than "nondetectable". The chronic criteria for chlorine in saltwater is 0.0075 mg/L.* *Reporting requirements for permittees remain unchanged.* *Reference to footnote (4) was added, indicating the quantification level (QL) for chlorine.*
9VAC25-196-70. General permit. Part I A 2. Effluent Limitations and Monitoring Requirements for Saltwater		Footnote (3) Chlorine limitation of nondetectable (<0.1 mg/l) and chlorine monitoring only apply to outfalls directly discharging to surface waters where …	*Revised Footnote (3) to remove reference to "nondetectable" in accordance with the above as follows:* "Chlorine limitation and monitoring only apply to outfalls directly discharging to surface waters where …"
9VAC25-196-70. General permit. Part I A 2. Effluent Limitations and Monitoring Requirements for Saltwater		Footnote (4) – QL table	*Revised Footnote (4) QL table to add the chlorine QL and list the units of each material alongside the concentration.*
9VAC25-196-70. General permit.		Part I B 4. MS4 notification … The notice shall include the following information: the	*Added the requirement to provide an email address to the owner of the MS4 as part of the notification:*

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
Part I B 4 Special Conditions		name of the facility, a contact person and telephone number, the location of the discharge, the nature of the discharge, and the facility's VPDES general permit registration number if a reissuance …	"The notice shall include the following information: the name of the facility, a contact person and contact information (telephone number and email), the location of the discharge, the nature of the discharge, and the facility's VPDES general permit registration number if a reissuance."
9VAC25-196-70. General permit. Part II C 2. Reporting Monitoring Results		Part II C 2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the department.	*Added the following contingent e-reporting language:* "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." *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).*
9VAC25-196-70. General permit. Part II D. Duty to Provide Information		Part II D. … The board may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge …	*Replaced "his discharge" with "the permittee's discharge".*
9VAC25-196-70. General permit. Part II G. Reports of Unauthorized discharges		Part II G. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in	*Added reference to Part II I 3 as follows:* "… shall notify the department (see Part II I 3) of the discharge immediately upon discovery of the

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
		violation of Part II F, or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery …	discharge, but in no case later than 24 hours after said discovery …"
9VAC25-196-70. General permit. Part II H. Reports of Unusual or Extraordinary Discharges		Part II H. 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 … … The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part II I 2 …	*Added reference to Part II I 3 and removed "by telephone" as follows:* "…the permittee shall promptly notify (see Part II I 3), in no case later than 24 hours, the department after the discovery of the discharge … *Corrected reference to Part II I 2 with Part II I 1 b as follows:* "…The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part II I 1 b."
9VAC25-196-70. General permit. Part II I 2. Reports of Noncompliance		Part II I 2. The permittee shall report all instances of noncompliance not reported under Part II I 1 or 2, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 2.	*Corrected references to Part II I 2 as follows:* "The permittee shall report all instances of noncompliance not reported under Part II I 1, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 1 b."
9VAC25-196-70. General permit. Reports of Noncompliance	Part II I 3.	Part II I 2. …"NOTE: The immediate (within 24 hours) reports required in Parts II G, H and I may be made to the department's regional office. Reports may be made by telephone, FAX, or online at	*Renumbered the existing "NOTE" to be item 3 and modified the language to be consistent with other general permits as follows:* "The immediate (within 24 hours) reports required in Parts II G, H and I shall be made to the department's regional office. Reports may be

Current section number	New section number, if applicable	Current requirements in VAC	Change, intent, rationale, and likely impact of new requirements
		http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/PollutionReportingForm.aspx. For reports outside normal working hours, leave a message and this shall fulfill the immediate reporting requirement. For emergencies, the Virginia Department of Emergency Services maintains a 24-hour telephone service at 1-800-468-8892."	made by telephone, FAX, or online at https://www.deq.virginia.gov/get-involved/pollution-response (online reporting preferred). 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." *Existing item 3 renumbered as item 4.*
9VAC25-196-70. General Permit. Part II M. Duty to Reapply.		Part II M. "All permittees with currently effective permit coverage shall submit a new registration statement at least 30 days before the expiration date of the existing permit, unless permission for a later date has been granted by the board."	*Replaced "30 days" with "60 days" to be consistent with other general permits.*

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 noncontact cooling water of 50,000 gallons per day or less 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 noncontact cooling water of 50,000 gallons per day or less 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.

Project 6527 - Final

State Water Control Board

2023 Amendment and Reissuance of the Existing Regulation

Chapter 196

Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Noncontact Cooling Water Discharges of 50,000 Gallons Per Day or Less

9VAC25-196-15. Applicability of incorporated references based on the dates that they became effective.

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, 2017 [~~2021~~ 2022].

9VAC25-196-40. Effective date of the permit.

This general permit will become effective on ~~March 2, 2018~~April 1, 2023. This general permit will expire on ~~March 1, 2023~~March 31, 2028. This general permit is effective as to any covered owner upon compliance with all the provisions of 9VAC25-196-50.

9VAC25-196-50. Authorization to discharge.

A. Any owner governed by this general permit is hereby authorized to discharge to surface waters of the Commonwealth of Virginia provided that the owner submits and receives acceptance by the ~~board~~ department of the registration statement of 9VAC25-196-60, submits the required permit fee, and complies with the effluent limitations and other requirements of 9VAC25-196-70, and provided that the ~~board~~ department has not notified the owner that the discharge is not eligible for coverage in accordance with subsection B of this section.

B. The ~~board~~ department will notify an owner that the discharge is not eligible for coverage under this general permit in the event of any of the following:

1. The owner is required to obtain an individual permit in accordance with 9VAC25-31-170 B 3 of the VPDES Permit Regulation;

2. The owner is proposing to discharge to Class V stockable trout waters, Class VI natural trout waters, or any state waters specifically named in other board regulations that prohibit such discharges;

3. The discharge violates or would violate the antidegradation policy in the Water Quality Standards at 9VAC25-260-30; ~~or~~

4. The discharge is not consistent with the assumptions and requirements of [~~an approved~~ a] TMDL [approved prior to the term of this general permit]; or

5. The facility is subject to the substantive provisions of 40 CFR Part 125 Subparts I or J.

C. Chlorine or any other halogen compounds shall not be used for disinfection or other treatment purposes, including biocide applications, for any discharges to waters containing endangered or threatened species as identified in 9VAC25-260-110 C of the Water Quality Standards.

D. The owner shall not use tributyltin, any chemical additives containing tributyltin, or water treatment chemicals containing hexavalent chromium in the cooling water systems.

E. The owner shall not use groundwater remediation wells as the source of cooling water.

F. Compliance with this general permit constitutes compliance, for purposes of enforcement, with §§ 301, 302, 306, 307, 318, 404, 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. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

G. Continuation of permit coverage.

1. Permit coverage shall expire at the end of its term. However, expiring permit coverages are automatically continued if the owner has submitted a complete registration statement at least ~~30~~60 days prior to the expiration date of the permit, or a later submittal established by the ~~board~~department, which cannot extend beyond the expiration date of the original permit. The permittee is authorized to continue to discharge until such time as the ~~board~~department either:

a. Issues coverage to the owner under this general permit; or

b. Notifies the owner that the discharge is not eligible for coverage under this general permit.

2. When the owner that was covered under the expiring or expired general permit has violated or is violating the conditions of that permit, the ~~board~~department may choose to do any or all of the following:

a. Initiate enforcement action based upon the general permit coverage that has been continued;

b. Issue a notice of intent to deny coverage under the ~~reissued~~amended general permit. If the general permit coverage is denied, the owner would then be required to cease the discharges authorized by the continued general permit coverage or be subject to enforcement action for discharging without a permit;

c. Issue a VPDES individual permit with appropriate conditions; or

d. Take other actions authorized by the VPDES Permit Regulation (9VAC25-31).

9VAC25-196-60. Registration statement.

A. Deadlines for submitting registration statements. The owner seeking coverage under this general permit shall submit a complete VPDES general permit registration statement in accordance with this ~~section~~ chapter, which shall serve as a notice of intent for coverage under the VPDES general permit regulation for noncontact cooling water discharges of 50,000 gallons per day or less.

1. New facilities. Any owner proposing a new discharge shall submit a complete registration statement at least ~~30~~ 60 days prior to the date planned for commencing operation of the new discharge.

2. Existing facilities.

a. Any owner covered by a VPDES individual permit who is proposing to be covered by this general permit shall submit a complete registration statement at least ~~210~~240 days prior to the expiration date of the VPDES individual permit or a later submittal established by the department.

b. Any owner that was authorized to discharge under the expiring or expired VPDES general permit for noncontact cooling water discharges of 50,000 gallons per day or less, and that intends to continue coverage under this general permit shall submit a complete registration statement to the ~~board~~department at least ~~30~~60 days prior to the expiration date of the existing permit or a later submittal established by the ~~board~~department.

B. Late registration statements. Registration statements will be accepted after the expiration date of the general permit, but authorization to discharge will not be retroactive.

C. The required registration statement shall contain the following information:

1. Facility name and address, owner name, mailing address, telephone number, and email address (if available);

2. Operator name, mailing address, telephone number, and email address (if available) if different from owner;

3. State Corporation Commission entity identification number if the facility is required to obtain an entity identification number by law.

~~3.~~4. Current VPDES permit registration number (if applicable);

~~4.~~5. List of point source discharges that are not composed entirely of cooling water;

~~5.~~6. List of type and size (tons) of cooling equipment or noncontact cooling water processes;

~~6.~~7. The following information if any chemical or nonchemical treatment is employed in each cooling water system:

a. Description of the treatment to be employed (both chemical and nonchemical) and its purpose; for chemical additives other than chlorine, provide the information prescribed in subdivisions ~~6~~7 b, c, d, e, and f;

b. Name and manufacturer of each additive used;

c. List of active ingredients and percent composition of each additive;

d. Proposed dosing schedule and quantity of chemical usage, and either an engineering analysis or a technical evaluation of the active ingredients to determine the discharge concentration of each contaminant;

e. Available aquatic toxicity information for each proposed additive used;

f. Any other information such as product or constituent degradation, fate, transport, synergies, bioavailability, etc., that will aid the ~~board~~department with the toxicity evaluation of the discharge; and

g. Safety data sheet for each proposed additive;

~~7.~~8. Description of any type of treatment or retention being provided to the wastewater before discharge (i.e., retention ponds, settling ponds, etc.);

~~8.~~9. A schematic drawing of the cooling water equipment that shows the source of the cooling water, its flow through the facility, and each noncontact cooling water discharge point;

~~9.~~10. A USGS 7.5 minute topographic map or equivalent computer generated map extending to at least one mile beyond the property boundary. The map must show the outline of the facility and the location of each of its existing and proposed intake and discharge points, and must include all springs, rivers and other surface water bodies;

~~10.~~11. The following discharge information:

a. A list of all cooling water discharges identified by a unique number, latitude, and longitude;

b. The source of cooling water for each discharge;

c. An estimate of the maximum daily flow in gallons per day for each discharge;

d. The name of the waterbody receiving direct discharge or discharge through the municipal separate storm sewer system (MS4); and

e. The duration and frequency of the discharge for each separate discharge point;

~~11.~~12. A determination of whether the facility will discharge to a MS4. If the facility discharges to a MS4, the facility owner must notify the owner of the MS4 of the existence of the discharge at the time of registration under this permit and include that notification with the registration statement. The notice shall include the following information: the name of the facility, a contact person and contact information (telephone number and email), the location of the discharge, the nature of the discharge, and the facility's VPDES general permit registration number if a reissuance; and

13. The following cooling water intake structure information:

a. A determination of the cooling water intake source (e.g., groundwater, surface water, third party supplier).

b. For surface water intakes or non-potable surface water received from a third party supplier, the following information:

(1) Source water physical data (water body description, hydrology, chemistry, and area of influence of intake structure).

(2) Cooling water intake structure data (screen size, through screen velocity, configuration of intake, flows, a water balance diagram, and typical operations).

(3) Source water baseline biological characterization data (any available studies).

(4) Cooling water system data (configuration of the cooling water system and water reuse).

(5) Operational status (description of current and future production schedules). and

[~~c. For hydroelectric facilities, the following calculation:~~

~~(1) A water-use efficiency calculation of megawatts produced in megawatt hours (MWh) divided by the cooling water used in billion gallons per day (BGD).~~]

~~12.~~14. The following certification:

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

D. The registration statement shall be signed in accordance with 9VAC25-31-110.

E. The registration statement shall be delivered by either postal or electronic mail to the DEQ regional office serving the area where the facility is located. 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.

9VAC25-196-70. General permit.

Any owner whose registration statement is accepted by the ~~board~~department will receive coverage under the following permit and shall comply with the requirements therein and be subject to all requirements of 9VAC25-31.

General Permit No: VAG25
Effective Date: ~~March 2~~April 1, ~~2018~~2023
Expiration Date: March 31, ~~2023~~2028

GENERAL PERMIT FOR NONCONTACT COOLING WATER DISCHARGES OF 50,000 GALLONS PER DAY OR LESS

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of noncontact cooling water discharges of 50,000 gallons per day or less are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except Class V stockable trout waters, Class VI natural trout waters, and those specifically named in board regulations that prohibit such discharges. Chlorine or any other halogen compounds shall not be used for disinfection or other treatment purposes, including biocide applications, for any discharges to waters containing endangered or threatened species as identified in 9VAC25-260-110 C of the Water Quality Standards.

The authorized discharge shall be in accordance with the information submitted with the registration statement, this cover page, Part I - Effluent Limitations, ~~and~~ Monitoring Requirements, Special Conditions, and Part II - Conditions Applicable to all VPDES Permits, as set forth in this general permit.

Part I

Effluent Limitations, Monitoring Requirements, Special Conditions

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

1. Effluent limitations and monitoring requirements for discharges to freshwater receiving waterbodies. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	0.05	NA	1/3 Months	Estimate
Temperature (°C)	(1)	NA	1/3 Months	Immersion Stabilization
pH (SU)	9.0(2)	6.0(2)	1/3 Months	Grab
Ammonia-N(3) (mg/l)	NL	NA	1/3 Months	Grab
Total Residual Chlorine(3)(4) (mg/l)	~~Nondetectable~~0.011	NA	1/3 Months	Grab
Total Recoverable Copper(4) (µg/l)	9.0	NA	1/3 Months	Grab

Total Recoverable Zinc[4] (µg/l)	120	NA	1/3 Months	Grab
Total Recoverable Silver[4], [5] (µg/l)	3.4	NA	1/3 Months	Grab
Total Phosphorus[6] (mg/l)	NL	NA	1/3 Months	Grab

NL = No limitation, monitoring required
NA = Not applicable
1/3 Months = the following three-month periods each year of permit coverage: January through March, April through June, July through September, and October through December

(1)The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, or 31°C for mountain and upper piedmont waters. No maximum temperature limit, only monitoring, applies to discharges to estuarine waters.
The effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point source discharge.
(2)Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.
(3)Chlorine limitation ~~of nondetectable (<0.1 mg/l)~~ and ~~chlorine~~ monitoring only apply to outfalls directly discharging to surface waters where either: (i) a treatment additive that contains chlorine or chlorine compounds is used or (ii) the source of cooling water is chlorinated. All data below the quantification level (QL) of 0.1 mg/L shall be reported as "<QL." Ammonia monitoring only applies where the source of cooling water is disinfected using chloramines.
(4)A specific analytical method is not specified; however, a maximum quantification level (Max QL) value for each metal has been established. An appropriate method to meet the Max QL value shall be selected using any approved method presented in 40 CFR Part 136. If the test result is less than the method quantification level (QL), a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

Material	Max QL (µg/l)
Copper	1.0 µg/l
Chlorine	0.1 mg/l
Zinc	50.0 µg/l
Silver	1.0 µg/l

Quality control/assurance information shall be submitted to document that the required QL has been attained.
(5)Silver monitoring is only required where a Cu/Ag anode is used.
(6)Phosphorus monitoring is only required where an additive containing phosphorus is used.

2. Effluent limitations and monitoring requirements for discharges to saltwater receiving waterbodies. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	Maximum	Minimum	Frequency	Sample Type
Flow (MGD)	0.05	NA	1/3 Months	Estimate

Temperature (°C)	(1)	NA	1/3 Months	Immersion Stabilization
pH (SU)	9.0(2)	6.0(2)	1/3 Months	Grab
Ammonia-N(3) (mg/l)	NL	NA	1/3 Months	Grab
~~Total Residual Chlorine~~Chlorine Producing Oxidant(3)~~(4)~~ (mg/l)	~~Nondetectable~~0.0075	NA	1/3 Months	Grab
Total Recoverable Copper(4) (µg/l)	6.0	NA	1/3 Months	Grab
Total Recoverable Zinc(4) (µg/l)	81	NA	1/3 Months	Grab
Total Recoverable Silver(4), (5) (µg/l)	1.9	NA	1/3 Months	Grab
Total Phosphorus(6) (mg/l)	NL	NA	1/3 Months	Grab

NL = No limitation, monitoring required
NA = Not applicable

1/3 Months = the following three-month periods each year of permit coverage: January through March, April through June, July through September, and October through December

(1)The effluent temperature shall not exceed a maximum 32°C for discharges to nontidal coastal and piedmont waters, or 31°C for mountain and upper piedmont waters. No maximum temperature limit, only monitoring, applies to discharges to estuarine waters.
The effluent shall not cause an increase in temperature of the receiving stream of more than 3°C above the natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2°C per hour. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point source discharge.
(2)Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.
(3)Chlorine limitation ~~of nondetectable (<0.1 mg/l)~~ and ~~chlorine~~ monitoring only apply to outfalls discharging to surface waters where either: (i) a treatment additive that contains chlorine or chlorine compounds is used or (ii) the source of cooling water is chlorinated. All data below the quantification level (QL) of 0.1 mg/L shall be reported as "<QL." Ammonia monitoring only applies where the source of cooling water is disinfected using chloramines.
(4)A specific analytical method is not specified; however, a maximum quantification level (Max QL) value for each metal has been established. An appropriate method to meet the Max QL value shall be selected using any approved method presented in 40 CFR Part 136. If the test result is less than the method quantification level (QL), a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

Material	Max QL ~~(µg/l)~~
Copper	1.0 µg/l

	Chlorine	0.1 mg/l
	Zinc	50.0 µg/l
	Silver	1.0 µg/l

Quality control/assurance information shall be submitted to document that the required QL has been attained.
(5)Silver monitoring is only required where a Cu/Ag anode is used.
(6)Phosphorus monitoring is only required where an additive containing phosphorus is used.

B. Special conditions.

1. There shall be no discharge of floating solids or visible foam in other than trace amounts.

2. No discharges other than cooling water, as defined, are permitted under this general permit.

3. The use of any chemical additives not identified in the registration statement, except chlorine, without prior approval is prohibited under this general permit. Prior approval shall be obtained from the DEQ before any changes are made to the chemical or nonchemical treatment technology employed in the cooling water system. Requests for approval of the change shall be made in writing and shall include the following information:

a. Describe the chemical or nonchemical treatment to be employed and its purpose; if chemical additives are used, provide the information prescribed in subdivisions 3 b, c, d, e, and f;

b. Provide the name and manufacturer of each additive used;

c. Provide a list of active ingredients and percentage of composition;

d. Give the proposed schedule and quantity of chemical usage, and provide either an engineering analysis or a technical evaluation of the active ingredients to determine the concentration in the discharge;

e. Attach available aquatic toxicity information for each additive proposed for use;

f. Attach any other information such as product or constituent degradation, fate, transport, synergies, bioavailability, etc., that will aid the ~~board~~department with the toxicity evaluation for the discharge; and

g. Attach a safety data sheet for each proposed additive.

4. A determination of whether the facility will discharge to a MS4. If the facility discharges to a MS4, the facility owner must notify the owner of the MS4 of the existence of the discharge at the time of registration under this permit and include that notification with the registration statement. The notice shall include the following information: the name of the facility, a contact person and contact information (telephone number and email), the location of the discharge, the nature of the discharge, and the facility's VPDES general permit registration number if a reissuance. Discharge monitoring reports (DMRs) required by this permit shall be submitted to both the department and the owner of the MS4.

5. Operation and maintenance manual requirement.

a. Within 90 days after the date of coverage under this general permit, the permittee shall develop an operation and maintenance (O&M) manual for the equipment or systems used to meet effluent limitations. The O&M manual shall be reviewed within 90 days of changes to the equipment or systems used to meet effluent limitations. The O&M manual shall be certified in accordance with Part II K of this permit. The O&M manual shall be made available for review by department personnel upon request.

b. This manual shall detail the practices and procedures that will be followed to ensure compliance with the requirements of this permit. Within 30 days of a request by the department, the current O&M manual shall be submitted to the ~~board~~department for review and approval. The permittee shall operate the treatment works in accordance with the O&M manual. Noncompliance with the O&M manual shall be deemed a violation of the permit.

c. This manual shall include, but not necessarily be limited to, the following items:

(1) Techniques to be employed in the collection, preservation, and analysis of effluent samples;

(2) Discussion of best management practices;

(3) Design, operation, routine preventative maintenance of equipment or systems used to meet effluent limitations, critical spare parts inventory, and recordkeeping;

(4) A plan for the management or disposal of waste solids and residues, and a requirement that all solids shall be handled, stored, and disposed of so as to prevent a discharge to state waters; and

(5) Procedures for measuring and recording the duration and volume of treated wastewater discharged.

6. The permittee shall notify the department as soon as the permittee knows or has reason to believe:

a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 µg/l);

(2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; 500 micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five times the maximum concentration value reported for that pollutant in the permit registration statement; or

(4) The level established by the board in accordance with 9VAC25-31-220 F.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter (500 µg/l);

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the board in accordance with 9VAC25-31-220 F.

7. Geothermal systems using groundwater and no chemical additives. Geothermal systems using groundwater and no chemical additives may be eligible for reduced monitoring requirements.

If a geothermal system was covered by the previous noncontact cooling water general permit, and the monitoring results from the previous permit term demonstrate full compliance with the effluent limitations, the permittee may request authorization from the department to reduce the monitoring to once in the first monitoring quarter of the first year of this permit term.

Owners of new geothermal systems, and previously unpermitted geothermal systems that receive coverage under this permit shall submit monitoring results to the department for the first four monitoring quarters after coverage begins. If the monitoring results demonstrate full compliance with the effluent limitations, the permittee may request authorization from the department to suspend monitoring for the remainder of the permit term.

Should the permittee be issued a warning letter or notice of violation related to violation of effluent limitations, or be the subject of an active enforcement action regarding effluent limit violations, upon issuance of the letter or notice, or initiation of the enforcement action, the monitoring frequency shall revert to 1/3 months and remain in effect until the permit's expiration date.

8. Monitoring results shall be reported using the same number of significant digits as listed in the permit. Regardless of the rounding convention used by the permittee (e.g., five always rounding up or to the nearest even number), the permittee shall use the convention consistently and shall ensure that consulting laboratories employed by the permittee use the same convention.

9. Discharges to waters with an approved TMDL. Owners of facilities that are a source of the specified pollutant of concern to waters where an approved TMDL has been established shall implement measures and controls that are consistent with the assumptions and requirements of the TMDL.

10. Notice of termination.

a. The owner may terminate coverage under this general permit by filing a complete notice of termination with the department. 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 cooling water discharges 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 cooling water discharges associated with this facility have been covered by a VPDES individual permit or an alternative VPDES permit; or

(4) Termination of coverage is being requested for another reason, provided the ~~board~~department agrees that coverage under this general permit is no longer needed.

b. The notice of termination shall contain the following information:

(1) Owner's name, mailing address, telephone number, and email address (if available);

(2) Facility name and location;

(3) VPDES noncontact cooling water discharges general permit number; and

(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 noncontact cooling water discharges from the facility;

(c) A statement indicating that all noncontact cooling water discharges have been covered by a VPDES individual permit; or

(d) A statement indicating that termination of coverage is being requested for another reason (state the reason).

c. The following certification: "I certify under penalty of law that all noncontact cooling water discharges from the identified facility that are authorized by this VPDES general permit have been eliminated, or covered under a VPDES individual or alternative permit, or that I am no longer the owner of the facility, 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 noncontact cooling water in accordance with the general permit, and that discharging pollutants in noncontact cooling water 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."

d. The notice of termination shall be signed in accordance with Part II K.

e. The notice of termination shall be submitted to the DEQ regional office serving the area where the noncontact cooling water discharge is located.

11. The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards.

12. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other federal, state, or local statute, ordinance, or regulation.

Part II
Conditions Applicable to All VPDES Permits

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.

2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.

3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records.

1. Records of monitoring information shall include:

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

b. The individuals who performed the sampling or measurements;

c. The dates and times analyses were performed;

d. The individuals who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

2. Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years, the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and

records of all data used to complete the registration statement for this permit, for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee or as requested by the ~~board~~department.

C. Reporting monitoring results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.

2. Monitoring results shall be reported on a Discharge Monitoring Report (DMR) or on forms provided, approved or specified by the department. 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.

4. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information which the ~~board~~department may request to determine whether cause exists for terminating coverage under this permit or to determine compliance with this permit. The ~~board~~department may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from the permittee's discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the department upon request copies of records required to be kept by this permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized discharges. Except in compliance with this permit or another permit issued by the ~~board~~department, it shall be unlawful for any person to:

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

2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, to animal or aquatic life, to the use of such waters for domestic or industrial consumption, for recreation, or for other uses.

G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F, or who discharges or causes or allows a discharge

that may reasonably be expected to enter state waters in violation of Part II F, shall notify the department (see Part II I 3) of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;

2. The cause of the discharge;

3. The date on which the discharge occurred;

4. The length of time that the discharge continued;

5. The volume of the discharge;

6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

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 (see Part II I 3), in no case later than 24 hours, the department ~~by telephone~~ after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part II I 1 b. Unusual and extraordinary discharges include any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;

2. Breakdown of processing or accessory equipment;

3. Failure or taking out of service some or all of the treatment works; and

4. Flooding or other acts of nature.

I. Reports of noncompliance.

1. The permittee shall report any noncompliance that may adversely affect state waters or may endanger public health.

a. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information which shall be reported within 24 hours under this subsection:

(1) Any unanticipated bypass; and

(2) Any upset which causes a discharge to surface waters.

b. A written report shall be submitted within five days and shall contain:

(1) A description of the noncompliance and its cause;

(2) The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(3) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The ~~board~~department may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

2. The permittee shall report all instances of noncompliance not reported under Part II I 1, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 1 b.

~~NOTE:~~3. The immediate (within 24 hours) reports required in Parts II G, H and I ~~may~~shall be made to the department's regional office. Reports may be made by telephone, FAX, or online at ~~http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/PollutionReportingForm.aspx~~https://www.deq.virginia.gov/get-involved/pollution-response (online reporting preferred). For reports outside normal working hours, ~~leave a message and this shall fulfill the immediate reporting requirement~~the online portal shall be used. For emergencies, call the Virginia Department of Emergency Management's Emergency Operations Center (24-hours)~~Services maintains a 24-hour telephone service~~ at 1-800-468-8892.

~~3.~~4. Where the permittee becomes aware that it failed to submit any relevant facts in a permit registration statement or submitted incorrect information in a permit registration statement or in any report to the department, it shall promptly submit such facts or information.

J. Notice of planned changes.

1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(1) After promulgation of standards of performance under § 306 of Clean Water Act which are applicable to such source; or

(2) After proposal of standards of performance in accordance with § 306 of Clean Water Act which are applicable to such source, but only if the standards are promulgated in accordance with § 306 within 120 days of their proposal;

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations nor to notification requirements under Part I B 6; or

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit registration process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

K. Signatory requirements.

1. Registration statements. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-

president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit registration requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes: (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports and other information. All reports required by permits, and other information requested by the ~~board~~department shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part II K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company (a duly authorized representative may thus be either a named individual or any individual occupying a named position); and

c. The written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the department prior to or together with any reports or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part II K 1 or 2 shall make the following certification:

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

L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the

State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit coverage termination or denial of a permit coverage renewal.

The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under § 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain coverage under a new permit. All permittees with currently effective permit coverage shall submit a new registration statement at least ~~30~~60 days before the expiration date of the existing permit, unless permission for a later date has been granted by the ~~board~~department. The ~~board~~department shall not grant permission for registration statements to be submitted later than the expiration date of the existing permit.

N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in permit conditions on bypass (Part II U) and upset (Part II V), nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

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

Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure

efficient operation. These bypasses are not subject to the provisions of Part II U 2 and U 3.

2. Notice.

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.

3. Prohibition of bypass.

a. Bypass is prohibited, and the ~~board~~department may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part II U 2.

b. The ~~board~~department may approve an anticipated bypass, after considering its adverse effects, if the ~~board~~department determines that it will meet the three conditions listed in Part II U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the permittee can identify the causes of the upset;

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required in Part II I; and

d. The permittee complied with any remedial measures required under Part II S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The permittee shall allow the director or an authorized representative, including an authorized contractor acting as a representative of the administrator, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this subsection, the time for inspection shall be deemed reasonable during regular business hours, or whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit actions. Permits coverage may be terminated for cause. The filing of a request by the permittee for permit coverage termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permit coverage.

1. Permit coverage is not transferable to any person except after notice to the department.

2. Coverage under this permit may be automatically transferred to a new permittee if:

a. The current permittee notifies the department within 30 days of the transfer of the title to the facility or property;

b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

c. The ~~board~~department does not notify the existing permittee and the proposed new permittee of its intent to deny permit coverage. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2 b.

Z. Severability. The provisions of this permit are severable. If any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

FACT SHEET
REISSUANCE OF A GENERAL VPDES PERMIT FOR NON-CONTACT COOLING WATER DISCHARGES OF 50,000 GALLONS PER DAY OR LESS

The Virginia State Water Control Board has under consideration the reissuance of a VPDES general permit for point source discharges of non-contact cooling water to surface waters of the Commonwealth of Virginia. This general permit will replace the existing non-contact cooling water general permit, VAG25, which expires March 1, 2023. 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:	VAG25
Name of Permittee:	Any owner of a qualifying facility discharging non-contact cooling water 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 Class V stockable waters, Class VI natural trout waters, and those specifically named in Board Regulations which prohibit such discharges. Discharge to surface waters may be through a municipal separate storm sewer system. Chlorine or any other halogen compounds shall not be used for disinfection or other treatment purposes, including biocide applications, for any discharges to waters containing endangered or threatened species as identified in 9VAC25-260-110 C of the Water Quality Standards.

On the basis of preliminary review and application of lawful standards and regulations, the State Water Control Board proposes to reissue the VPDES general permit subject to certain conditions and has prepared a draft permit. The Board has determined that this category of discharges is appropriately controlled under a general permit. Non-contact cooling water discharges are similar in composition even though they may not be generated by a single industrial category or point source. The draft general permit requires that all covered facilities meet standardized effluent limitations, monitoring requirements, special conditions, and Water Quality Standards (9VAC25-260).

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

1.0 Activities Covered By This General Permit And Sources Of Wastewater

This general permit covers point source discharges of 50,000 gallons per day or less of non-contact cooling water and cooling equipment blowdown to surface waters. Discharge to surface waters may be through a municipal separate storm sewer system (MS4).

"Cooling Water" means water used to reduce temperature which does not come into direct contact with any raw product, intermediate product (other than heat) or finished product. For the purposes of this general permit, cooling water can be generated from any cooling equipment blowdown or produced as a result of any non-contact cooling process through either a single pass (once through) or recirculating system.

"Blowdown" is a discharge of recirculating water from any cooling equipment or cooling process in order to maintain a desired quality of the recirculating water. Water which is used for cooling purposes and which commingles with a wastewater or process fluid becomes process wastewater and is not covered by this general permit. Boiler blowdown and storm water discharges are also excluded from the coverage of this general permit.

This general permit is not applicable for a category where federal effluent guidelines have been promulgated, such as steam electric generating stations (see 40 CFR Part 423).

The cooling water's source can be a well, surface water, or the potable water supply. The water is used in a process for cooling. The temperature control system operates so that the cooling water does not come into direct contact with the raw materials. The primary pollutant associated with cooling equipment blowdown and non-contact cooling water discharges is the heat taken up by the water. In one pass cooling water facilities, after the heat transfer has taken place, the water is discharged. Once-through cooling generates relatively large volumes of water. In most cases, the water passes through the heat exchange apparatus and is discharged without chemical additives or treatment.

Other cooling equipment, such as cooling towers, use less water because they usually operate in a recycle, rather than once-through, mode. Generally associated with air conditioning units, cooling towers are used to remove heat from a fluid by evaporating water. Water is dispersed over a media or trickled through shallow pans as air is blown over it. Evaporation cools the water down to the ambient air temperature. The cooled water is then piped to a heat exchanger within the air conditioning chiller where it absorbs the heat released as Freon is condensed. The cycle is completed when the water is pumped back to the cooling tower. A certain amount of the water in the cooling equipment system must be replaced during each or several cycles in order to maintain the desired properties of the water. This type of discharge (blowdown) is usually lower in volume than the once-through cooling discharge, but it has a greater potential to contain pollutants. The reuse of water usually requires some sort of treatment to inhibit corrosion and scale build-up, to reduce biological growth, and to reduce deposition of water impurities in the system. Chemical and/or non-chemical treatment may be employed to address these problems.

Due to the concern that tributyltin compounds are not easily degradable and thus have long-lasting residual effects, and the stringent water quality standards for tributyltin (0.072 ppb in freshwater and 0.0074 ppb in saltwater), discharges that use biocides containing tributyltin will be excluded from coverage under this general permit. In addition, this general permit will not cover any cooling water discharges that use hexavalent chromium (Cr^{+6})-containing water treatment chemicals in the cooling water system. This restriction is imposed based on the provision promulgated under 40 CFR Part 749 that prohibits the use of hexavalent chromium-based water treatment chemicals in comfort cooling towers (CCT's). Although CCT's are dedicated exclusively to, and are an integral part of heating, ventilation, and air conditioning (HVAC) or refrigeration systems, it is anticipated that the majority of the cooling water discharges covered by this general permit will be generated from CCT's. In order to assure compliance with the halogen ban of 9VAC25-260-110 of the Water Quality Standards, chlorine or any other halogen compounds are not allowed to be used for disinfection or other treatment purposes, including biocide applications, for any discharges to water containing endangered or threatened species as identified in 9VAC25-260-110 C of the Water Quality Standards.

Using chloramines to disinfect drinking water is a common practice among drinking water utilities. Ammonia is a byproduct of the use of chloramines for this purpose. Therefore, ammonia monitoring is required where the source of cooling water is disinfected using chloramines.

As a non-chemical treatment alternative, an ion generator is commonly employed in the cooling water system. DC current is passed through anodes made of copper and silver alloy. This process releases copper and silver ions into the water. The ions neutralize bacteria and algae. Other non-chemical treatment alternatives, such as magnetic descaling which reduces the scale build-up by creating alternating magnetic fields, may require alternative treatment for control of biological growth. Either a silver/copper anode unit or chlorine addition may serve this purpose.

Due to the concern that toxic effects could occur as a result of contaminated water sources from groundwater remediation wells, discharges that use groundwater remediation wells as cooling water source will be excluded from the coverage of this general permit.

The cooling water discharges normally do not include a treatment system. However, retention or settling ponds may be used to equalize the flow, lower the temperature, or to settle any possible solids that may occur in the discharge.

2.0 Revisions to the Expiring VPDES General Permit for Non-Contact Cooling Water Discharges of 50,000 GPD or Less

The date for the "Applicability of incorporated references" section (9VAC25-196-15) was revised to the most recent federal update, July 1, 2022.

The "Effective date of the permit" section (9VAC25-196-40) was revised to provide updated dates for the regulation and to align the effective and expiration dates with the permit's quarterly monitoring periods. It should be noted that these dates were updated through the other sections of the regulation.

Added requirements to the "Registration Statement" section (9VAC25-196-60 C) regarding cooling water intake structures in order to address impingement and entrainment under §316(b), as necessary.

Added language to the "Registration Statement" section (9VAC25-196-60 E) indicating that electronic submittals of registration statements will be required in the future and that the department will notify permittees at least three months in advance of the requirement being implemented.

The Part I A, Effluent Limits and Monitoring Requirements (9VAC25-196-70) section was modified as follows:

In Parts I A 1 and I A 2, a numerical chlorine maximum discharge limitation was included in place of "nondetectable". In Part I A 1, the freshwater total residual chlorine (TRC) chronic criteria of 0.011 mg/L was included. In Part I A 2, the saltwater chlorine producing oxidant (CPO) chronic criteria of 0.0075 mg/L was included. The associated quantification limit (QL) for chlorine was added to the footnotes of both sections.

3.0 Effluent Limitations and Monitoring Requirements

3.1 Part I A 1. Effluent Limitations and Monitoring Requirements for Discharges to Freshwater Receiving Waterbodies.

Parameter	Limitation
Flow	0.05 MGD maximum
Temperature	Maximum(1)
pH	6.0 minimum, 9.0 maximum(2)
Total Residual Chlorine(3)(4)	0.011 mg/L maximum
Ammonia-N(3)	No limit, monitoring required
Total Recoverable Copper(4)	9.0 µg/l maximum
Total Recoverable Zinc(4)	120 µg/l maximum
Total Recoverable Silver(4,5)	3.4 µg/l maximum
Total Phosphorus(6)	No limit, monitoring required

All monitoring is once per three months by grab sample, except for temperature which is by immersion/stabilization. Once per three months is equal to the following three-month periods each year of permit coverage: January through March, April through June, July through September, and October through December.

(1) The effluent temperature shall not exceed a maximum 32ºC for discharges to non-tidal coastal and piedmont waters, or 31ºC for mountain and upper piedmont waters. No maximum temperature limit, only monitoring, applies to discharges to estuarine waters.

The effluent shall not cause an increase in temperature of the receiving stream of more than 3ºC above the natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2ºC per hour. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

(2) Where the Water Quality Standards (9 VAC 25-260-5 et seq.) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

(3) Chlorine limitation and monitoring only apply to outfalls directly discharging to surface waters and are required where either: (1) a treatment additive that contains chlorine or chlorine compounds is used, or (2) the source of cooling water is chlorinated. All data below the quantification level (QL) of 0.1 mg/L shall be reported as "<QL". Ammonia monitoring only applies where the source of cooling water is disinfected using chloramines.

(4) A specific analytical method is not specified; however a maximum quantification level (Max QL) value for each metal has been established. An appropriate method to meet the Max QL value shall be selected using any approved method presented in 40 CFR Part 136. If the test result is less than the method quantification level (QL), a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

Material	Max QL
Copper	1.0 µg/L
Chlorine	0.1 mg/L
Zinc	50.0 µg/L
Silver	1.0 µg/L

Quality control/assurance information shall be submitted to document that the required QL has been attained.

(5) Silver monitoring is only required where a Cu/Ag anode is used.

(6) Phosphorus monitoring is only required where an additive containing phosphorus is used.

3.2 Part I A 2. Effluent Limitations and Monitoring Requirements for Discharges to Saltwater Receiving Waterbodies.

Parameter	Limitation
Flow	0.05 MGD maximum
Temperature	Maximum(1)
pH	6.0 minimum, 9.0 maximum(2)
Chlorine Producing Oxidant(3)(4)	0.0075 mg/L maximum
Ammonia-N(3)	No limit, monitoring required
Total Recoverable Copper(4)	6.0 µg/l maximum
Total Recoverable Zinc(4)	81 µg/l maximum
Total Recoverable Silver(4,5)	1.9 µg/l maximum
Total Phosphorus(6)	No limit, monitoring required

All monitoring is once per three months by grab sample, except for temperature which is by immersion/stabilization. Once per three months is equal to the following three-month periods each year of permit coverage: January through March, April through June, July through September, and October through December.

(1) The effluent temperature shall not exceed a maximum 32ºC for discharges to non-tidal coastal and piedmont waters, or 31ºC for mountain and upper piedmont waters. No maximum temperature limit, only monitoring, applies to discharges to estuarine waters.

The effluent shall not cause an increase in temperature of the receiving stream of more than 3ºC above the natural water temperature. The effluent shall not cause the temperature in the receiving stream to change more than 2ºC per hour. Natural temperature is defined as that temperature of a body of water (measured as the arithmetic average over one hour) due solely to natural conditions without the influence of any point-source discharge.

(2) Where the Water Quality Standards (9 VAC 25-260-5 et seq.) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

(3) Chlorine limitation and monitoring only apply to outfalls directly discharging to surface waters and are required where either: (1) a treatment additive that contains chlorine or chlorine compounds is used, or (2) the source of cooling water is chlorinated. All data below the quantification level (QL) of 0.1 mg/L shall be reported as "<QL". Ammonia monitoring only applies where the source of cooling water is disinfected using chloramines.

(4) A specific analytical method is not specified; however a maximum quantification level (Max QL) value for each metal has been established. An appropriate method to meet the Max QL value shall be selected using any approved method presented in 40 CFR Part 136. If the test result is less than the method quantification level (QL), a "<[QL]" shall be reported where the actual analytical test QL is substituted for [QL].

Material	Max QL
Copper	1.0 µg/L
Chlorine	0.1 mg/L
Zinc	50.0 µg/L
Silver	1.0 µg/L

Quality control/assurance information shall be submitted to document that the required QL has been attained.

(5) Silver monitoring is only required where a Cu/Ag anode is used.

(6) Phosphorus monitoring is only required where an additive containing phosphorus is used.

4.0 Basis for Effluent Limitations and Monitoring Requirements

4.1 Technology-Based Effluent Limitations

EPA has not promulgated National Effluent Guidelines for non-contact cooling water discharges. For a category where Guidelines have been promulgated, such as steam electric generating stations, the issuance of an individual permit for the discharges would be more appropriate. (See 9VAC25-31-170 B.3.a.(3)).

4.2 Water Quality-Based Effluent Limitations

Water quality-based limitations for pH, temperature, chlorine, and total recoverable copper, zinc and silver are included in this general permit for all monitoring scenarios.

The pH limitation is based upon the Water Quality Standards (9VAC25-260-5 et seq.). There shall be no change from background conditions that would impair any uses assigned to the receiving streams.

Because of the concern of excess heat from cooling water discharges, and once through systems in particular, a respective temperature limit for non-tidal coastal and piedmont waters or mountainous waters, based on the Virginia Water Quality Standards (9VAC25-260-50) is placed in the permit. Restrictions on rise above natural temperature and maximum hourly temperature change are also imposed. In order to ensure that the stringent temperature standards for put and take trout waters and natural trout waters will be maintained, cooling water discharges to these receiving streams will not be covered by this general permit, rather be covered by an individual permit.

The general permit contains a TRC limit for freshwater and a CPO limit for saltwater based on the chronic criteria in the Water Quality Standards (9VAC25-260-140) for the protection of aquatic life regardless of the dilution available to the discharge. Chlorine limitations and monitoring are required for facilities where the following conditions prevail: 1) There is a direct discharge to surface waters; and 2) Either a treatment additive that contains chlorine or chlorine compounds is used, or the source of cooling water is chlorinated. For cooling water discharges to the MS4s, it is anticipated that dissipation in the cooling process and chlorine demand in the MS4s will reduce the residual chlorine to "de minimis" level. For any cooling water discharges to waters containing endangered and threatened species as identified in the Water Quality Standards (9VAC25-260-110 C.), chlorine or any other halogen compounds are not allowed to be used in the cooling water system.

The copper, zinc and silver limitations are based on the numerical water quality criteria in the Water Quality Standards (9VAC25-260-140) for protection of aquatic life. Limits are given for both freshwater receiving streams and saltwater receiving streams. For freshwater receiving streams, a total hardness as $CaCO_3$ of 100mg/l was assumed. The freshwater copper and zinc limits are based on the chronic criteria, while the silver is based on the acute criteria. The saltwater copper and zinc limits are based on the chronic criteria, while the silver is based on the acute criteria.

4.4 Toxics Considerations

Due to the concern that the use of corrosion inhibitors and/or biocides may be allowed through this general permit, and that metals could be discharged and thus the quality of the receiving stream could be impacted, a maximum flow of 50,000 gallons per day (0.05 MGD) is imposed in this general permit. It is the opinion of the Department that a larger discharge would need to be monitored on a more frequent basis and need additional controls, and it would be more appropriate to be covered by an individual permit. This approach is also consistent with the agency's Toxics Management Program.

Further assessment of the need for toxicity monitoring requirements for the restricted flow discharges (< 0.05 MGD) was performed by conducting an in-house review of toxicity test data for non-contact cooling water discharges (with or without additives). It showed that 94% of acute toxicity tests had an LC_{50} greater than or equal to 100% effluent. It was concluded that these types of discharges, in general, are not acutely toxic. The report also showed that 75% of chronic toxicity tests had a no observed effect concentration (NOEC) greater than or equal to 100% effluent, which is the worst case of the instream waste concentration (IWC). These results indicate that both acute and chronic tests passed the decision criteria (75% of the tests) established by the Toxic Management Program. Therefore, additional toxicity monitoring is not imposed in this general permit.

5.0 Special Conditions and Their Basis

1. Restriction of floating solids and visible foam discharges. This is a standard requirement for all permits per the VPDES Permit Manual (2010) and conforms to the general water quality criteria at 9VAC25-260-20.

2. Prohibition of any discharges other than cooling water as defined. The effluent limitations do not address pollutants typical of treated sewage, process wastewater, or storm water discharges. Therefore no discharges other than cooling water as defined are permitted under the general permit.

3. Prohibition of unapproved chemical usage and prior approval requirement for change of treatment technology. In order to assure protection of water quality and beneficial uses of the waters receiving the discharge, the use of any chemical additives not identified in the registration statement, except chlorine,

without prior approval is prohibited under this general permit. The general permit contains a water quality-based chlorine limitation.

The chemical and/or non-chemical treatment that are employed in the cooling water system will be identified on the registration statement, a SDS shall be submitted for each proposed additive, and evaluated before the facility is covered under the general permit. Prior approval shall be obtained from the DEQ before any changes are made to the chemical and/or non-chemical treatment technology employed in the cooling water system, during the life of the permit term.

4. Notification of municipal separate storm sewer system. Where cooling water discharges to surface waters through a municipal separate storm sewer system, the permittee is required to notify the owner of the municipal separate storm sewer system in writing of the existence of the discharge, and include the name of the facility, a contact person and phone number, the location of the discharge, the nature of the discharge, and the facility's VPDES general permit number. The permittee is required to submit any DMRs required by the permit to both the Department and to the owner of the MS4. This is required in order to facilitate the municipality's efforts to control dry weather flows from the storm sewer. **New for this reissuance,** the facility must notify the owner of an MS4 of a proposed discharge to the MS4 at the time of registration under the general permit and include that notification with the registration statement.

5. Operation and maintenance manual requirement. The requirement that within 90 days of coverage under the general permit prepare an operations and maintenance (O&M) manual for the equipment or systems used to meet effluent limitations.

6. Notification levels. The permittee is required to report the discharge of any toxic pollutant from any activity that has occurred or will occur when that discharge, either on routine or non-routine basis, will exceed the highest of the listed notification levels. This condition is required by the VPDES Permit Regulation (9 VAC 25-31-200 A).

7. Geothermal Systems Using Groundwater and No Chemical Additives. Geothermal systems using groundwater and no chemical additives may be eligible for reduced monitoring requirements. If a geothermal system was covered by the expiring general permit, and the monitoring results from the previous permit term demonstrate full compliance with the effluent limitations, the permittee may request authorization from the department to reduce the monitoring to once in the first monitoring quarter of the first year of the new permit term.

Owners of new geothermal systems, and previously unpermitted geothermal systems that receive coverage under this permit shall submit monitoring results to the Department for the first four monitoring quarters after coverage begins. If the monitoring results demonstrate full compliance with the effluent limitations, the permittee may request authorization from the Department to suspend monitoring for the remainder of the permit term.

Should the permittee be issued a warning letter related to violation of effluent limitations, a notice of violation, or be the subject of an active enforcement action, upon issuance of the letter or notice, or initiation of the enforcement action the monitoring frequency shall revert to 1/3 months and remain in effect until the permit's expiration date.

8. The general permit requires that any monitoring results be reported using the same number of significant digits as listed in the permit.

9. Discharges to waters with an approved TMDL. Owners of facilities that are a source of the specified pollutant of concern to waters where an approved “total maximum daily load” (TMDL) has been established shall implement measures and controls that are consistent with the assumptions and requirements of the TMDL. The condition was developed since general permit discharges are considered insignificant to the overall TMDL waste load allocation. This special condition allows staff more flexibility to allow permit coverage for discharges without requiring immediate modification of the TMDL. DEQ will track all the general permit discharges and once they become significant for purposes of the TMDL, the TMDL will be modified to include the load.

10. Notice of Termination. This special condition spells out the procedure a permittee must use to terminate coverage under the general permit.

11. Discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards.

12. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other federal, state or local statute, ordinance or regulation. This special condition repeats the requirement in 9VAC25-12-60 C (Authorization to Discharge).

6.0 General Permit Coverage

The general permit has a fixed term of 5 years. Every authorization under this general permit will expire at the same time and all authorizations will be renewed on the same date, provided a complete registration statement has been filed prior to the general permit's expiration date.

All persons desiring to be covered by this general permit must register with the Board by submitting a registration statement and applicable fee to the Department. The registration statement shall be submitted and a notification of coverage issued prior to any discharges or other activities for which this permit is required.

Cooling water sources that are discharging to surface waters on the effective date of this general permit and that have not been issued an individual VPDES permit, are required to submit the registration statement. Existing operations with individual VPDES permits that wish to seek coverage under the proposed general permit would have to file a registration statement at least 240 days prior to the expiration date of the individual VPDES permit. For all new cooling water dischargers that propose to discharge to surface waters and that will begin activities after the effective date of this permit, the registration statement shall be filed at least 60 days prior to the commencement of construction or operation of the cooling equipment.

This general permit does not cover activities or discharges covered by an individual VPDES permit until the individual permit has expired or has been revoked. 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 revoked and register for coverage under this general permit. Antibacksliding will be considered prior to granting the 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 procedures, stating the reasons supporting the request.

This general permit does not apply to any new or increased discharge that will result in significant effects to the receiving waters. The determination is made in accordance with the State Water Control Board's Antidegradation Policy contained in 9VAC25-260-30 of the Virginia Water Quality Standards.

All facilities that the Board determines are eligible for coverage under this general permit will be authorized to discharge under the terms and conditions of the permit after a complete registration statement is submitted, the applicable permit fee is paid and the Department sends a copy of the general permit to the applicant. If this general permit is inappropriate (for example, effluent limitations are needed for any parameters other than flow, pH, temperature, total residual chlorine, copper, zinc or silver) the applicant will be so notified and the requirement that an individual permit or alternate general permit is needed will remain in effect.

7.0 Clean Water Act § 316(b) determinations

Section 316(b) of the Clean Water Act (CWA) requires that "the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact." Under state and federal regulations cooling water intake requirements for facilities covered under this general permit must meet the requirements of CWA § 316(b) on a case-by-case, best professional judgement (BPJ) basis. For example, state regulations at 9VAC25-31-165 C specify a BPJ approach for existing facilities. Similarly, federal regulations at 40 CFR 125.80(c) and 125.90(b) specify that facilities that do not meet the applicability thresholds in the federal new facility and existing facility

rules must meet CWIS requirements on a BPJ basis.[1] For example, 40CFR §125.90(b) requires that cooling water intake structures not subject to requirements under §§125.94 through 125.99 (subpart J, existing facilities) or subparts I or N (new facilities) of Part 125 must meet requirements under section 316(b) of the CWA established by the Director on a case-by-case, best professional judgment (BPJ) basis. This applies to existing facilities that either have a design intake flow (DIF) of equal to or less than 2.0 MGD or use less than 25 percent of their intake water exclusively for cooling. All facilities eligible for this general permit meet one of these thresholds.

Example:

If a facility discharges the maximum 50,000 gpd of cooling water allowed under this general permit and the cooling water comprises exactly 25 percent of the intake flow, then the facility's intake flow would be 200,000 gpd, which is far less than 2.0 MGD, and the BPJ provisions apply. If the percentage used for cooling increases, the intake flow decreases.

If less than 25 percent of the intake flow is used for cooling, then BPJ provisions apply.

As such, the following general cooling water intake structure information is now required on the registration statement for the purposes of informing such case-by-case Best Technology Available (BTA) determinations:

For facilities with surface water withdrawals or facilities that receive non-potable surface water from a third party supplier, the following:

1. Source water physical data (water body description, hydrology, chemistry, area of influence of intake structure).
2. Cooling water intake structure data (screen size, through screen velocity, configuration of intake, flows, water balance diagram, and typical operations).
3. Source water baseline biological characterization data (any available studies).
4. Cooling water system data (configuration of cooling water system, water reuse).
5. Operational status (description of current and future production schedules).

DEQ will also determine and consider the presence or absence of aquatic threatened and endangered species or critical habitat within a 0.5 mile radius of the intake. Based on these data, DEQ will use the following methodology to make case-by-case determinations as to whether the cooling water intake structures and practices in place at a facility constitute BTA:

For existing permittees, DEQ will consider the current technologies in place to be interim BTA for the 2023 permit term, but will use the data collected with the registration statement in order to make a final BTA determination prior to registering these facilities under the 2028 general permit.

For new registrants, one of the following BTA standards are required in order to be eligible for the general permit:

1. Intake structures with a slot size less than or equal to 1.0 mm and an approach velocity of less than or equal to 0.25 ft/sec; or,
2. No aquatic threatened or endangered species or critical habitat identified within 0.5 mile radius of the intake;

DEQ believes that these requirements are reasonable for minimizing impingement mortality and entrainment at these facilities. The velocity and screening requirements and the consideration of protected species, combined with the low cooling water flow of this category of dischargers, is sufficient to reduce impingement mortality and entrainment without imposing an unjustified burden on covered facilities or unduly restricting the use of this general permit.

[1] It is reasonable and appropriate to look to these federal regulations to support this general permit since they specify the existing federal standards that the state program needs to meet (i.e., be as stringent), and they reflect U.S. EPA's in-depth evaluation of the CWA best technology available requirements.

Office of Regulatory Management

Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-196
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Noncontact Cooling Water Discharges of 50,000 Gallons Per Day or Less
Action title	Proposed reissuance and amendment of the VPDES general permit for Noncontact Cooling Water Discharges of 50,000 Gallons Per Day or Less
Date this document prepared	September 1, 2022

Cost Benefit Analysis

Table 1a must be completed for all actions. Tables 1b and 1c must be completed for actions (or portions thereof) where the agency is exercising discretion, including those where some of the changes are mandated by state or federal law or regulation. Tables 1b and 1c are not needed if **all** changes are mandated, and the agency is not exercising any discretion. In that case, enter a statement to that effect.

(1) Direct Costs & Benefits: Identify all specific, direct economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (A direct impact is one that affects entities regulated by the agency and which directly results from the regulatory change itself, without any intervening steps or effects. For example, the direct impact of a regulatory fee change is the change in costs for these regulated entities.) When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo. One bullet has been provided, add additional bullets as needed.

(2) Quantitative Factors:
  (a) Enter estimated dollar value of total (overall) direct costs described above.
  (b) Enter estimated dollar value of total (overall) direct benefits described above.
  (c) Enter the present value of the direct costs based on the worksheet.
  (d) Enter the present value of the direct benefits based on the worksheet.

(3) Benefits-Costs Ratio: Calculate d divided by c OR enter it from the worksheet.

(4) Net Benefit: Calculate d minus c OR enter it from the worksheet.

(5) Indirect Costs & Benefits: Identify all specific, indirect economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (An indirect impact is one that results from responses to the regulatory change, but which are not directly required by the regulation. Indirect impacts of a regulatory fee change on regulated entities could include a change in the prices they charge, changes in their operating procedures or employment levels, or decisions to enter or exit the regulated profession or market. Indirect impacts

also include responses by other entities that have close economic ties to the regulated entities, such as suppliers or partners.) If there are no indirect costs or benefits, include a specific statement to that effect.

(6) Information Sources: Describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.

(7) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

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)

(1) Direct Costs & Benefits	• **Added additional information section to the Registration Statement regarding cooling water intake structures that are only applicable to a subset of regulated entities.** Direct Costs: No direct economic cost to regulated entities expected beyond the additional administrative time permittees may spend in preparing a Registration Statement submittal. Direct Benefits: No direct economic benefit to regulated entities.		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) See above	(c) n/a	
Direct Benefits	(b) See above	(d) n/a	
(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a
(5) Indirect Costs & Benefits	No indirect costs or benefits to the regulated entities expected due to the limited extent of changes being made to the general permit regulation.		

(6) Information Sources	n/a
(7) Optional	n/a

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)
This table addresses current requirements and the implications of not making any changes. In other words, describe the costs and benefits of maintaining the current regulatory requirements as is.

(1) Direct Costs & Benefits	• **The current regulation does not include the additional information section noted in Table 1a above.** Direct Costs: Maintaining the current requirements would have no direct economic cost to regulated entities. Direct Benefits: Maintaining the current requirements would have no direct economic benefit to regulated entities beyond saving additional administrative time in preparing a Registration Statement submittal.		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) See above	(c) n/a	
Direct Benefits	(b) See above	(d) n/a	
(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a
(5) Indirect Costs & Benefits	No indirect costs or benefits to the regulated entities expected if the current requirements are maintained.		
(6) Information Sources	n/a		

(7) Optional	n/a

Table 1c: Costs and Benefits under an Alternative Approach
This table addresses an alternative approach to accomplishing the objectives with different requirements. These alternative approaches may include the use of reasonably available alternatives in lieu of regulation, or information disclosure requirements or performance standards instead of regulatory mandates.

(1) Direct Costs & Benefits	• **No alternative approach was considered given that the additional information added to the Registration Statement is required in order for the Agency to make any necessary 316(b) Best Technology Available (BTA) determinations in compliance with existing state and federal regulations (9VAC25-31-165 C; 40 CFR 125.80(c) and 125.90(b))** 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 permit. The permit fee for operators to obtain coverage under this general permit is $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 (total of $11,176 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.

(2) Quantitative Factors	Estimated Dollar Amount	Present Value
Direct Costs	(a) See above	(c) n/a
Direct Benefits	(b) See above	(d) n/a

(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a
(5) Indirect Costs & Benefits	n/a		
(6) Information Sources	n/a		
(7) Optional	n/a		

Impact on Local Partners

(1) Describe the direct costs and benefits (as defined on page 1) for local partners in terms of real monetary costs and FTEs. Local partners include local or tribal governments, school divisions, or other local or regional authorities, boards, or commissions. If local partners are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of total (overall) direct costs described above.
  (b) Enter estimated dollar value of total (overall) direct benefits described above.
(3) Indirect Costs & Benefits: Describe any indirect benefits and costs (as defined on page 1) for local partners that are associated with all significant changes. If there are no indirect costs or benefits, include a specific statement to that effect.
(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.
(5) Assistance: Identify the amount and source of assistance provided for compliance in both funding and training or other technical implementation assistance.
(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 2: Impact on Local Partners

(1) Direct Costs & Benefits	No costs or benefit impacts on local partners 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.

(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) n/a
(3) Indirect Costs & Benefits	n/a
(4) Information Sources	n/a
(5) Assistance	n/a
(6) Optional	n/a

Economic Impacts on Families

(1) Describe the direct costs and benefits (as defined on page 1) to a typical family of three (average family size in Virginia according to the U. S. Census) arising from any proposed regulatory changes that would affect the costs of food, energy, housing, transportation, healthcare, and education. If families are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of direct costs.
  (b) Enter estimated dollar value of direct benefits.
(3) Indirect Costs & Benefits: Describe any indirect costs and benefits (as defined on page 1) to a typical family of three that are most likely to result from the proposed changes.
(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
(5) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 3: Impact on Families

(1) Direct Costs & Benefits	No costs or benefit impacts on families are expected due to the limited extent of change being made to the general permit regulation.

(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) n/a
(3) Indirect Costs & Benefits	n/a
(4) Information Sources	n/a
(5) Optional	n/a

Impacts on Small Businesses

(1) Describe the direct costs and benefits (as defined on page 1) for small businesses. For purposes of this analysis, "small business" means the same as that term is defined in § 2.2-4007.1. If small businesses are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of direct costs.
  (b) Enter estimated dollar value of direct benefits.
(3) Indirect Costs & Benefits: Describe the indirect benefits and costs (as defined on page 1) for small businesses that are most likely to result from the proposed changes.
(4) Alternatives: Add a qualitative discussion of any equally effective alternatives that would make the regulatory burden on small business more equitable compared to other affected business sectors, and how those alternatives were identified.
(5) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 4: Impact on Small Businesses

(1) Direct Costs & Benefits	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.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) n/a
(3) Indirect Costs & Benefits	n/a
(4) Alternatives	n/a
(5) Information Sources	n/a
(6) Optional	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.

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.

Table 5: Total Number of Requirements

	Number of Requirements			
Chapter number	**Initial Count**	**Additions**	**Subtractions**	**Net Change**
9VAC25-196-50	3	0	0	0

9VAC25-196-60	17	2	0	+2
9VAC25-196-70	42	0	0	0

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Travis A. Voyles
Acting Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
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October 21, 2022

MEMORANDUM

TO: State Water Control Board Members
FROM: Elleanore Daub, Office of VPDES Permits
SUBJECT: VPDES General Permit Regulation for Potable Water Treatment Plants – Final (9VAC25-860)

The current VPDES Potable Water Treatment Plant general permit will expire on June 30, 2023 and the regulation establishing this general permit is being amended to reissue another term. The staff is bringing this proposed regulation before the Board to request adoption of the amendments to the VPDES General Permit Regulation for Potable Water Treatment Plants. 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 takes into consideration the recommendations of a technical advisory committee (TAC) formed for this regulatory action. A list of the TAC membership is attached.

The Notice of Public Comment and Hearing was approved by the Board on March 25, 2022, the comment period was April 25, 2022 to June 24, 2022 with a public hearing held on June 2, 2022. No members of the public attended the hearing. No comments were received from the public during the Notice of Public Comment and Hearing; however, EPA provided comment in accordance with 40 CFR §123.44 entitled "EPA review of and objection to State permits" and the MOA between The Virginia State Water Control Board and the EPA. EPA noted that the draft permit allows for automatic transfer of coverage to a new permittee if the current permittee notifies the department within 30 days of the transfer of the title to the facility or property. This permit condition appears to be inconsistent with 40 CFR 122.61(b)(1) which requires the permittee to notify the Director at least 30 days in advance of the proposed transfer date. EPA recommends VADEQ revisit the automatic transfer of coverage condition in the permit to ensure its consistency with the regulations. DEQ intends to retain the language as drafted to ease the burden of administering the general permit on staff. The 30 day prior notification deadline is rarely met when property is transferred and DEQ staff prefer the requirement reflect the normal timing of events so waivers or additional documentation is not needed.

No substantive changes were made from the proposed regulation. However, the recently enacted legislation (SB 657) board bill revisions have been updated in the final regulation. The balance of the general permit/ regulation changed the term “board” to “department” where the reference was to a permit action.

Substantive changes that were proposed and subject to public comment are:

- Section 10 – Added definition for “conventional filtration treatment” per the recommendation of the TAC since the term is used in this regulation. The definition is taken from the VDH Waterworks Regulation 12VAC5-590-10. Amended definition for "Membrane treatment" to mean a pressure driven or vacuum process. “Vacuum” was added at the request of the TAC to reflect the fact that membrane treatment can be pressure or vacuum driven.

- Sections 40 and 70 - Updated the effective dates to reflect the new five year term (July 1, 2023 – June 30, 2028).

- Section 60 C - Registration Questions – Added monthly average process wastewater flow and Virginia Department of Health Public Water Supply Identification (PWSID) number. Revised the schematic drawing instructions to show the treatment of the water from raw water intake through finished water distribution to clearly indicate where pollutants could enter the process discharge water.

- Added that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry, registration statements shall be submitted electronically. Three months’ notice shall be given by the department about this requirement.

- Section 70 Part I A 1 and 2 – Clarified footnote (4) instructions for composite sampling to match other permits with similar composite instructions. Also added that composite sample procedures may be approved by DEQ on a case by case basis.

- Section 70 Part I A 2 - Added limits for TSS and chlorine to the reverse osmosis plant discharge limits. TSS applies when conventional filtration treatment is used at the reverse osmosis plant and present in the discharge. Chlorine applies when chlorine is present in the discharge.

- 9VAC25-860-70 Part I B 8 – Added instructions to this special condition on how to calculate the monthly average and the daily maximum for quarterly reporting.

- Section 70 Part II A – Conditions Applicable to All Permits - Added under reporting, that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry and 3 months’ notice is given, discharge monitoring reports shall be submitted electronically.

The Office of the Attorney General will be sent the regulation for certification of authority to adopt the amendments.

Attachments: TAC Membership, General Permit Regulation Amendments, Town Hall Agency Final Background Document, Fact Sheet

TAC COMMITTEE MEMBERSHIP
VPDES Potable Water Treatment Plant General Permit Regulation
9VAC25-860

Robert D. Edelman, PE Director, Division of Technical Services Virginia Department of Health, Office of Drinking Water 109 Governor Street, 6th Floor Richmond, VA 23219 804-864-7490 (office) 434-466-4012 (cell/text) robert.edelman@vdh.virginia.gov	Wendy Eikenberry Tim Castillo (alternate) Lab and Compliance Manager Augusta County Service Authority 18 Government Center Lane PO Box 859 Verona, VA 24482 Office (540)245-5677 Cell (540)487-0009 weikenberry@co.augusta.va.us tcastillo@co.augusta.va.us
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DEQ Staff: **Elleanore Daub** – CO VPDES **Allan Brockenbrough** - CO VPDES	**DEQ Staff Technical Liaisons:** Deborah Debiasi (CO, VPDES Permits) Troy Nipper (CO, Water Compliance) Kevin Crider(BRRO, VPDES Permits) Adam Eller (PRO, VPDES Permits) Heather Weimer (PRO, Water Compliance).

townhall.virginia.gov

Exempt Action: Final Regulation
Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-860
VAC Chapter title(s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Potable Water Treatment Plants
Action title	VPDES General Permit -Potable Water Treatment Plants - Amend and Reissue Existing Regulation
Final agency action date	November 29, 2022
Date this document prepared	October 24, 2022

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 regulation specifies requirements potable water treatment plants to discharge process wastewater to protect water quality. The most significant amendments to this regulation are updating definitions, adding total suspended solids and chlorine discharge limits for reverse osmosis and nanofiltration plants and including future electronic reporting requirements. This regulatory action is proposed to amend and reissue the existing general permit, which expires on June 30, 2023.

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 Virginia Code § 62.1-44.15 (5a) which states, "All certificates issued by the Board under this chapter shall have fixed terms. The term of a Virginia Pollution Discharge Elimination System permit shall not exceed five years." This general permit expires on June 30, 2023 and must be reissued in order to make coverage available for potable water treatment plants that discharge to surface waters after that date. 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.

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.

DEQ: Department of Environmental Quality
EPA (U.S. EPA): United States Environmental Protection Agency
NPDES: National Pollutant Discharge Elimination System
PREP: Pollution Response Program
TAC: Technical Advisory Committee
USC: United States Code
VAC: Virginia Administrative Code
VPDES: Virginia Pollutant Discharge Elimination System
WTP: Water Treatment Plant

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 29, 2022, the State Water Control Board adopted the Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Potable Water Treatment Plants – 9VAC25-860 as a final regulation.

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 promulgating entity for this regulation is the State Water Control Board. 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 waste 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, § 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 proposed regulatory action is needed in order to establish permitting requirements for discharges from potable water treatment plants in order to protect the health, safety and welfare of citizens. The existing general permit expires on June 30, 2023 and must be reissued to cover existing potable water treatment plant discharges. The goal is to update the permit and the regulation to be consistent with other VPDES general permits.

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 provisions include updating definitions, adding total suspended solids and chlorine discharge limits for reverse osmosis and nanofiltration plants and including future electronic reporting requirements.

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 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, 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. There is no change to previously reported information.

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 is no change to previously reported information which was as follows:

Other State Agencies Particularly Affected - None

Localities Particularly Affected – there are many localities that operate drinking water treatment plants for their locality that have coverage under this permit but none bear a disproportionate material impact.

Other Entities Particularly Affected - None

For purposes of "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.

There were no comments received in response to impact to small businesses.

The existing permit regulation is needed because it expires on June 30, 2023 and must be reissued for another term to remain available to new and current 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 TAC meeting input have identified areas where the general permit could be improved.

The regulation is a technical regulation but written as clearly as possible to convey the requirements to maintain water quality.

The regulation does not overlap, duplicate or conflict with federal or state law or regulation. Staff from the Office of Drinking water at the Virginia Department of Health (the agency responsible for finished water treatment) participated on the technical advisory committee.

The regulation was evaluated during periodic review in October 2020 and before that at permit reissuance which was effective July 2018.

Commenter	Comment	Agency response
Jennifer Fulton, Acting Chief, Clean Water Branch US EPA Mid-Atlantic Region	The draft permit allows for automatic transfer of coverage to a new permittee if the current permittee notifies the department within 30 days of the transfer of the title to the facility or property. This permit condition appears to be inconsistent with 40 CFR 122.61(b)(1) which requires the permittee to notify the Director at least 30 days in advance of the proposed transfer date. EPA recommends VADEQ	DEQ intends to retain the language as drafted to ease the burden of administering the general permit on staff. The 30 day prior notification deadline is rarely met when property is transferred and DEQ staff prefer the

	revisit the automatic transfer of coverage condition in the permit to ensure its consistency with the regulations.	requirement reflect the normal timing of events so waivers or additional documentation is not needed.

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
9VAC25-860-10, 50, 60 and 70.	NA	The term “board” is used for most actions related to the permit in the proposed stage.	Replaced “board” with “department” wherever the requirement is referring to a permit action.	This conforms to recently enacted legislation (SB 657). In the balance of the general permit/ regulation, changed “board” to “department” where the reference was to a permit action. No impact.
9VAC25-860-10	NA	The definition “Department" or "DEQ" means the Virginia Department of Environmental Quality was stricken as an amendment in the proposed stage because definitions in the permit regulation do not need to be repeated in the general permit regulations.	The definition was reinstated.	The recently enacted legislation (SB 657) assumed this definition to be present to correspond with the new definition of “Board” that was part of the SB 657 amendments so it was decided to keep the definition of “Department.” No impact.
9VAC25-860-15		Applicability of incorporated references based on the dates that they became effective was changed to July 1, 2021 in the proposal.	Effective date for the Title 40 CFR changed to July 1, 2022.	Effective date for the Title 40 CFR changed to July 1, 2022 to reflect the most recent federal fiscal year. No impact.

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
9VAC25-860-10, 50, 60 and 70.	NA	The term “board” is used for most actions related to the permit in the proposed stage.	Replaced “board” with “department” wherever the requirement is referring to a permit action. This conforms to recently enacted legislation (SB 657). In the balance of the general permit/ regulation, changed “board” to “department” where the reference was to a permit action. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-860-10. Definitions.		No definition for “conventional filtration treatment.”	Added definition for “conventional filtration treatment” per the recommendation of the TAC since the term is used in this regulation. The definition is taken from the VDH Waterworks Regulation 12VAC5-590-10. Amended definition for "Membrane treatment" to mean a pressure driven or vacuum process. “Vacuum” was added at the request of the TAC to reflect the fact that membrane treatment can be pressure or vacuum driven.
9VAC25-860-15. Applicability of incorporated references based on the dates that they became effective.		Effective date for the Title 40 CFR is July 1, 2017	Effective date for the Title 40 CFR changed to July 1, 2022. No impact.
9VAC25-860-40. Effective date of the permit.		Effective date of permit is July 1, 2018 and expires on June 30, 2023.	Effective date of permit changed to July 1, 2023 and expires on June 30, 2028. Updated to reflect new five year permit term.
9VAC25-860-50. D Authorization to discharge.		Subdivision 1 describes requirements for continuation of permit coverage.	Same requirement, amendments made to language to match other general permit continuation language. No impact.
9VAC25-860-60 A Registration statement.		Subsection A contains deadlines for registration statement submittals for new and existing facilities.	Same requirements, amendments made to language to match other general permit registration language. No impact.

9VAC25-860-60 C. Registration statement.		Subsection C contains registration requirements.	Amendments made to language to match other general permit registration requirement language in questions 2, 12 and 16. No impact.
		Question #6 asks for flow information (daily maximum actual or projected process wastewater flow rate (MGD or GPD), typical volume, duration of discharges, and frequency of discharge. Question also asks for latitude and longitude.	Question #6 changed to require daily maximum and monthly average process wastewater flow and typical volume deleted. No impact as this information is required by the permit. Clarified that latitude and longitude should be in decimal degrees (six digits - ten-thousandths place. This is consistent with the VPDES Construction General Permit 9VAC25-880-50 for a similar requirement. No impact.
		Question #7 provides examples for types of treatment.	Question #7 provided examples for types of treatment but clarified that "conventional" was "conventional filtration treatment" to match new definition is section 10. No impact.
		Question #8 asks for other VPDES permit numbers that allow discharges.	Question #8 same question but clarifies DEQ wants VPDES or VPA permit numbers.
		No question asking for Virginia Department of Health Public Water Supply Identification (PWSID) number. After insertion of VDH PWSID number, the following subdivisions are renumbered.	Question #9 inserted which asks for (PWSID) number. This assists DEQ in identifying and crosschecking VDH and DEQ potable WTPs. No impact as all potable WTPs already know their VDH PWSID number.
		Question #13 asks for information on chemicals used in the production of drinking water and process wastewater treatment, to include (i) a description of chemicals, (ii) a proposed or actual schedule and quantity of chemical usage, (iii) a description of any chemical or chemical usage changes since the previous registration statement was submitted, and (iv) a description of which chemicals have no likelihood	Question #13 revised to ask for a schematic drawing showing the treatment of the water from raw water intake through finished water distribution. Indicate clearly where backwash, reject water, clean in place water, and disinfection chemicals could enter the process wastewater and exit the outfall to state waters. Also include in schematic where solids from any treatment process are settled or dried. This was done so DEQ can clearly see what process water is being discharged so that the appropriate permit limits page is applied to that facility. Minor impact as some

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		of entering the process wastewater.	permittees may have to redraw their schematics to be clearer where process waters are discharged.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-860-60 E. Registration statement.		Registration statement shall be delivered to the department by postal or electronic mail.	Added that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry, registration statements shall be submitted electronically. Three months' notice shall be given by the department about this requirement. Some impact because once electronic reporting dates are established and technology is developed at the department, the permittees will be required to file registration statements electronically. This may be difficult if the registrant has no available internet access (even via a public library) or computer/internet skills. Waivers are available under very limited circumstances.
9VAC25-860-70. General permit.		Effective and expiration dates July 1, 2018 – June 30, 2023.	Updated to next term July 1, 2023 to June 30, 2028.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-860-70. General permit. Part I A 1		Footnote (2) states that the reported estimated flow is to be based on the technical evaluation of the sources contributing to the discharge. Footnote (4) contains instructions for composite sampling.	Amended footnote (2) to say the estimated flow “may be” based on a technical evaluation of the sources contributing to the discharge. Flow is often measured using a flow meter (which is more accurate than an estimate) so the footnote estimate is an allowance and not a requirement. No impact as this reflects existing procedures. Footnote (4) instructions for composite sampling clarified to match other permits with similar composite instructions. Also added that composite sample procedures for batch discharges unable to meet the above requirements may be approved by DEQ on a case by case basis. This is a clarification to add flexibility to batch composite procedures as batch discharges may be very short and variable. DEQ has had to approve alternative compositing procedures in the past that met the spirit and intent of this footnote in order to receive representative samples. This is a clarification of existing procedures. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-860-70. General permit. Part I A 2		Part I A 2 contains limits for reverse osmosis and nanofiltration plants.	Added limits for TSS and chlorine under certain circumstances. TSS applies when conventional filtration treatment is used at the reverse osmosis plant and present in the discharge. Chlorine applies when chlorine is present in the discharge. As drinking water treatment scenarios have changed over the years, DEQ has determined that conventional treatment technologies can be used prior to the reverse osmosis or nanofiltration and should therefore contain TSS and chlorine limits similarly to Part 1 A 1 pages. This will impact plants that contain these mixed treatment technologies to include TSS and chlorine in their discharges. DEQ estimates there is currently one facility impacted by these additional requirement. Composite sampling procedures in footnote (3) were amended as described in Part I A 1 (footnote (4)) above.
9VAC25-860-70. General permit. Part I B		Subdivision 8 contains compliance reporting conditions for the limits in Part I A.	Subdivision clarified to add instructions for how to calculate the monthly average and the daily maximum for quarterly reporting. This may impact facilities that have been calculating averages or maximums differently. Deleted the instructions on how to calculate quantity when samples are below detection. There are no quantity related calculations with QLs so the instructions are not needed. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-860-70 Part II C		Monitoring results shall be submitted on a form provided by DEQ.	Added that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry, DMRs shall be submitted electronically. Three months' notice shall be given by the department about this requirement. Some impact because once electronic reporting dates are established and technology is developed at the department, the permittees will be required to file DMRs electronically. This may be difficult if the registrant has no available internet access (even via a public library) or computer/internet skills. Waivers are available under very limited circumstances.
9VAC25-860-70 Part II G, H, I, L and Y		Subsection D contains the duty to provide information that the board requests for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Subsection G contains unauthorized discharge reporting requirement. Subsection H contains unusual discharge reporting requirements Subsection I contains noncompliance reporting requirements. Subsection L contains the requirement to reapply for coverage. Subdivision Y contains transfer of permit coverage requirements.	D, G, H, I, L and Y contain the same requirements but amendments made to the language to match other general permit language in these requirements. Subsection I was also amended to reflect more recent reporting requirements after discussions with DEQs Pollution Response Program (PREP) staff who requested all after hours reporting be done online via the PREP portal. This portal automatically notifies regional offices and logs the report in the database. This requirement should not be a problem for this particular industrial sector as most of these permittees are localities with internet access so online access is available.

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 reissuance of the VPDES general permit accomplishes the objectives of applicable law and minimizes the costs to a small business owner and simplifies the application process. 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 and permit 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.

There is no potential impact of the proposed regulatory action on the institution of the family and family stability.

Project 6872 - Exempt Final

State Water Control Board

VPDES General Permit -Potable Water Treatment Plants - Amend and Reissue Existing Regulation

Chapter 860

Virginia Pollutant Discharge Elimination System General Permit Regulation for Potable Water Treatment Plants

9VAC25-860-10. Definitions.

The words and terms used in this regulation shall have the meanings defined in the State Water Control Law and 9VAC25-31, the VPDES Permit Regulation, unless the context clearly indicates otherwise, except that for the purposes of this chapter:

"Board" means the State Water Control Board. However, when used outside the context of the promulgation of regulations, including regulations to establish general permits, board" means the Department of Environmental Quality.

["Department" or "DEQ" means the Virginia Department of Environmental Quality.]

"Conventional filtration treatment" means a series of processes including coagulation, flocculation, sedimentation, and filtration resulting in substantial particulate removal.

"Membrane treatment" means a pressure or vacuum driven process using synthetic materials to separate constituents from water. Membranes are used for dissolved solids or suspended solids removal. Membrane treatment for dissolved solids removal includes reverse osmosis and nanofiltration. Membrane treatment for suspended solids removal includes ultrafiltration and microfiltration.

"Microfiltration" means a method of membrane treatment designed to remove particles down to 0.1 µm in size. The treatment removes cysts, bacteria, and most (but not all) particulates.

"Nanofiltration" or "low-pressure reverse osmosis" or "membrane softening" means a method of membrane treatment designed to remove multivalent ions (softening) and removes contaminants down to 1 nm (nanometer = 0.001 µm) in size.

"Potable water treatment plant" means an establishment engaged in producing water for domestic, commercial, or industrial use as designated by North American Industry Classification System (NAICS) Code 221310 - Water Supply and Irrigation Systems, (Executive Office of the President, Office of Management and Budget, United States, 2017), Standard Industrial Classified (SIC) Code 4941 - Water Supply (Office of Management and Budget (OMB) SIC Manual, 1987), or others as approved by the [~~board.~~department.]

"Reverse osmosis" means a method of membrane treatment designed to remove salts and low-molecular weight solutes and remove all contaminants down to 0.0001 µm (microns) in size. Reverse osmosis methods apply pressure in excess of osmotic pressure to force water through a semi-permeable membrane from a region of high salt concentration to a region of lower salt concentration.

"Total maximum daily load" or "TMDL" means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges, and load allocations (LAs) for nonpoint sources or natural background or both, and must include a margin of safety (MOS) and account for seasonal variations.

"Ultrafiltration" means a method of membrane treatment designed to remove particles down to 0.01 µm in size. The treatment removes cysts, bacteria, and viruses as well as suspended solids.

9VAC25-860-15. Applicability of incorporated references based on the dates that they became effective.

Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in Title 40 of the Code of Federal Regulations (CFR) is referenced and incorporated in this chapter, that regulation shall be as it exists and has been published as of July 1, ~~2017~~ [~~2021.~~2022]

9VAC25-860-40. Effective date of the permit.

This general VPDES permit will become effective on July 1, ~~2018~~ 2023, and will expire on June 30, ~~2023~~ 2028. This general permit is effective for any covered owner upon compliance with all the provisions of 9VAC25-860-50.

9VAC25-860-50. Authorization to discharge.

A. Any owner governed by this general permit is hereby authorized to discharge to surface waters of the Commonwealth of Virginia provided that:

1. The owner submits a registration statement in accordance with 9VAC25-860-60 and that registration statement is accepted by the [~~board~~department] ;

2. The owner submits the required permit fee;

3. The owner complies with the applicable effluent limitations and other requirements of 9VAC25-860-70; and

4. The [~~board~~department] has not notified the owner that the discharge is not eligible for coverage in accordance with subsection B of this section.

B. The [~~board~~department] will notify an owner that the discharge is not eligible for coverage under this general permit in the event of any of the following:

1. The owner is required to obtain an individual permit in accordance with 9VAC25-31-170 B 3 of the VPDES Permit Regulation;

2. The owner is proposing to discharge to state waters specifically named in other board regulations that prohibit such discharges;

3. The discharge violates or would violate the antidegradation policy in the Water Quality Standards at 9VAC25-260-30;

4. The discharge is not consistent with the assumptions and requirements of an approved TMDL;

5. The facility is subject to the requirements of 9VAC25-820-70 Part I G 1 (General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia - Requirement to Register); and

6. An owner applying for coverage under this general permit submits the results of representative whole effluent toxicity testing of the discharge, and the results demonstrate that there is a reasonable potential for toxicity.

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. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

D. Continuation of permit coverage.

1. Permit coverage shall expire at the end of ~~its~~ the applicable permit term. However, expiring permit coverages are automatically continued if the owner has submitted a complete registration statement at least 60 days prior to the expiration date of the permit, or a later submittal established by the [~~board,~~department,] which cannot extend beyond the expiration date of the ~~original~~ permit. The permittee is authorized to continue to discharge until such time as the [~~board~~department] either:

a. Issues coverage to the owner under this general permit; or

b. Notifies the owner that the discharge is not eligible for coverage under this general permit.

2. When the owner that was covered under the expiring or expired general permit has violated or is violating the conditions of that permit, the [~~board~~department] may choose to do any or all of the following:

a. Initiate enforcement action based upon the general permit coverage that has been continued;

b. Issue a notice of intent to deny coverage under the reissued general permit. If the general permit coverage is denied, the owner would then be required to cease the discharges authorized by the continued general permit coverage ~~under the terms of the general permit~~ or be subject to enforcement action for discharging without a permit;

c. Issue an individual permit with appropriate conditions; or

d. Take other actions authorized by the VPDES Permit Regulation (9VAC25-31).

9VAC25-860-60. Registration statement.

A. Deadlines for submitting registration statement. The owner seeking coverage under this general permit shall submit a complete VPDES general permit registration statement in accordance with this section, which shall serve as a notice of intent for coverage under the ~~general~~ VPDES general permit regulation for potable water treatment plants.

1. New facilities. Any owner proposing a new discharge shall submit a complete registration statement at least 60 days prior to the date planned for commencement of the new discharge.

2. Existing facilities.

a. Any owner covered by an individual VPDES permit who is proposing to be covered by this general permit shall submit a complete registration statement at least ~~270~~ 240 days prior to the expiration date of the individual VPDES permit or a later submittal established by the [~~board.~~department.]

b. Any owner that was authorized to discharge under the expiring or expired ~~general~~ VPDES general permit and who intends to continue coverage under this general permit shall submit a complete registration statement to the [~~board~~department] at least 60 days prior to the expiration date of the existing permit or a later submittal established by the [~~board.~~department.]

~~c. Any owner of a potable water treatment plant not currently covered by a VPDES permit who is proposing to be covered by this general permit shall file the registration statement.~~

B. Late registration statements. Registration statements for existing owners covered under subdivision A 2 b of this section will be accepted after the expiration date of the permit, but authorization to discharge will not be retroactive.

C. The required registration statement shall contain the following information:

1. Facility name and street address, owner name, mailing address, telephone number, and email address (if available);

2. Operator or other contact name, mailing address, telephone number, and email address ~~(if available)~~;

3. The nature of the business;

4. A USGS 7.5 minute topographic map or equivalent computer generated map showing the facility location extending to at least one mile beyond the property boundary and the location of the discharge points;

5. The receiving waters of the discharge;

6. The outfall number, latitude and longitude (in decimal degrees (six digits - ten-thousandths place)), the daily maximum ~~actual or projected process wastewater flow rate~~ and monthly average process wastewater flow (millions of gallons per day or gallons per day), ~~typical volume,~~ duration of discharges, and frequency of discharge;

7. The type of water treatment (e.g., conventional filtration treatment, microfiltration, ultrafiltration, nanofiltration, reverse osmosis, or a combination of these) and, if applicable, a description of any treatment type changes since the previous registration statement was submitted;

8. The number of any existing VPDES or VPA permit ~~that authorizes discharges from the potable water treatment plant~~;

9. The Virginia Department of Health Public Water Supply Identification (PWSID) number;

10. If the existing VPDES permit contains a groundwater monitoring plan requirement, a copy of the [~~board-approved~~department-approved] plan shall be submitted unless the plan has been previously submitted and approved and remains unchanged. If a plan has been previously approved, cite the plan and date of approval;

~~10.~~ 11. Information regarding the lining of any settling basins or lagoons, whether such units are earthen lined, and if so, whether the linings have a permeability of no greater than 10^{-6} cm/sec;

~~11.~~ 12. The results of any whole effluent toxicity evaluation required by the ~~2013~~ 2018 potable water treatment plant general permit regulation, 9VAC25-860-50 A 3, or the current individual permit, if not previously submitted to the department;

~~12.~~ 13. A schematic drawing showing ~~the sources of water used on the property and the conceptual design of the methods of treatment and disposal of process wastewater;~~ the treatment of the water from raw water intake through finished water distribution. Indicate clearly where backwash, reject water, clean in place water, and disinfection chemicals could enter the process wastewater and exit the outfall to state waters. Also include in schematic where solids from any treatment process are settled or dried.

~~13.~~ 14. Information on chemicals used in the production of drinking water and process wastewater treatment, to include (i) a description of chemicals, (ii) a proposed or actual schedule and quantity of chemical usage, (iii) a description of any chemical or chemical usage changes since the previous registration statement was submitted, and (iv) a description of which chemicals have no likelihood of entering the process wastewater;

~~14.~~ 15. A description of how solids and residue from any settling basins or lagoons are disposed;

~~15.~~ 16. Whether the facility will discharge to a municipal separate storm sewer system (MS4). If ~~so~~ yes, the name of the MS4 owner must be provided. If the owner of the potable water treatment plant is not the owner of the MS4, the facility owner shall notify the MS4 owner of the existence of the discharge and include a copy of the notification with the registration statement. The notification shall include the following information: the name of the facility, a contact person ~~and telephone number~~ contact information (telephone

number and email), the location of the discharge, the nature of the discharge, and the owner's VPDES general permit number;

~~16.~~ 17. If a new potable water treatment plant owner proposes to discharge within five miles upstream of another public water supply system's intake, the new potable water treatment plant owner shall notify the public water supply system's owner and include a copy of the notification with the registration statement; and

~~17.~~ 18. The following certification:

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

D. The registration statement shall be signed in accordance with 9VAC25-31-110.

E. The registration statement shall be delivered to the department's regional office where the industrial facility is located by either postal or electronic mail. 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.

9VAC25-860-70. General permit.

Any owner whose registration statement is accepted by the [~~board~~department] will receive coverage under the following permit and shall comply with the requirements therein and be subject to all requirements of 9VAC25-31.

General Permit No.: VAG64
Effective Date: July 1, ~~2018~~ 2023
Expiration Date: June 30, ~~2023~~ 2028

GENERAL PERMIT FOR POTABLE WATER TREATMENT PLANTS

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of potable water treatment plants are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in board regulations that prohibit such discharges.

The authorized discharge shall be in accordance with the information submitted with the registration statement, this cover page, Part I - Effluent Limitations, Monitoring Requirements, ~~and~~ Special Conditions~~,~~ and Part II - Conditions Applicable to All VPDES Permits, as set forth in this general permit.

Part I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

1. Facilities other than reverse osmosis or nanofiltration plants.

During the period beginning with the permittee's coverage under this general permit and lasting until the permit's expiration date, the permittee is authorized to discharge process wastewater from outfalls: _____

Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
	Monthly Average	Minimum	Maximum	Frequency(1)	Sample Type
Flow (MGD)	NL	NA	NL	1/3 Months	Estimate(2)
pH (SU)(3)	NA	6.0	9.0	1/3 Months	Grab
Total Suspended Solids (mg/l)	30	NA	60	1/3 Months	Composite(4)
Total Residual Chlorine(5) (mg/l)	0.011	NA	0.011	1/3 Months	Grab

NL - No Limitation, monitoring requirement only

NA - Not applicable

(1) Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

(2)Reported estimated flow ~~is to~~ may be based on the technical evaluation of the sources contributing to the discharge.

(3)Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in waters receiving the discharge, those standards shall be the minimum and maximum effluent limitations.

(4)Composite - For continuous discharges, five grab samples collected at hourly intervals. For batch discharges, five grab samples taken at evenly placed intervals ~~until the discharge ceases~~ for the duration of the discharge, or until a minimum of five grab samples have been collected. For batch discharges, the first grab shall occur within 15 minutes of commencement of the discharge. Composite sample procedures for batch discharges unable to meet the requirements in this table may be approved by DEQ on a case-by-case basis.

(5) Total residual chlorine limit shall only be applicable if chlorine is present in the process wastewater.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS.

2. Reverse osmosis and nanofiltration plants.

During the period beginning with the permittee's coverage under this general permit and lasting until the permit's expiration date, the permittee is authorized to discharge process wastewater originating from outfalls: _____

Such discharges shall be limited and monitored as specified below:

EFFLUENT CHARACTERISTICS	EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
	Monthly Average	Minimum	Maximum	Frequency	Sample Type
Flow (MGD)	NL	NA	NL	1/ Month	Estimate(1)
pH (SU)(2)	NA	6.0	9.0	1/ Month	Grab
Total Dissolved Solids (mg/l)	NA	NA	NL	1/ Month	Composite(3)
Total Suspended Solids (mg/l)(4)	30	NA	60	1/ Month	Composite(3)
Dissolved Oxygen (mg/l)(4)(5)	NA	4.0	NA	1/ Month	Grab
Total Residual Chlorine (mg/l)(6)	0.011	NA	0.011	1/ Month	Grab

NL - No limitation, monitoring requirement only

NA - Not applicable

(1)Reported estimated flow ~~is to~~ may be based on the technical evaluation of the sources contributing to the discharge.

(2)Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in waters receiving the discharge, those standards shall be the minimum and maximum effluent limitations.

(3)Composite - For continuous discharges, five grab samples collected at hourly intervals. For batch discharges, five grab samples taken at evenly placed intervals ~~until the discharge ceases or~~ for the duration of the discharge or until a minimum of five grab samples have been collected. For batch discharges, the first grab shall occur within 15 minutes of commencement of the discharge. Composite sample procedures for batch discharges unable to meet the requirements in this table may be approved by DEQ on a case-by-case basis.

(4)Applicable when conventional filtration treatment discharge is part of drinking water treatment and present in the process wastewater.

(4) (5)Where the Water Quality Standards (9VAC25-260) establish alternate standards for dissolved oxygen in waters receiving the discharge, those standards shall be the minimum effluent limitations.

(6)Total residual chlorine limit shall only be applicable if chlorine is present in the process wastewater.

B. Special conditions.

1. Inspection of the effluent, and maintenance of the process wastewater treatment facility, shall be performed daily. Documentation of the inspection and maintenance shall be recorded in an operational log. This operational log shall be made available for review by the department personnel upon request.

2. No domestic sewage discharges are permitted under this general permit.

3. No chemicals used for water and process wastewater treatment, other than those listed on the owner's accepted registration statement, are allowed. Prior approval shall be obtained from the [~~board~~department] before any changes are made to the chemicals, in order to assure protection of water quality and beneficial uses of the waters receiving the discharge. The owner shall indicate whether the chemical is likely to enter state waters through the process wastewater discharge.

4. There shall be no discharge of floating solids or visible foam in other than trace amounts.

5. Owners of facilities that are a source of the specified pollutant of concern to waters where an approved total maximum daily load (TMDL) has been established shall implement measures and controls that are consistent with the assumptions and requirements of the TMDL.

6. The permittee shall notify the department as soon as the permittee knows or has reason to believe:

a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter;

(2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;

(3) Five times the maximum concentration value reported for that pollutant in the general permit registration statement; or

(4) The level established by the [~~board.~~department.]

b. That any activity has occurred or will occur that would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant that is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter;

(2) One milligram per liter for antimony;

(3) Ten times the maximum concentration value reported for that pollutant in the general permit registration statement; or

(4) The level established by the [~~board.~~department.]

7. If a [~~board-approved~~department-approved] groundwater monitoring plan was submitted with the registration statement, the permittee shall continue to sample and report in accordance with the plan. The approved plan shall be an enforceable part of this permit. The [~~board~~department] or the owner, with [~~board~~department] approval, may evaluate the groundwater monitoring data and demonstrate that revisions to or the cessation of the groundwater monitoring are appropriate. If the department determines that monitoring indicates that groundwater is contaminated, the permittee shall submit a corrective action plan within 60 days of being notified by the regional office. The plan shall set forth the steps to ensure the contamination source is eliminated or that the contaminant plume is contained on the permittee's property. In addition, based on the extent of

contamination, a risk analysis may be required. Once approved, this plan or analysis shall become an enforceable part of this permit.

8. Compliance reporting under Part I A.

a. The quantification levels (QL) shall be ~~as follows~~ less than or equal to the following:

	Effluent Characteristic	Quantification Level
	Chlorine	0.10 mg/l
	TSS	1.0 mg/l

b. Reporting.

(1) Monthly average. Compliance with the monthly average limitations and reporting requirements for the parameters listed in subdivision 8 a of this subsection shall be determined as follows: all concentration data below the QL listed in subdivision 8 a shall be treated as zero. All concentration data equal to or above the QL listed in subdivision 8 a shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as calculated. If all data are below the QL, then the average shall be reported as "<QL." ~~If reporting for quantity is required on the DMR and the calculated concentration is <QL, then report "<QL" for the quantity. Otherwise use the calculated concentration.~~ For quarterly monitoring frequencies, the monthly average value to be reported on the DMR shall be the maximum of the arithmetic monthly averages calculated for each calendar month during the monitoring period.

(2) Daily maximum. Compliance with the daily maximum limitations or reporting requirements for the parameters listed in subdivision 8 a of this subsection shall be determined as follows: all concentration data below the QL listed in subdivision 8 a shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the daily maximum. If all data are below the QL, then the average shall be reported as "<QL." ~~If reporting for quantity is required on the DMR and the calculated concentration is <QL, then report "<QL" for the quantity. Otherwise use the calculated concentration.~~ For quarterly monitoring frequencies, the daily maximum value to be reported on the DMR shall be the maximum of the daily values for each calendar day during the monitoring period.

c. Any single datum required shall be reported as "<QL" if it is less than the QL in subdivision 8 a of this subsection. Otherwise, the numerical value shall be reported.

d. The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used (i.e., five always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

9. Operation and maintenance manual requirement.

a. Within 90 days after the date of coverage under this general permit, the permittee shall develop or update an operation and maintenance (O&M) manual for the process wastewater treatment works. The O&M manual shall be reviewed within 90 days of changes to the treatment system. The O&M manual shall be certified in accordance

with Part II K of this permit. The O&M manual shall be made available for review by department personnel upon request.

b. This manual shall detail the practices and procedures that will be followed to ensure compliance with the requirements of this permit. Within 30 days of a request by the department, the current O&M manual shall be submitted to the [~~board~~department] for review and approval. The permittee shall operate the process wastewater treatment works in accordance with the O&M manual. Noncompliance with the O&M manual shall be deemed a violation of the permit.

c. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

(1) Techniques to be employed in the collection, preservation, and analysis of effluent samples;

(2) Discussion of best management practices;

(3) Process wastewater treatment system design, operation, routine preventive maintenance of units within the process wastewater treatment system, critical spare parts inventory, and recordkeeping;

(4) A plan for the management or disposal of waste solids and residues, which includes a requirement to clean settling basins and lagoons (if present at the facility) in order to achieve effective treatment and a requirement that all solids shall be handled, stored, and disposed of so as to prevent a discharge to state waters;

(5) Procedures for measuring and recording the duration and volume of treated process wastewater discharged; and

(6) Location of the operational log for performing the daily inspections of the effluent. The log shall note any solids or sheens and if there is no discharge at time of inspection.

10. Owners of a facility with a daily maximum flow rate greater than or equal to 50,000 gallons per day over three consecutive monitoring periods that have not conducted whole effluent toxicity (WET) testing to demonstrate there is no reasonable potential for toxicity from their discharge shall conduct WET testing as described in subdivisions 10 a through 10 e of this subsection. Owners with changes in treatment technology or chemical usage that change the characteristics of the discharge and with a daily maximum flow rate greater than or equal to 50,000 gallons per day over three consecutive monitoring periods shall conduct WET testing as described in subdivisions 10 a through 10 e of this subsection.

a. The WET testing shall consist of a minimum of four sets (a set includes both vertebrate and invertebrate tests) of acute or chronic tests that reflect the current characteristics of the process wastewater treatment plant effluent using the following tests and organisms:

For an intermittent or batch discharger	48 hour static acute toxicity tests
Freshwater organisms	Pimephales promelas or Oncorhynchus mykiss (for cold water) (vertebrates) Ceriodaphnia dubia (invertebrate)
Saltwater organisms	Cyprinodon variegatus (vertebrate) Americamysis bahia (invertebrate)
For continuous discharger	

Freshwater	7-Day Chronic Static Renewal Larval Survival and Growth Test with Pimephales promelas (vertebrate)
	3-Brood Chronic Static Renewal Survival and Reproduction Test with Ceriodaphnia dubia (invertebrate)
Saltwater	7-Day Chronic Static Renewal Larval Survival and Growth Test with Cyprinodon variegatus (vertebrate)
	7-Day Chronic Static Renewal Survival, Growth and Fecundity Test with Americamysis bahia (invertebrate)

Freshwater organisms are used where the salinity of the receiving water is less than 1.0‰ (parts per thousand). Where the salinity of the receiving water is greater than or equal to 1.0‰ but less than 5.0‰ either freshwater or saltwater organisms may be used. Saltwater organisms are used where the salinity is greater than or equal to 5.0‰. There shall be a minimum of 30 days between sets of tests, and test procedures shall follow 40 CFR Part 136, which references the EPA guidance manuals for WET testing.

b. This testing shall be completed, at a minimum, during the first year of coverage under the general permit or within one year of commencing discharge.

c. The department will evaluate all representative data statistically to see if there is reasonable potential for toxicity in the facility discharge. If such reasonable potential exists and cannot be eliminated, the owner will be notified that the owner must apply for an individual VPDES permit at next reissuance and a WET limit will be included in that individual permit. If the potential cause of the toxicity is eliminated during the five-year term of this general permit, the owner may conduct additional WET testing to demonstrate that there is no longer reasonable potential for toxicity and an individual permit will not be required at the next reissuance.

d. If the department determines that no reasonable potential for toxicity exists in the facility discharge, no further WET testing is required unless changes in treatment technology or chemical usage are made at the plant that change the characteristics of the discharge. If there have been changes to the effluent characteristics, then four sets of WET testing, either acute or chronic tests as applicable to the current characteristics of the process wastewater treatment plant effluent, must be performed to recharacterize the discharge.

e. Any WET testing data will be submitted with the next required discharge monitoring report.

11. The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards.

12. Notice of termination.

a. The owner may terminate coverage under this general permit by filing a complete notice of termination with the department. 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 process wastewater from the potable water treatment plant;

(2) A new owner has assumed responsibility for the facility. A notice of termination does not have to be submitted if a VPDES Change of Ownership Agreement form has been submitted;

(3) All discharges associated with this facility have been covered by an individual VPDES permit or a VPDES general permit; or

(4) Termination of coverage is being requested for another reason, provided the [~~board~~department] agrees that coverage under this general permit is no longer needed.

b. The notice of termination shall contain the following information:

(1) Owner's name, mailing address, telephone number, and email address (if available);

(2) Facility name and location;

(3) VPDES general permit registration number for the facility; and

(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 from the facility;

(c) A statement indicating that all discharges have been covered by an individual VPDES permit; or

(d) A statement indicating that termination of coverage is being requested for another reason and a description of the reason.

c. The following certification: "I certify under penalty of law that all process wastewater discharges from the identified facility that are authorized by this VPDES general permit have been eliminated, or covered under a VPDES individual or a VPDES general permit, or that I am no longer the owner of the facility, 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 process wastewater in accordance with the general permit, and that discharging pollutants 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."

d. The notice of termination shall be submitted to the department and signed in accordance with Part II K.

13. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other federal, state, or local statute, ordinance, or regulation.

Part II
CONDITIONS APPLICABLE TO ALL VPDES PERMITS.

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.

2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this permit.

3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45, Certification for Noncommercial Environmental Laboratories, or 1VAC30-46, Accreditation for Commercial Environmental Laboratories.

B. Records.

1. Records of monitoring information shall include:

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

b. The individuals who performed the sampling or measurements;

c. The dates and times analyses were performed;

d. The individuals who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the registration statement for this permit, for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the [~~board.~~department.]

C. Reporting monitoring results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.

2. Monitoring results shall be reported on a DMR or on forms provided, approved or specified by the department. 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.

3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this permit, the results of this monitoring shall be included

in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.

4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information that the [~~board~~department] may request to determine whether cause exists for ~~modifying, revoking and reissuing, or~~ terminating this permit or to determine compliance with this permit. The [~~board~~department] may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from the permittee's discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the department upon request, copies of records required to be kept by this permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized discharges. Except in compliance with this permit, or another permit issued by the [~~board,~~department] it shall be unlawful for any person to:

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

2. Otherwise alter the physical, chemical, or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, or for recreation, or for other uses.

G. Reports of unauthorized discharges. Any permittee that discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part II F, or that discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part II F, shall notify the department of the discharge immediately (see Part II I 3) upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;

2. The cause of the discharge;

3. The date on which the discharge occurred;

4. The length of time that the discharge continued;

5. The volume of the discharge;

6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

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 (see Part II I 3), in no case later than 24 hours, the department ~~by telephone~~ after the discovery of the discharge. This

notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part II I 1 b. Unusual and extraordinary discharges include any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;

2. Breakdown of processing or accessory equipment;

3. Failure or taking out of service some or all of the treatment works; and

4. Flooding or other acts of nature.

I. Reports of noncompliance.

1. The permittee shall report any noncompliance that may adversely affect state waters or may endanger public health.

a. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information that shall be reported within 24 hours under this subsection:

(1) Any unanticipated bypass; and

(2) Any upset that causes a discharge to surface waters.

b. A written report shall be submitted within five days and shall contain:

(1) A description of the noncompliance and its cause;

(2) The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(3) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The [~~board~~department] may waive the written report on a case-by-case basis for reports of noncompliance under Part II I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

2. The permittee shall report all instances of noncompliance not reported under Parts II I 1, in writing, at the time the next monitoring reports are submitted. The reports shall contain the information listed in Part II I 1 b.

~~NOTE:~~ 3. The immediate (within 24 hours) reports required in Parts II G, H and I ~~may~~ shall be made to the department's regional office. Reports may be made by telephone, FAX, or online at ~~http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx~~ https://www.deq.virginia.gov/get-involved/pollution-response (online reporting preferred). For reports outside normal working hours, ~~a message may be left and this shall fulfill the immediate reporting requirement~~ the online portal shall be used. For emergencies, call the Virginia Department of Emergency ~~Services maintains a 24-hour telephone service~~ Management's Emergency Operations Center (24-hours) at 1-800-468-8892.

~~3.~~ 4. Where the permittee becomes aware that it failed to submit any relevant facts in a permit registration statement, or submitted incorrect information in a permit registration statement or in any report to the department, it shall promptly submit such facts or information.

J. Notice of planned changes.

1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(1) After promulgation of standards of performance under § 306 of the Clean Water Act that are applicable to such source; or

(2) After proposal of standards of performance in accordance with § 306 of the Clean Water Act that are applicable to such source, but only if the standards are promulgated in accordance with § 306 within 120 days of their proposal;

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations nor to notification requirements under Part I B 6; or

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit registration process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

K. Signatory requirements.

1. Registration statement. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit registration requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes (i) the chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports and other information. All reports required by permits, and other information requested by the [~~board~~department] shall be signed by a person described in Part II K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part II K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent

responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and

c. The written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part II K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part II K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part II K 1 or 2 shall make the following certification:

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

L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action, for permit coverage termination, or for denial of permit coverage renewal.

The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall submit a new registration statement at least 60 days before the expiration date of the existing permit, unless permission for a later date has been granted by the [~~board.~~department.] The [~~board~~department] shall not grant permission for registration statements to be submitted later than the expiration date of the existing permit.

N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in permit conditions on "bypassing" (Part II U), and "upset" (Part II V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

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

Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are

installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges. Solids, sludges, or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part II U 2 and U 3.

2. Notice.

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part II I.

3. Prohibition of bypass.

a. Bypass is prohibited, and the [~~board~~department] may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part II U 2.

b. The [~~board~~department] may approve an anticipated bypass, after considering its adverse effects if the [~~board~~department] determines that it will meet the three conditions listed in Part II U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based permit effluent limitations if the requirements of Part II V 2 are met. A determination made during administrative review of claims that noncompliance was

caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the permittee can identify the causes of the upset;

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required in Part II I; and

d. The permittee complied with any remedial measures required under Part II S.

3. In any enforcement preceding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The permittee shall allow the director, or an authorized representative, including an authorized contractor acting as a representative of the administrator, upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this subsection, the time for inspection shall be deemed reasonable during regular business hours or whenever the facility is discharging. Nothing contained in this general permit shall make an inspection unreasonable during an emergency.

X. Permit actions. Permit coverages may be terminated for cause. The filing of a request by the permittee for a permit termination or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permit coverage.

1. Permit coverage is not transferable to any person except after notice to the department.

2. Coverage under this permit may be automatically transferred to a new permittee if:

~~1.~~ a. The current permittee notifies the department within 30 days of the transfer of the title to the facility or property unless permission for a later date has been granted by the [~~board;~~department;]

~~2.~~ b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

~~3.~~ c. The [~~board~~department] does not notify the existing permittee and the proposed new permittee of its intent to deny the new permittee coverage under the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part II Y 2.

Z. Severability. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

FACT SHEET
REISSUANCE OF A GENERAL VPDES PERMIT
FOR POTABLE WATER TREATMENT PLANTS
October 5, 2022

The Virginia State Water Control Board has under consideration the reissuance of a VPDES general permit for point source discharges from facilities discharging potable water treatment plant wastewater (SIC Code 4941-Water Supply, or other discharges of potable water treatment plant wastewater as approved by the department) to the surface waters of the Commonwealth of Virginia. This permit is a VPDES general permit covered under the National Pollutant Discharge Elimination System. Owners who wish to discharge under a general permit must register for coverage under the reissued general permit.

Permit Number: VAG64

Name of Permittee: Any owner of a qualifying potable water treatment plant with point source discharges to the surface waters of the Commonwealth of Virginia.

Facility Location: Commonwealth of Virginia

Receiving Waters: Surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in Board regulations 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 VPDES permit regulation subject to certain conditions. The Board has determined that this category of discharges is appropriately controlled under a general permit regulation. The category of discharges to be included involves facilities with the same or similar types of operations and the facilities discharge the same or similar types of wastes. The draft general permit requires that all covered facilities meet standardized effluent limitations and monitoring requirements.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Elleanore Daub at:

Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218
(804) 659-2655
elleanore.daub@deq.virginia.gov

Activities Covered By This General Permit:

This general permit will cover point source discharges of potable water treatment plant wastewater (SIC Code 4941 – Water Supply, or other discharges of potable water treatment plant wastewater as approved by the department) to surface waters of the Commonwealth of Virginia. The types of water treatment plants to be covered include treatment processes such as pretreatment (coagulation/flocculation/sedimentation); conventional filtration; softening with lime/soda ash, ion exchange, or membrane; and membrane filtration and desalting. Wastewater may be generated from clarifier underflow, sludge blowdown and particulate filter backwash from plain purification and lime-soda softening process, iron filter backwash wastewater from iron and manganese removal processes, reverse osmosis and microfiltration processes.

Ground water is most frequently treated to remove dissolved iron and manganese and typically includes oxidation (i.e., ozonation, chlorination, or addition of potassium permanganate) to precipitate the iron and manganese followed by filtration to remove the iron and manganese oxides.

Surface water is most frequently treated by filtration to remove suspended solids and may incorporate presedimentation and sedimentation basins before filtration. Precipitation, coagulation, and flocculation

are frequently used to increase the effectiveness of sedimentation and filtration. Aluminum sulfate (alum) is the most common additive and is used for coagulation. Polymers are another common additive that may be used to enhance coagulation, flocculation, or filtration. Chlorination may be used before filtration as an oxidizing agent for precipitation and to remove taste and odor. Chlorine is often added after filtration for disinfection purposes, producing finished water for distribution to customers.

These wastewater treatment systems produce an acceptable quality effluent and operate well when maintained properly.

Authorization to Discharge

This general permit will have a term of five years. The effective date of this permit is July 1, 2023 and the expiration date of this permit is June 30, 2028.

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 revoked and register for coverage under this general permit. An alternative to this is to wait until the individual permit expires and then ask for coverage at a later date. There are reasons why authorization to discharge cannot be granted. These are described below and should be considered by owners before submitting a registration statement.

A facility is ineligible for coverage under this general permit if DEQ becomes aware of any data indicating the potential for adverse water quality impacts.

Antibacksliding will be considered prior to granting coverage under this general permit. Generally, this means that any effluent limitations or requirements in your individual permit that are more restrictive than those in the general permit cannot be relaxed or removed. If granting coverage under the general permit would result in possible backsliding of effluent limitations or permit requirements, then coverage will not be allowed and you must retain your individual permit.

Antidegradation will be considered prior to granting coverage under this general permit. This means that a determination will be made in accordance with the State Water Control Board's Antidegradation Policy contained in the Virginia Water Quality Standards, 9VAC25-260-30. Generally, the standards require that high quality waters must be maintained and new or increased discharges to exceptional waters (specifically listed in 9VAC25-260-30) are not allowed.

The discharge must also be consistent with the assumptions and requirements of an approved total maximum daily load (TMDL), if applicable. As of this date, most potable water treatment plants are considered insignificant loads in TMDLs, or the limits set forth in the general permit meet the requirements of the TMDL.

Facilities that are subject to the requirements of 9 VAC 25-820-70, Part I.G.1 (*General VPDES Watershed Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia - Requirement to Register*), will usually also have an individual permit to address tracking of waste load offsets or technology-based annual concentration limits. These facilities are excluded from coverage under this general permit, since the discharge of potable water treatment plant wastewater will be included as part of the individual permit.

Any discharge that has the reasonable potential to cause toxicity instream will not be granted coverage under the general permit. Whole Effluent Toxicity (WET) testing data (from current or previous permit terms) must be submitted with the registration statement if it is available, and must be representative of the current facility discharge. If WET testing is not available, it must be conducted as part of a special condition during the permit term if WET testing has never been conducted or is no longer representative of the discharge. See special conditions below.

Registration

All facilities that the Department believes are eligible for coverage under this general permit will be authorized to discharge under the terms and conditions of the permit after a complete registration statement is submitted, the applicable permit fee is paid and the Department sends a copy of the general permit to the applicant. If this general permit is inappropriate, the applicant will be so notified and the requirement that an individual permit or alternate general permit is needed will remain in effect.

The registration statement contains instructions for filling out the form and the type of data needed.

Owners of new potable water treatment plants must submit the registration statement at least 60 days prior to commencing discharge. Owners of existing facilities covered under the previous general permit must submit a registration statement by May 1, 2023 to reregister for coverage under this permit. Complete registration statements submitted after May 1, 2023 will grant the permittee administrative authorization to discharge under the 2018 permit until such time that DEQ is able to approve or disapprove coverage. Registrations will be accepted after the expiration date of the 2018 permit (June 30, 2023); however, authorization to discharge will not be retroactive. Existing owners covered by individual VPDES permits must submit a complete registration statement 240 days prior to the expiration of the individual VPDES permit. The 240 day deadline allows DEQ time to review the registration and respond to the owner in time for the owner to submit an individual permit application if their general permit registration is not accepted. Registration statements may be submitted to the DEQ regional office by postal or email. 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.

General Permit

There are two permit limits pages. The first limits page covers 'conventional' (anything that is not a reverse osmosis or nanofiltration plant) water treatment plant discharges. The second limits page covers reverse osmosis and nanofiltration plant discharges that may or may not have conventional type treatment included in the drinking water treatment process.

Proposed Limitations and Monitoring Requirements:

A. Effluent limitations for potable water treatment plant process wastewater that are not reverse osmosis or nanofiltration plants are as follows:

Parameter	Limitation	Monitoring [1]
Flow	Monitoring (NL)	Estimate[2]
pH[3]	9.0 max., 6.0 min.	Grab
Total Suspended Solids	30 mg/l avg., 60 mg/l max.	Composite[4]
Total Residual Chlorine[5]	0.011 mg/L avg. and max.	Grab

NL is defined as no limitation, monitoring and reporting are required.

[1] Monitoring frequency shall be once per quarter. Reports of quarterly monitoring shall be submitted to the DEQ regional office no later than the 10th day of April, July, October, and January.

[2] Reported estimated flow is may be based on the technical evaluation of the sources contributing to the discharge.

[3] Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in waters receiving the discharge, those standards shall be the minimum and maximum effluent limitations.

[4] Composite - For continuous discharges, five grab samples collected at hourly intervals. For batch discharges, five grab samples taken at evenly placed intervals for the duration of the discharge, or

until a minimum of five grab samples have been collected. For batch discharges, the first grab shall occur within 15 minutes of commencement of the discharge. Composite sample procedures for batch discharges unable to meet the above requirements may be approved by DEQ on a case by case basis.

(5) Total residual chlorine limit shall only be applicable if chlorine is present in the process wastewater.

B. Effluent limitations for reverse osmosis and nanofiltration potable water treatment plant process wastewater are as follows:

Parameter	Limitation	Monitoring
Flow	Monitoring (NL)	Estimate(1)
pH(2)	9.0 max., 6.0 min.	Grab
Total Dissolved Solids	NL mg/l max	Composite(3)
Total Suspended Solids(4)	30 mg/l avg., 60 mg/l max.	Composite(3)
Dissolved Oxygen(5)	4.0 mg/l min.	Grab
Total Residual Chlorine(6)	0.011 mg/L avg. and max.	Grab

NL is defined as no limitation, monitoring and reporting are required.

Monitoring frequency shall be once per month.

(1) Reported estimated flow may be based on the technical evaluation of the sources contributing to the discharge.

(2) Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations (minimum only for dissolved oxygen).

(3) Composite - For continuous discharges, five grab samples collected at hourly intervals. For batch discharges, five grab samples taken at evenly placed intervals until the discharge ceases, or until a minimum of five grab samples have been collected. For batch discharges, the first grab shall occur within 15 minutes of commencement of the discharge.

(4) Applicable when conventional filtration treatment discharge is part of drinking water treatment and present in the process wastewater.

(5) Where the Water Quality Standards (9VAC25-260) establish alternate standards for dissolved oxygen in waters receiving the discharge, those standards shall be the minimum effluent limitations.

(6) Total residual chlorine limit shall only be applicable if chlorine is present in the process wastewater.

Basis for Proposed Effluent Limitations and Monitoring Requirements

In developing the proposed effluent limitations and special conditions the following information was reviewed. DEQ's 2014 permit manual currently contains standard effluent limits and special permit conditions to be used for water treatment plant individual permits, and several other states issue general permits for discharges from potable water treatment plant wastewater facilities. As no federal effluent limitation guidelines exist for discharges from water treatments plants, the monitoring requirements and limitations in this permit are based on best professional judgment and the water quality standards in 9VAC25-260.

Depending on the type of discharge the parameters to be limited or monitored in this general VPDES permit for potable water treatment plant discharges are pH, total residual chlorine, total suspended solids, dissolved oxygen and total dissolved solids. The pH limitation is based upon Virginia's stream water quality standards (9VAC25-260-50 and 9VAC25-260-380). The total suspended solids, and total dissolved solids are expected pollutants in conventional filtration treatment and reverse osmosis treatment, respectively. These parameters are based on best professional judgment (9VAC25-31-210) and are established at levels which, based on the Department's experience with individual VPDES permits, are achievable with conventional treatment technology and which will prevent the build-up of

solids on the bottom of receiving waters. The dissolved oxygen and total residual chlorine parameter are based on water quality standards for the type of treatment employed by these systems. Complying with these limitations is an indication that the treatment system is being operated and maintained properly and is producing an acceptable quality effluent.

The use of chlorine for drinking water disinfection may not necessitate a chlorine limit in the process wastewater. It is dependent on where in the plant the chlorine is added and whether it is present in the backwash water or other process wastewater. The total suspended solids limit only applies at the reverse osmosis and nanofiltration plants when some type of conventional filtration treatment precedes the reverse osmosis or nanofiltration treatment. Total suspended solids are a typical pollutant in conventional treatment discharges.

Water treatment plants applying for coverage under this permit may use either ground water, surface water or a combination as their source water, and processes can vary depending on the treatment the source water requires.

Proposed Special Conditions and Rationale

1. Inspection of the effluent, and maintenance of the process wastewater treatment facility shall be performed daily. Documentation of the inspection and maintenance shall be recorded in an Operational Log. This operational log shall be made available for review by the Department personnel upon request and its location identified in the O&M Manual.
   Rationale: 9VAC25-31-190 E, and 40 CFR 122.41(e) require proper operation and maintenance of the permitted facility.
2. No domestic sewage discharges are permitted under this general permit.

   Rationale: The effluent limitations do not address pollutants typical of treated sewage, therefore no sewage discharges to surface or ground waters are permitted under the general permit.
3. No chemicals used for water and process wastewater treatment, other than those listed on the owner's accepted registration statement, are allowed. Prior approval shall be obtained from the department before any changes are made to the chemical(s), in order to assure protection of water quality and beneficial uses of the waters receiving the discharge. The owner shall indicate whether the chemical is likely to enter state waters through the process wastewater discharge.

   Rationale: 9VAC25-31-50 A prohibits the discharge of any wastes into State waters unless authorized by this permit. Code of Virginia §62.1-44.16 and §62.1-44.17 authorizes the Board to regulate the discharge of industrial waste or other waste.
4. There shall be no discharge of floating solids or visible foam in other than trace amounts.

   Rationale: This is a standard requirement for all permits per the VPDES Permit Manual (2014) and conforms to the general water quality criteria at 9VAC25-260-20. This condition serves as a measure of protection that the treatment works are operating correctly.
5. Owners of facilities that are a source of the specified pollutant of concern to waters where an approved TMDL has been established shall implement measures and controls that are consistent with the assumptions and requirements of the TMDL.

   Rationale: Section 303(d) of the Clean Water Act requires that TMDLs be developed for streams listed as impaired, and 9VAC25-31-220 D. EPA does not want DEQ to authorize general permits that are not in conformance with any applicable TMDL. This requirement is also in section 50 'Authorization to Discharge.' Staff thought it important to repeat this as a special condition in the permit itself. Generally, TMDL wasteload allocations (WLAs) are calculated based on existing

permit limits and flows (either calculated for the industry or actual flows). Situations may exist where the permittee may have to show they meet the assumptions made in TMDL development.

6. The permittee shall notify the Department as soon as they know or have reason to believe:

   a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

      (1) 100 micrograms per liter µg/l;

      (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony;

      (3) Five times the maximum concentration value reported for that pollutant in the permit application; or

      (4) The level established by the department.

   b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following notification levels:

      (1) Five hundred micrograms per liter;

      (2) One milligram per liter for antimony;

      (3) Ten times the maximum concentration value reported for that pollutant in the permit application; or

      (4) The level established by the department.

   Required by VPDES Permit Regulation, 9VAC25-31-200 A, for all manufacturing, commercial, mining and silvicultural dischargers.

7. If a department approved groundwater monitoring plan was submitted with the registration statement, the permittee shall continue to sample and report in accordance with the plan. The approved plan shall be an enforceable part of this permit. The department or the owner, with department approval, may evaluate the groundwater monitoring data and demonstrate that revisions to, or the cessation of the groundwater monitoring are appropriate. If the department determines that monitoring indicates that groundwater is contaminated, the permittee shall submit a corrective action plan within 60 days of being notified by the regional office. The plan shall set forth the steps to ensure the contamination source is eliminated or that the contaminant plume is contained on the permittee's property. In addition, based on the extent of contamination, a risk analysis may be required. Once approved, this plan or analysis shall become an enforceable part of this permit.

   Rationale: The purpose of the ground water monitoring plan is to determine if the system integrity is being maintained and to indicate if activities at the site are resulting in violations of the Board's Ground Water Standards (9VAC25-280).

8. Compliance reporting under Part I A

   a. The quantification levels (QL) shall be as follows:

Effluent Characteristic	Quantification Level
Chlorine	0.10 mg/l
TSS	1.0 mg/l

b. Reporting

Monthly Average -- Compliance with the monthly average limitations and/or reporting requirements for the parameters listed in a. above shall be determined as follows: All concentration data below the QL listed above shall be treated as zero. All concentration data equal to or above the QL listed in a. above shall be treated as it is reported. An arithmetic average shall be calculated using all reported data for the month, including the defined zeros. This arithmetic average shall be reported on the Discharge Monitoring Report (DMR) as "calculated". If all data are below the QL, then the average shall be reported as "<QL". For quarterly monitoring frequencies, the monthly average value to be reported on the DMR shall be the maximum of the arithmetic monthly averages calculated for each calendar month during the monitoring period.

Daily Maximum -- Compliance with the daily maximum limitations and/or reporting requirements for the parameters listed in a., above shall be determined as follows: All concentration data below the QL listed in a. above shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, collected within each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the Daily Maximum. If all data are below the QL, then the average shall be reported as "<QL. For quarterly monitoring frequencies, the daily maximum value to be reported on the DMR shall be the maximum of the daily values for each calendar day during the monitoring period.

c. Any single datum required shall be reported as "<QL" if it is less than the QL in a. above. Otherwise the numerical value shall be reported.

d. The permittee shall report at least the same number of significant digits as the permit limit for a given parameter. Regardless of the rounding convention used (i.e., 5 always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently, and shall ensure that consulting laboratories employed by the permittee use the same convention.

Rationale: Authorized by VPDES Permit Regulation, 9VAC25-31-190 J 4 and 220 I. This condition is necessary when toxic pollutants are monitored by the permittee and a maximum level of quantification and /or a specific analytical method is required in order to assess compliance with a permit limit or to compare effluent quality with a numeric criterion. The condition also establishes protocols for calculation of reported values.

9. Operation and Maintenance Manual Requirement.

a. Within 90 days after the date of coverage under this general permit, the permittee shall develop or update an O&M manual for the process wastewater treatment works. The manual shall also be reviewed within 90 days of changes to the treatment system. The manual shall be certified in accordance with Part II K of this permit. The manual shall be made available for review by department personnel upon request.

b. This manual shall detail the practices and procedures which will be followed to ensure compliance with the requirements of this permit. Within 30 days of a request by DEQ, the current O&M Manual shall be submitted to the DEQ Regional Office for review and department approval. The permittee shall operate the process wastewater treatment works in accordance with the approved O&M Manual. Noncompliance with the O&M Manual shall be deemed a violation of the permit.

c. This manual shall include, but not necessarily be limited to, the following items, as appropriate:

(1) Techniques to be employed in the collection, preservation, and analysis of effluent samples;

(2) Discussion of Best Management Practices;

(3) Process wastewater treatment system design, operation, routine preventive maintenance of process wastewater units within the treatment system, critical spare parts inventory and recordkeeping;

(4) A plan for the management and/or disposal of waste solids and residues which includes a requirement to clean settling basins and lagoons (if present at the facility) in order to achieve effective treatment, and a requirement that all solids shall be handled, stored and disposed of so as to prevent a discharge to state waters; and

(5) Procedures for measuring and recording the duration and volume of treated wastewater discharged.

(6) Location of the operational log for performing the daily inspections of the effluent. The log shall note any solids or sheens and if there is no discharge at time of inspection.

Rationale: Required by Code of Virginia § 62.1-44.16; VPDES Permit Regulation, 9VAC25-31-190 E, and 40 CFR 122.41(e). These require proper operation and maintenance of the permitted facility. Compliance with an approval O&M manual ensures this.

10. Owners of a facility with a daily maximum flow rate greater than or equal to 50,000 gallons per day (GPD) over three consecutive monitoring periods that have not conducted whole effluent toxicity (WET) testing to demonstrate there is no reasonable potential for toxicity from their discharge shall conduct WET testing as described below. Daily maximum flow will be determined from the maximum flow submitted on the DMRs over the last permit coverage term. Owners with changes in treatment technology or chemical usage that change the characteristics of the discharge and with a daily maximum flow rate greater than or equal to 50,000 GPD over three consecutive monitoring periods shall conduct WET testing as described below. An example of a significant change is changing polymers in the flocculation process, adding chlorine, and upgrading the plant. An insignificant change would be switching fluoride suppliers. Any questions about significant changes will be dealt with at the time of registration. This is also when the owner will be told whether or not WET testing is required during the next permit term.

    a. The WET testing shall consist of a minimum of four sets (a set included both vertebrate and invertebrate tests) of acute or chronic tests that reflect the current characteristics of the process wastewater treatment plant effluent using the following tests and organisms:

For intermittent or batch dischargers, these are hourly grab samples for the duration of the discharge. The first grab should be within 15 minutes of commencement of the discharge.	48 hour static acute toxicity tests
Freshwater organisms	*Pimephales promelas* or *Oncorhynchus mykiss* (for cold water) (vertebrates) *Ceriodaphnia dubia* (invertebrate)
Saltwater organisms	*Cyprinodon variegatus* (vertebrate) *Americamysis bahia* (invertebrate)

For continuous dischargers, generally, this is a minimum of 5 consecutive day discharges. Samples should be 24 hour flow proportional composites.	
Freshwater	7-Day Chronic Static Renewal Larval Survival and Growth Test with *Pimephales promelas* (vertebrate) 3-Brood Chronic Static Renewal Survival and Reproduction Test with *Ceriodaphnia dubia* (invertebrate)
Saltwater	7-Day Chronic Static Renewal Larval Survival and Growth Test with *Cyprinodon variegatus* (vertebrate) 7-Day Chronic Static Renewal Survival, Growth and Fecundity Test with *Americamysis bahia* (invertebrate)

Freshwater organisms are used where the salinity of the receiving water is less than 1.0‰ (parts per thousand). Where the salinity of the receiving water is greater than or equal to 1.0‰ but less than 5.0‰ either freshwater or saltwater organisms may be used. Saltwater organisms are used where the salinity is greater than or equal to 5.0‰. There shall be a minimum of 30 days between sets of tests, and test procedures shall follow Title 40 of the Code of Federal Regulations (CFR) Part 136, which references the EPA guidance manuals for WET testing.

b. This testing shall be completed, at a minimum, during the first year of coverage under the general permit or within one year of commencing discharge. If discharge commences late in the five year coverage term, the owner should ensure the next registration statement is submitted on time and, with that submittal, consider asking for an administrative continuance of the 2018 permit coverage in order to complete the WET testing.

c. The department will evaluate all representative data statistically to see if there is reasonable potential for toxicity in the facility discharge. If such reasonable potential exists and cannot be eliminated, the owner will be notified that they must apply for an individual VPDES permit at next reissuance and a WET limit will be included in that individual permit. If the potential cause of the toxicity is eliminated during the five year term of this general permit, the owner may conduct additional WET testing to demonstrate that there is no longer reasonable potential for toxicity and an individual permit will not be required at the next reissuance. It will benefit the owner to find and eliminate the cause of toxicity so that you may retain coverage under the general permit.

d. If the department determines that no reasonable potential for toxicity exists in the facility discharge, no further WET testing is required unless changes in treatment technology or chemical usage are made at the plant that change the characteristics of the discharge. If there have been changes to the effluent characteristics, then four sets of WET testing, either acute or chronic tests as applicable to the current characteristics of the process wastewater treatment plant effluent, must be performed to re-characterize the discharge.

e. The completed series of WET testing data must be submitted with the next required discharge monitoring report.

Rationale: Required by VPDES Permit Regulation, 9VAC25-31-210 and 220 I. Requires monitoring in the permit to provide for and assure compliance with all applicable requirements of the State Water Control Law and the Clean Water Act.

11. The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards (9VAC25-260).

    Rationale: This condition is in most general permits and are a general narrative condition requested by EPA.

12. Notice of termination.

    a. The owner may terminate coverage under this general permit by filing a complete notice of termination with the department. 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 process wastewater from the potable water treatment plant;

    (2) A new owner has assumed responsibility for the facility. A notice of termination does not have to be submitted if a VPDES Change of Ownership Agreement form has been submitted;

    (3) All discharges associated with this facility have been covered by an individual VPDES permit or a VPDES general permit; or

    (4) Termination of coverage is being requested for another reason, provided the department agrees that coverage under this general permit is no longer needed.

    b. The notice of termination shall contain the following information:

    (1) Owner's name, mailing address, telephone number, and email address (if available);

    (2) Facility name and location;

    (3) VPDES general permit registration number for the facility; and

    (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 from the facility;

    (c) A statement indicating that all discharges have been covered by an individual VPDES permit; or

    (d) A statement indicating that termination of coverage is being requested for another reason and a description of the reason.

    c. The following certification: "I certify under penalty of law that all process wastewater discharges from the identified facility that are authorized by this VPDES general permit have been eliminated, or covered under a VPDES individual or a VPDES general permit, or that I am no longer the owner of the facility, 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 process wastewater in accordance with the general permit, and that discharging pollutants 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."

    d. The notice of termination shall be submitted to the department and signed in accordance with Part II K.

Rationale: These termination procedures are necessary to provide the requirements for termination to the permittee and so the department has the necessary documentation needed to process the termination and that the activities covered under the general permit have been concluded and coverage is no longer needed.

13. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other federal, state, or local statute, ordinance, or regulation.

    Rationale: This requirement is part of the regulation at section 50 C and is repeated in the permit to remind the permittee of the responsibility.

Part III Conditions Applicable to All Permits

This section contains language from the permit regulation at 9VAC25-31-190 for conditions applicable to all permits. Several items are different from the permit regulation. For example, Part III A recognizes the new Virginia Accredited Laboratory Program requirement. Part III B and L do not contain references to sewage sludge use because sewage sludge use is not part of this general permit. Part III M is 60 days (instead of 180 days) before expiration to match the registration statement requirements in 9VAC25-860-60. Part III X does not reference modification or revoke and reissue because these permit actions do not apply to general permits. Part III Y allows for automatic transfer of coverage to a new permit if the current permittee notifies the department within 30 days of the transfer of the title to the facility or property instead of at least 30 days in advance of the proposed transfer.

Office of Regulatory Management

Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-860
VAC Chapter title(s)	9VAC25-860 - Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Potable Water Treatment Plants
Action title	Reissuance of a General Permit for the discharge of effluent resulting from the treatment of drinking water at potable water treatment plants.
Date this document prepared	October 5, 2022

Cost Benefit Analysis

Table 1a must be completed for all actions. Tables 1b and 1c must be completed for actions (or portions thereof) where the agency is exercising discretion, including those where some of the changes are mandated by state or federal law or regulation. Tables 1b and 1c are not needed if **all** changes are mandated, and the agency is not exercising any discretion. In that case, enter a statement to that effect.

(1) Direct Costs & Benefits: Identify all specific, direct economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (A direct impact is one that affects entities regulated by the agency and which directly results from the regulatory change itself, without any intervening steps or effects. For example, the direct impact of a regulatory fee change is the change in costs for these regulated entities.) When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo. One bullet has been provided, add additional bullets as needed.

(2) Quantitative Factors:
  (a) Enter estimated dollar value of total (overall) direct costs described above.
  (b) Enter estimated dollar value of total (overall) direct benefits described above.
  (c) Enter the present value of the direct costs based on the worksheet.
  (d) Enter the present value of the direct benefits based on the worksheet.

(3) Benefits-Costs Ratio: Calculate d divided by c OR enter it from the worksheet.

(4) Net Benefit: Calculate d minus c OR enter it from the worksheet.

(5) Indirect Costs & Benefits: Identify all specific, indirect economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (An indirect impact is one that results from responses to the regulatory change, but which are not directly required by the regulation. Indirect impacts of a regulatory fee change on regulated entities could include a change in the prices they charge, changes in their operating procedures or employment levels, or decisions to enter or exit the regulated profession or market. Indirect impacts

also include responses by other entities that have close economic ties to the regulated entities, such as suppliers or partners.) If there are no indirect costs or benefits, include a specific statement to that effect.

(6) Information Sources: Describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.

(7) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

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)

(1) Direct Costs & Benefits	**9VAC25-860-60 Registration Statement – Several new items were amended (latitude/longitude, flow, and the schematic drawing) and one item was added (VDH Public Water Supply Identification (PWSID) number).** Direct Costs: No direct economic cost to regulated entities expected beyond the additional administrative time permittees may spend to recalculate the flow values, find the PWSID number (this is online) and add more details to the schematic drawing. Direct Benefits: No direct economic benefit to regulated entities. There are currently 109 active potable water treatment plants covered under this permit. Each one would be subject to the changes described above. **9VAC25-860-70. General Permit – New limits for total suspended solids (TSS) and total residual chlorine (TRC) were added to reverse osmosis facilities if they discharge these parameters. Whether or not they discharge these pollutants depends on how the reverse osmosis plant is designed and if these pollutants are present in the discharge.** Currently there are only three water treatment plants that utilize reverse osmosis that may be subject to these new limitations. Monitoring occurs monthly and costs for TSS can range from $13 - $68 per sample. Therefore costs for TSS could result in $156 to $816 per year. Direct Benefits: No direct economic benefit to regulated entities.

	The most common method of measurement for Total Chlorine Residual (parameter usually measured for wastewater effluents) is the DPD (N,N-diethyl-p-phenylenediamine) colorimetric procedure, and the most often used provider is Hach Company. Below are the minimum required equipment for performing the test for Total Residual Chlorine and quality assurance procedures to verify accuracy of the results: Hach Product #LPV445.97.00110 - DR300 Pocket Colorimeter Kit, single parameter go-anywhere portable photometer. Kit includes: carrying case, batteries, sample cells and instrument manual. Reagent are not included and must be purchased separately. Cost: $589.12 (one time cost) Hach Product #2105669 - DPD Total Chlorine Residual Powder Pillows, 10 mL sample size, 100/pack. Cost: $29.11 (estimate 2/year) Hach Product #2635300 - SpecCheck Secondary Gel Standards Set, DPD Chlorine low range. Cost: $249.76 (estimated 2/year) It is likely these facilities already own this equipment and supplies to measure the disinfection level in the distribution system drinking water.

(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) See above	(c) n/a	
Direct Benefits	(b) None	(d) n/a	
(3) Benefits -Costs Ratio	n/a	(4) Net Benefit	n/a

(5) Indirect Costs & Benefits	None.

(6) Information Sources	TSS costs: https://wrrc.unh.edu/analytical-services-prices $16 https://anlab.ucdavis.edu/Prices $45 https://www.cityoffortmorgan.com/DocumentCenter/View/4382/Wastewater-Treatment-Plant-Laboratory-Analysis-Fees?bidId= TSS = $13 Chlorine = https://www.hach.com/colorimeters/dr300-pocket-colorimeter/family?productCategoryId=54949031368 https://www.hach.com/dpd-total-chlorine-reagent-powder-pillows-10-ml-pk-100/product?id=7640187693&_bt=465292674389&_bk=&_bm=&_bn=g&utm_id=go_cmp-11129852373_adg-104404195610_ad-465292674389_dsa-953865823099_dev-c_ext-_prd-&utm_source=google&gclid=Cj0KCQjwnbmaBhD-ARIsAGTPcfWUVrGXUpc600fcbXlR2_xJZaQlPb-0CJ_RSuBk3nJAtPNodZdEoNEaAltTEALw_wcB https://www.hach.com/speccheck-secondary-gel-standards-set-dpd-chlorine-lr/product?id=7640204329&source=googleshopping&locale=en-US&_bt=271134018450&_bk=&_bm=&_bn=g&_bt=271134018450&_bk=&_bm=&_bn=g&utm_id=go_cmp-1411501171_adg-57078103353_ad-271134018450_pla-300840422534_dev-c_ext-_prd-2635300&utm_source=google&gclid=Cj0KCQjwnbmaBhD-ARIsAGTPcfUQyqPvrsF5oaKlnlJWMU1bRbSGjr4RGHYer1N-WKFQPxImRq3o8b8aAtghEALw_wcB
(7) Optional	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)
This table addresses current requirements and the implications of not making any changes. In other words, describe the costs and benefits of maintaining the current regulatory requirements as is.

(1) Direct Costs & Benefits	Direct Costs: Maintaining the current requirements would have no direct economic cost to regulated entities.

	Direct Benefits: Maintaining the current requirements would have no direct economic benefits to the regulated entities beyond the analytical costs saved that are mentioned in 1a.		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) None	(c) n/a	
Direct Benefits	(b) None	(d) n/a	
(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a
(5) Indirect Costs & Benefits	No indirect costs or benefits under the status quo.		
(6) Information Sources	n/a		
(7) Optional			

Table 1c: Costs and Benefits under an Alternative Approach

This table addresses an alternative approach to accomplishing the objectives with different requirements. These alternative approaches may include the use of reasonably available alternatives in lieu of regulation, or information disclosure requirements or performance standards instead of regulatory mandates.

(1) Direct Costs & Benefits	**Regulating industrial discharges to state waters through the reissuance of a general permit regulation 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 permit. The permit fee for owners to obtain coverage under this general permit is $600. If this general permit were not available, these owners would be required to obtain an individual VPDES permit, and the initial application fee would be $10,200 (assumes industrial minor, no standard limits). An annual permit maintenance fee of $4,059 would also apply (total of $20,295 per permittee for a 5-year permit term). Additionally, a public notice would need to be published in a local newspaper twice at each reissuance. This is estimated at $900 each 5 years.**

	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.		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) See above	(c) n/a	
Direct Benefits	(b) See above	(d) n/a	
(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a
(5) Indirect Costs & Benefits	n/a		
(6) Information Sources	n/a		
(7) Optional			

Impact on Local Partners

(1) Describe the direct costs and benefits (as defined on page 1) for local partners in terms of real monetary costs and FTEs. Local partners include local or tribal governments, school divisions, or other local or regional authorities, boards, or commissions. If local partners are not affected, include a specific statement to that effect and a brief explanation of the rationale.

(2) Quantitative Factors:
   (a) Enter estimated dollar value of total (overall) direct costs described above.
   (b) Enter estimated dollar value of total (overall) direct benefits described above.

(3) Indirect Costs & Benefits: Describe any indirect benefits and costs (as defined on page 1) for local partners that are associated with all significant changes. If there are no indirect costs or benefits, include a specific statement to that effect.

(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.

(5) Assistance: Identify the amount and source of assistance provided for compliance in both funding and training or other technical implementation assistance.

(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 2: Impact on Local Partners

(1) Direct Costs & Benefits	There are no direct costs and benefits for local partners in terms of real monetary costs and FTEs. The localities that normally hold this general permit coverage are subject to the costs and benefits presented in 1a above. FTEs at the localities would likely be the same whether or not the permit was a general permit or an individual permit. 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) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) n/a
(3) Indirect Costs & Benefits	n/a
(4) Information Sources	n/a
(5) Assistance	n/a
(6) Optional	

Economic Impacts on Families

(1) Describe the direct costs and benefits (as defined on page 1) to a typical family of three (average family size in Virginia according to the U. S. Census) arising from any proposed regulatory changes that would affect the costs of food, energy, housing, transportation, healthcare, and education. If families are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of direct costs.
  (b) Enter estimated dollar value of direct benefits.
(3) Indirect Costs & Benefits: Describe any indirect costs and benefits (as defined on page 1) to a typical family of three that are most likely to result from the proposed changes.
(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
(5) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 3: Impact on Families

(1) Direct Costs & Benefits	There is no potential impact of the proposed regulatory action on the institution of the family and family stability.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) n/a
(3) Indirect Costs & Benefits	n/a
(4) Information Sources	n/a
(5) Optional	

Impacts on Small Businesses

(1) Describe the direct costs and benefits (as defined on page 1) for small businesses. For purposes of this analysis, "small business" means the same as that term is defined in § 2.2-4007.1. If small businesses are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of direct costs.
  (b) Enter estimated dollar value of direct benefits.
(3) Indirect Costs & Benefits: Describe the indirect benefits and costs (as defined on page 1) for small businesses that are most likely to result from the proposed changes.
(4) Alternatives: Add a qualitative discussion of any equally effective alternatives that would make the regulatory burden on small business more equitable compared to other affected business sectors, and how those alternatives were identified.
(5) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 4: Impact on Small Businesses

(1) Direct Costs & Benefits	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) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) n/a
(3) Indirect Costs & Benefits	n/a
(4) Alternatives	n/a
(5) Information Sources	n/a

(6) Optional	

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.

The general permit approach contains 348 requirements on the regulated community, whereas the individual permit contains 2177 requirements on the regulated community. The general permit provides a streamlined approach for the regulated community to utilize that is contains 1829 less requirements on the regulated community.

Table 5: Total Number of Requirements

	Number of Requirements			
Chapter number	**Initial Count**	**Additions**	**Subtractions**	**Net Change**
9VAC25-860	91	3	0	+3

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Andrew R. Wheeler
Secretary of Natural and Historic Resources

Michael S. Rolband, PE, PWD, PWS Emeritus
Director
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October 28, 2022

MEMORANDUM

TO: State Water Control Board Members
FROM: Elleanore Daub, Office of VPDES Permits
SUBJECT: VPDES General Permit Regulation for Concrete Products Facilities (9VAC25-193)

The current VPDES Concrete Products Facilities general permit will expire on December 31, 2023 and the regulation establishing this general permit is being amended to reissue another term. The staff is bringing this proposed regulation amendment before the State Water Control Board (Board) to request authorization to hold a public comment period and a public hearing. The proposed regulation takes into consideration the recommendations of a technical advisory committee (TAC) formed for this regulatory action. A list of the TAC membership is attached.

Draft amendments showing proposed changes to the current regulation, the Agency Town Hall background document and Fact Sheet are also attached. Substantive changes to the existing regulation are:

- Section 10 – Added definition for "corrective action" because these terms are used in the regulation. The definition is taken from the Industrial Stormwater (ISW) general permit 9VAC25-151 and were added to clarify various requirements in the regulation.

- Sections 40 and 70 – Updated the effective dates to reflect the new five-year term (January 1, 2024 – December 31, 2028).

- Section 60 C - Registration Questions – Added that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry, registration statements shall be submitted electronically. Three months' notice shall be given by the department about this requirement.

- Section 70 Part I B 14 – Dust suppression allowances were revised to reflect similar requirements in the construction stormwater general permit (9VAC25-880) to allow for discharge of dust suppression water provided it has been treated.

- Section 70 Part I B 16 - The current total maximum daily load (TMDL) requirement is expanded and clarified to mean these are TMDLs that have been approved prior to the term of the permit and that the department will provide written notification that the facility is subject to a TMDL requirement and that if the TMDL establishes a numerical waste load allocation (WLA) for that facility, the owner shall monitor and implement measures to meet the allocation. Also, at permit reissuance, the permittee shall submit a demonstration that the WLA is met. This change will result in an impact because there will be specific monitoring requirements for any facilities that have a numeric WLA in a TMDL. Currently all TMDLs applicable to these facilities are for TSS (total suspended solids) (in this case specifically sediment) and the facilities already monitor for TSS as part of the water quality limitations. There is a total dissolved solids (TDS) TMDL currently under development that may present additional monitoring requirements for some concrete facilities in the future.

- Section 70 Part II – Stormwater management requirements have been updated and re-ordered to match the order and language in the 2019 ISW general permit. For example, monitoring requirements (visual and benchmark) have been moved to the beginning of Part II Corrective actions, control measure "considerations" and eliminating and minimizing exposure requirements have been added. Also, routine facility inspections have been moved out of the "Stormwater Controls" and into its own subdivision of "Contents of the SWPPP" (Stormwater Pollution Prevention Plan). Other changes are being proposed because of TAC stakeholder suggestions. This includes, deletion of the requirement to report duration of rainfall event on the DMR. Signature and SWPPP review and maintaining and updated SWPPP subsections have been moved to the end of Part II.

- Section 70 Part III C – Conditions Applicable to All Permits - Added under reporting, that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry and 3 months' notice is given, discharge monitoring reports shall be submitted electronically.

A Notice of Intended Regulatory Action (NOIRA) for the amendment was issued on October 11, 2021 for 30 days. Comments received included requests to serve on the Technical Advisory Committee and all requests were honored. One comment was received that presented concerns about concrete washout sites at construction sites. DEQ staff thinks that this concern needs further attention but would be better addressed through the General VPDES Permit for Discharges of Stormwater from Construction Activities (9VAC25-880). This comment and response is presented in the attached agency town hall background document.

The Office of the Attorney General will be sent the proposed regulation for certification of statutory authority. The U.S. Environmental Protection Agency will also need to review and approve the general permit prior to final adoption.

Attachments: TAC Membership, Draft General Permit Regulation, Agency Background Document (Town Hall) and Fact Sheet.

TAC COMMITTEE MEMBERSHIP
VPDES Concrete Products Facilities General Permit Regulation
9VAC25-193

Walter Beck Brian Parker, PE (alternate) Vulcan Construction Materials 9210 Arboretum Parkway, Suite 260 North Chesterfield, VA 23236 Phone: (804) 717-8374 Mobile: (804) 314-6118 beckw@vmcmail.com Phone: (804) 717-8325 Mobile: (804) 338-2010 parkerbr@vmcmail.com	Cliff Bocchicchio Environmental Manager Titan America LLC 5700 Lake Wright Drive, Suite 300 Norfolk, VA 23502 phone: 757-858-6537 (office) phone: 757-287-6672 (cell) cbocchicchio@titanamerica.com
Matt DiBella Managing Partner - Greensite Concrete Washout LLC 44095 Pipeline Plaza Suite 140 Ashburn, VA 20147 mobile - 703-887-8937 matt@greensiteconcretewashout.com	Tom Foley Environmental Manager Vulcan Materials - Mideast Division (571) 437-1279 cell (703) 713-3125 office 13880 Dulles Corner Lane, Suite 450 Herndon, VA 20171 foleyt@vmcmail.com
DEQ Staff on TAC: **Elleanore Daub** (CO, VPDES Permits) **Allan Brockenbrough** (CO, VPDES Permits)	**DEQ Staff Technical Liaisons:** Troy Nipper (CO, Water Compliance) Matt Stafford (CO, Stormwater Management Construction Compliance) Kevin Crider (BRRO, VPDES Permits) Alison Thompson (NRO, VPDES Permits) Amy Dooley (NRO, Compliance) Mark Evans (NRO, Compliance) Brad Ricks (PRO, Compliance) Joy Able (PRO, VPDES Permits) Loan Pham (TRO, VPDES Permits) Kelli Park (VRO, Compliance)

townhall.virginia.gov

Exempt Action: Proposed Regulation
Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-193
VAC Chapter title(s)	Virginia Pollutant discharge Elimination System (*VPDES) General Permit for Concrete Products Facilities
Action title	Update and amend the regulation that expires on December 31, 2023 in order to continue to offer general permit coverage for this industry.
Date this document prepared	October 27, 2022

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 regulation specifies requirements for concrete products facilities to discharge process wastewater and industrial stormwater to protect water quality. The most significant amendments to this regulation are to reissue the permit for the next five year term and updating the stormwater requirements. This regulatory action is proposed to amend and reissue the existing general permit, which expires on December 31, 2023.

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 Virginia Code § 62.1-44.15 (5a) which states, "All certificates issued by the Board under this chapter shall have fixed terms. The term of a Virginia Pollutant Discharge Elimination System permit shall not exceed five years." This general permit expires on December 31, 2022 and must be reissued in order to make coverage available for concrete products facilities that discharge to surface waters after that date. 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.

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.

DEQ: Department of Environmental Quality
DMR: Discharge Monitoring Report
EPA (U.S. EPA): United States Environmental Protection Agency
NPDES: National Pollutant Discharge Elimination System
SCC: State Corporation Commission
SWCB: State Water Control Board
SWPPP: Stormwater Pollution Prevention Plan
TMDL: Total Maximum Daily Load
TDS: Total Dissolved Solids
TSS: Total Suspended Solids
TAC: Technical Advisory Committee
USC: United States Code
VAC: Virginia Administrative Code
VPDES: Virginia Pollutant Discharge Elimination System

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.

The promulgating entity is the State Water Control Board. The basis for this regulation is § 62.1-44.2 et seq. of the Code of Virginia (State Water Control Law). Specifically, § 62.1-44.15(5) authorizes the Board to issue permits for the discharge of treated sewage, industrial wastes or other waste 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, § 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

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.

This proposed regulatory action is needed in order to establish and update permitting requirements for discharges from concrete products facilities in order to protect the health, safety and welfare of citizens. The existing general permit expires on December 31, 2022 and must be reissued to cover existing and new concrete products facilities. The goal is to update the permit and the regulation to be consistent with other VPDES general permits 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.

Substantive provisions include adding new definitions for "corrective action" and "measurable storm event" in section 10, clarifying that consistency with a TMDL is based on an applicable TMDL that is approved prior to the term of the general permit in section 50, and clarifying registration questions and adding electronic submission registration requirements in section 60. In the permit requirements of section 70, Part I, dust suppression allowances have been clarified and TMDL requirements have been updated and clarified. Many of the stormwater management requirements of section 60, Part II have been updated to reflect the requirements of the VPDES General Permit Regulation for Discharges of Stormwater Associated with Industrial Activity (9VAC25-151) including adding a section on corrective actions. In section 70, Part III, these conditions applicable to all permits a requirement has been added to submit electronic discharge monitoring reports when these are made available by the department.

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 advantages to the public 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, agency or regulated community.

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 requirements that exceed applicable federal 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:
None

Localities Particularly Affected:
None

Other Entities Particularly Affected:
None

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 reissuance of the VPDES general permit accomplishes the objectives of applicable law and minimizes the costs to a small business owner and simplifies the application process. 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 and permit costs.

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
Brian Parker, Vulcan Construction materials	Add Walter Beck and Brian Parker (as alternate) to the TAC membership.	The individuals were asked to participate on the TAC.
Cliff Bocchicchio, Titan America, LLC	Add Cliff Bocchicchio to the TAC membership.	The individual was asked to participate on the TAC.
Tom Foley, Vulcan Materials-Mideast Division	Add Tom Foley to the TAC membership.	The individual was asked to participate on the TAC.

Matthew DiBella Greensite Concrete Washout LLC	Add Matt DiBella to the TAC membership. The current regulations regarding the treatment and discharge of concrete wash water at concrete facilities are satisfactory. While regulations exist to monitor concrete washout on construction sites, the enforcement of this code is extremely inconsistent. This continues to be the most significant environmental issue the industry faces. As an example, I refer to the route 66 project in northern Virginia. All washout pits are temporary; Hay bales are lined with plastic but this doesn't deal with issue of the contaminated water, which needs to be removed and treated. The pits are too small for the volume of work and constantly overflowing or the water is pumped out on the side of the road to make more space. SWPP regulations call for "sealed containers", but the temporary pits are constantly leaking contaminated water or being cut open to drain the water, and should never be allowed on state and county projects. Also, when temporary pits are used, the concrete hardens with the plastic liner and all that concrete and plastic ends up in landfills. There's no reason for the concrete industry to be producing this much waste when there's a cost-effective way to recycle and reuse these materials. Too many times I've witnessed and reported these temporary pits being poorly managed and other violations occurring but not once have these infractions been penalized with a stop work order, fines, or even a substantial change in remediation efforts. Evidence of the problem is simply covered up with dirt or washed away by a flush truck and everyone continues to work pollute the water table and stream valleys because there's never any consequences. At least fifty temporary pits have been installed on route 66 adjacent to some of our most valuable stream valleys and unfortunately, we aren't doing our part on site to protect them. There are several companies that offer steel, water tight containers and remove the contaminated water with vacuum trucks so the solids can be reduced or eliminated and the pH can be lowered to an acceptable level. After proper treatment, the water can be	The individual was asked to participate on the TAC. The comments were discussed at the concrete TAC meeting and ultimately, the group concurred that this was a problem that the construction project owner or general contractor's responsibility to manage. The ready-mix producers train their people on this issue and instruct them to call our dispatch office if the contractor is not providing such facilities or if it is not adequate, properly located or safe. DEQ staff thinks that this concern needs further attention but better addressed through the General VPDES Permit for Discharges of Stormwater from Construction Activities (9VAC25-880) and that NOIRA was published March 28, 2022. These concerns are applicable to that permit and should also be discussed in that TAC. DEQ was interested in pursuing the enforcement issues particularly related to the VDOT projects.

Commenter	Comment	Agency response
	safely recirculated into the storm water system. The hardened concrete residue is all taken to recycling facilities where it can be reused instead of taking up space in landfills. This standard is being followed by many of the national residential homebuilders but it should be a construction industry standard for commercial construction and public works projects as well. The biggest objection the industry currently has to using leak proof steel containers for concrete washout is the cost, however, the cost is extremely minimal, about 2%. Companies constantly tell me if they include using a steel container for concrete washout in their budget, they won't get the bid. If it became the industry standard, this concern could be eliminated with little impact on profits. For every $58,000 spent on concrete deliveries, it costs only $700 to keep several tons of concrete out of landfills and over 200 gallons of toxic wash water from contaminating the environment. The industry can clearly afford to take this step. The amount of waste and pollution generated from temporary pits is unacceptable but will continue without enforcement of more stringent on-site regulations.	

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 agency/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, email or fax to Elleanore Daub, P.O. Box 1105, Richmond, Virginia 23218, phone: 804-659-2655 (for questions), elleanore.daub@deq.virginia.gov or Fax: 804-698-4178 **(please insure recipient [Elleanore Daub] is on fax or cover page of fax)**.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
9VAC25-193	NA	The term "board" is generally used throughout the regulation when referencing permit requirements.	Throughout the regulation, the term "board" has been replaced with the term "department" resulting from changes to Chapter 356 of the 2022 Acts of Assembly (Senate Bill 657) which address the authority of the SWCB to issue and enforce permits. All references to the "board" in reference to permit requirements has been changed to "department." No impact.
9VAC25-193-10. Definitions.	NA	No definition for "corrective action."	Added definition for "corrective action." This definition was added to clarify this requirement in the regulation.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-193-15. Applicability of incorporated references based on the dates that they became effective.	NA	Effective date for the Title 40 CFR is July 1, 2018	Effective date for the Title 40 CFR changed to July 1, 2022. No impact.
9VAC25-193-40. Effective date of the permit.	NA	Effective date of permit is January 1, 2019 and expiration is December 31, 2023.	Effective date of permit is changed to January 1, 2024 and expiration to December 31, 2028. Updated to cover a new permit term. If these dates are not changed, no existing or new permittees can obtain coverage under the general permit.
9VAC25-193-50. Authorization to discharge.	NA	Owners are not eligible for coverage if the discharge is not consistent with the assumptions and requirements of an approved TMDL.	Specified that an approved TMDL is one that is approved prior to the term of this general permit. No impact.
9VAC25-193-60 C 2	NA	Requires facility contact if different from owner.	Requires a facility, owner and permit contact. This change is to be consistent with e-reporting electronic registrations. The permittee will need to provide some additional contact information on the registration. The contacts may be the same person in some cases.
9VAC25-193-60 C 11	NA	A schematic drawing of the facility is required.	Clarified that the schematic drawing was for existing facilities and new facilities that had commenced discharge. No impact.
9VAC25-193-60 C 14	NA	Information regarding representative and substantially identical outfalls is required and includes the size of the drainage area in square feet.	Clarified that the size of the drainage area can be in acres or square feet and includes the total pervious and impervious area within the property boundary. Minor impact if the drainage area was calculated differently in previous years then the permittee would have to recalculate the drainage area.
9VAC25-193-60 C 15	NA	An indication of whether a SWPPP has been prepared is required.	Clarified that the date of the plan or the most recent update or review of the plan is required. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-193-60 C 18	NA	An SCC entity identification number is required.	Clarified that the SCC entity number is needed if the facility is required to obtain an entity identification number by law. No impact.
9VAC25-193-60 C 19	NA	A certification is required and includes a statement that duly authorized agents of DEQ may enter the property.	A certification signature is still required but the statement that permission is granted to duly authorized agents of the DEQ to enter the property is deleted. No impact since this required is already in Part III W of the permit.
9VAC25-193-60 E	NA	Registration statements shall be delivered to DEQ by either postal or electronic mail.	Following three months prior notification from the department, registration statements shall be electronically submitted to the department.
9VAC25-193-70	NA	Effective and expiration dates of the permit are January 1, 2024 – December 31, 2028.	Effective and expiration dates of the permit are updated to January 1, 2024 – December 31, 2028. The impact is that existing and new concrete products facilities can continue coverage or get new coverage under this permit instead of having to apply for an individual permit. General permits are less expensive to obtain.
9VAC25-193-70 B 14	NA	Settled wastewater may be used for dust suppression as a best management practice but run-off or ponding cannot occur.	Specified that dust suppression water may be discharged if it is treated. There is no prohibition to ponding and discharge may occur if the dust suppression water is treated. The TAC discussed how potable water was often used for dust suppression (uncontaminated potable water is an allowable nonstormwater discharge), and wondered whether discharge of water from dust suppression into a stormwater basin would constitute a direct discharge and be in violation of this condition. The construction general permit (9VAC25-880-70) allows treated dust suppression water to be discharged. The condition was amended to recognize that allowance. No impact to permittees although DEQ inspectors will have to be made aware that ponding is no longer prohibited and dust suppression water may be discharged if treated.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-193-70 B 16	NA	Discharges to waters with TMDL shall implement measures and controls that are consistent with the assumptions and requirements of the TMDL.	The TMDL requirement is expanded and clarified to mean these are TMDLs that have been approved prior to the term of the permit and that the department will provide written notification that the facility is subject to a TMDL requirement and that if the TMDL establishes a numerical WLA for that facility, the owner shall monitor and implement measures to meet the allocation. Also, at permit reissuance, the permittee shall submit a demonstration that the WLA is met. There will be an impact because now there are specific monitoring requirements for any facilities that have a numeric WLA in a TMDL. Currently all TMDLs applicable to these facilities are for TSS (sediment) and the facilities already monitor for TSS as part of the water quality limitations. There is a TDS TMDL currently under development that may present additional monitoring requirements for some concrete facilities in the future.
9VAC25-193-70 Part II	NA	Stormwater management requirements are in Part II. Contains collection, analysis and rainfall data requirements, representative outfall instructions, quarterly visual, monitoring requirements, hazardous substances requirements, SWPPP deadlines and contents including routine facility inspections, maintenance of BMPs, allowable nonstormwater discharge allowances and monitoring requirements, and SWPPP review and signature requirements.	Stormwater management requirements have been updated and re-ordered to match the order and language in the 2019 ISW general permit. For example, monitoring requirements (visual and benchmark) have been moved to the beginning of Part II Corrective actions, control measure “considerations” and eliminating and minimizing exposure requirements have been added. Also, routine facility inspections have been moved out of the “Stormwater Controls” and into its own subdivision of “Contents of the SWPPP.” Other changes are being proposed because of TAC stakeholder suggestions. This includes, deletion of the requirement to report duration of rainfall event on the DMR. Signature and SWPPP review and maintaining and updated SWPPP subsections have been moved to the end of Part II.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-193-70 Part III C	NA	No electronic reporting DMR requirement.	Added that once the 9VAC25-31-1020 (Electronic Reporting) date is established for this industry discharge monitoring reports shall be submitted electronically. Three months' notice shall be given by the department about this requirement. Some impact because once electronic reporting dates are established and technology is developed at the department, the permittees will be required submit discharge monitoring reports electronically. This may be difficult if the registrant has no available internet access (even via a public library) or computer/internet skills. Waivers are available under very limited circumstances.
9VAC25-193-70 Part III I 3		Contains immediate notification requirements for noncompliance which may adversely affect state waters or may endanger public health.	This subsection amended to reflect more recent reporting requirements after discussions with DEQs Pollution Response Program (PREP) staff who requested all after hours reporting be done online via the PREP portal. This portal automatically notifies regional offices and logs the report in the database. This may have an impact on concrete industries that have no immediate internet access who will have to find internet access within 24-hours to report a noncompliance event if it occurs outside of normal working hours.
9VAC25-193-70 Part III L		Requires the permittee to comply with standards for sewage sludge use and disposal under § 405(d) of the Clean Water Act.	Removed references to sewage sludge requirements since these industrial permittees do not discharge sewage or create sewage sludge under this permit. No impact.

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 potential impact of the proposed regulatory action on the institution of the family and family stability.

Project 6952 - Proposed

State Water Control Board
CH 193 Amend and Reissue Existing Regulation 2023

Chapter 193
Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Concrete Products Facilities

9VAC25-193-10. Definitions.

The words and terms used in this chapter shall have the meanings defined in § 62.1-44.2 et seq. of the Code of Virginia (State Water Control Law) and 9VAC25-31 (VPDES Permit Regulation), unless the context clearly indicates otherwise, except that for the purposes of this chapter:

“Board” means the State Water Control Board. When used outside the context of the promulgation of regulations, including regulations to establish general permits, “board” means the Department of Environmental Quality.

"Best management practices" or "BMPs" means schedules of activities, practices and prohibitions of practices, structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to surface waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

"Corrective action" means any action to (i) repair, modify, or replace any stormwater control used at the facility; (ii) clean up and properly dispose of spills, releases, or other deposits at the facility; or (iii) return to compliance with permit requirements.

"Department" or "DEQ" means the Virginia Department of Environmental Quality.

"Industrial activity" means facilities or those portions of a facility where the primary purpose is classified as:

1. North American Industry Classification System (NAICS) Code 327331 - Concrete Block and Brick Manufacturing, (Executive Office of the President, Office of Management and Budget, United States, 2017) and Standard Industrial Classification (SIC) Code 3271 - Concrete Block and Brick (Office of Management and Budget (OMB) SIC Manual, 1987);

2. NAICS Code 327332 Concrete Pipe Manufacturing, NAICS Code 327390 Other Concrete Product Manufacturing, NAICS Code 327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing (dry mix concrete manufacturing only) and SIC Code 3272 - Concrete Products, Except Block and Brick; or

3. NAICS Code 327320 Ready-Mix Concrete Manufacturing and SIC Code 3273 - Ready-Mixed Concrete, including both permanent and portable plants.

These facilities are collectively defined as "Concrete Products Facilities."

"Minimize" means reduce or eliminate to the extent achievable using control measures, including best management practices, that are technologically available and economically practicable and achievable in light of best industry practice.

"No discharge system" means process, commingled, or stormwater systems designed to operate so that there is no discharge of wastewater or pollutants, except in storm events greater than a 25-year, 24-hour storm event.

"Runoff coefficient" means the fraction of total rainfall that will appear at the conveyance as runoff.

"Significant spills" includes releases of oil or hazardous substances in excess of reportable quantities under § 311 of the Clean Water Act (see 40 CFR 110.10 and 40 CFR 117.21) or § 102

of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) (42 USC § 9601 et seq.) (see 40 CFR 302.4).

"Total maximum daily load" or "TMDL" means a calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLAs) for point source discharges and load allocations (LAs) for nonpoint sources or natural background, or both, and must include a margin of safety (MOS) and account for seasonal variations.

"25-year, 24-hour storm event" means the maximum 24-hour precipitation event with a probable recurrence interval of once in 25 years as established by the National Weather Service or appropriate regional or state rainfall probability information.

"Vehicle or equipment degreasing" means the washing or steam cleaning of engines or other drive components of a vehicle or piece of equipment in which the purpose is to degrease and clean petroleum products from the equipment for maintenance purposes. Removing sediment and concrete residue is not considered vehicle or equipment degreasing.

"Virginia Environmental Excellence Program" or "VEEP" means a voluntary program established by the department to provide public recognition and regulatory incentives to encourage higher levels of environmental performance for program participants that develop and implement environmental management systems (EMSs). The program is based on the use of EMSs that improve compliance, prevent pollution, and utilize other measures to improve environmental performance.

9VAC25-193-15. Applicability of incorporated references based on the dates that they became effective.

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~~ July 1, 2022.

9VAC25-193-40. Effective date of the permit.

This general VPDES permit will become effective on J~~anuary 1, 2019~~ January 1, 2024, and it will expire on ~~December 31, 2023~~ December 31, 2028. This general permit is effective for any covered owner upon compliance with all the provisions of 9VAC25-193-50.

9VAC25-193-50. Authorization to discharge.

A. Any owner governed by this general permit is hereby authorized to discharge process water, stormwater associated with this industrial activity or commingled discharges of these types to surface waters of the Commonwealth of Virginia provided that:

1. The owner submits a registration statement in accordance with 9VAC25-193-60 and that registration statement is accepted by the ~~board~~ department;

2. The owner submits the required permit fee;

3. The owner complies with the applicable effluent limitations and other requirements of 9VAC25-193-70; and

4. The ~~board~~ department has not notified the owner that the discharge is not eligible for coverage in accordance with subsection B of this section.

B. The ~~board~~ department will notify an owner that the discharge is not eligible for coverage under this general permit in the event of any of the following:

1. The owner is required to obtain an individual permit in accordance with 9VAC25-31-170 B 3 of the VPDES Permit Regulation;

2. The owner is proposing to discharge to state waters specifically named in other board regulations that prohibit such discharges;

3. The discharge would violate the antidegradation policy in the Water Quality Standards at 9VAC25-260-30; or

4. The discharge is not consistent with the assumptions and requirements of an ~~approved~~ applicable TMDL approved prior to the term of this general permit.

C. Compliance with this general permit constitutes compliance, for purposes of enforcement, with §§ 301, 302, 306, 307, 318, 403, and 405(a) through 405(b) of the federal Clean Water Act (33 USC § 1251 et seq.) and the State Water Control Law, with the exceptions stated in 9VAC25-31-60 of the VPDES Permit Regulation. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

D. Continuation of permit coverage.

1. Permit coverage shall expire at the end of its term. However, expiring permit coverages are automatically continued if the owner has submitted a complete registration statement at least 60 days prior to the expiration date of the permit, or a later submittal established by the ~~board~~ department, which cannot extend beyond the expiration date of the permit. The permittee is authorized to continue to discharge until such time as the ~~board~~ department either:

a. Issues coverage to the owner under this general permit; or

b. Notifies the owner that the discharge is not eligible for coverage under this general permit.

2. When the owner that was covered under the expiring or expired general permit has violated or is violating the conditions of that permit, the ~~board~~ department may choose to do any or all of the following:

a. Initiate enforcement action based upon the general permit coverage that has been continued;

b. Issue a notice of intent to deny coverage under the reissued general permit. If the general permit coverage is denied, the owner would then be required to cease the discharges authorized by the continued general permit coverage or be subject to enforcement action for discharging without a permit;

c. Issue an individual permit with appropriate conditions; or

d. Take other actions authorized by the VPDES Permit Regulation (9VAC25-31).

9VAC25-193-60. Registration statement.

A. Deadlines for submitting registration statement. Any owner seeking coverage under this general permit shall submit a complete VPDES general permit registration statement in accordance with this ~~section~~ chapter, which shall serve as a notice of intent for coverage under the general VPDES permit for concrete products facilities.

1. New facilities. Any owner proposing a new discharge shall submit a complete registration statement at least 60 days prior to the date planned for commencement of the discharge or a later submittal established by the ~~board~~ department.

2. Existing facilities.

a. Any owner covered by an individual VPDES permit that is proposing to be covered by this general permit shall submit a complete registration statement at least 240 days prior to the expiration date of the individual VPDES permit or a later submittal established by the department.

b. Any owner that was authorized to discharge under the expiring general VPDES permit for concrete products facilities and ~~who~~ that intends to continue coverage under this general permit shall submit a complete registration statement to the ~~board~~

department at least 60 days prior to the expiration date of the existing permit or a later submittal established by the ~~board~~ department.

B. Late registration statements. Registration statements for existing facilities covered under subdivision A 2 b of this section will be accepted after the expiration date of this permit, but authorization to discharge will not be retroactive.

C. The required registration statement shall contain the following information:

1. Facility name~~, and address, owner name, mailing~~ address, and telephone number~~, and email address~~ (if available);

2. ~~Operator or other~~ Facility, owner and permit contact name, mailing address, telephone number, and email address ~~(if available) if different from owner~~;

3. Facility's Standard Industrial Classification (SIC) Codes;

4. Nature of business at facility;

5. Indicate if the facility is proposed or existing; if the facility has a current VPDES or VPA Permit; and Permit Numbers for any current VPDES or VPA Permits;

6. Description of the wastewater treatment or reuse or recycle systems;

7. Indicate if there are any process wastewater, commingled process wastewater, and stormwater or stormwater treatment units designed to operate as "no discharge";

8. If settling basins are used for treatment and control of process wastewater or commingled process wastewater and stormwater, indicate the original date of construction, and describe the materials lining the process or commingled settling basins;

9. Indicate if there are vehicle or equipment degreasing activities performed on site. If yes, indicate if there is any process wastewater generated from these activities;

10. Description of any measures employed to reclaim, reuse, or dispose of the residual concrete materials;

11. A schematic drawing that shows the sources of water used on the property, the industrial operations contributing to or using water, the conceptual design of the methods of treatment and disposal of wastewater and solids, and the stormwater pollution prevention plan site map (see 9VAC25-193-70 Part ~~II F 6 c)~~ D 2 b (2) for existing covered facilities and for new facilities if operations have commenced (see 9VAC25-193-70 Part II D 1 for due dates);

12. A USGS ~~7.5 minute~~ 7.5-minute topographic map or equivalent ~~computer generated~~ computer-generated map, extending to at least one mile beyond property boundary, which shows the property boundary, the location of each of its existing and proposed intake and discharge points, and the locations of any wells, springs, and other surface water bodies;

13. Discharge outfall information, including outfall numbers, description of wastewater discharged from each outfall, estimated flow (gallons per day), receiving water bodies, duration and frequency of each discharge (hours per day and days per week), and latitude and longitude of outfall location;

14. Indicate which stormwater outfalls ~~will be~~ could operate as substantially identical or representative outfalls (if any). Provide ~~For stormwater outfalls that are to be represented by other outfall discharges, 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;

c. Estimates of the size of the total (pervious and impervious within property boundaries) drainage area (in acres or square feet) for each of the outfalls; and

d. An estimate of the runoff coefficient of the drainage areas (low: under 40%; medium: 40% to 65%; high: above 65%);

15. Indicate if a Stormwater Pollution Prevention Plan has been prepared and the date of the plan or the most recent update or review of the plan;

16. Whether the facility will discharge to a municipal separate storm sewer system (MS4). If "yes," the facility owner shall ~~notify~~ provide evidence that the MS4 owner has been notified of the existence of the discharge ~~at the time of registration under this permit and include that notification with the registration statement~~. The notification shall include the following information: the name of the facility, a contact person and contact information (telephone number and email), the location of the discharge, the nature of the discharge, and the facility's VPDES general permit number (if assigned by DEQ);

17. For portable concrete products operations, submit a closure plan and include the requirements specified by the operation and maintenance manual in 9VAC25-193-70 Part I B 8 a (4) of the permit;

18. ~~For applicants other than a sole proprietor, the~~ State Corporation Commission entity identification number if the facility is required to obtain an entity identification number by law; and

19. The following certification: "~~I hereby grant to duly authorized agents of the Department of Environmental Quality, upon presentation of credentials, permission to enter the property where the treatment works is located for the purpose of determining compliance with or the suitability of coverage under the General Permit.~~ I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

D. The registration statement shall be signed in accordance with the requirements of 9VAC25-31-110 of the VPDES Permit Regulation.

E. Where to submit. The registration statement shall be delivered by either postal or electronic mail to the DEQ regional office serving the area where the facility is located. 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.

9VAC25-193-70. General permit.

Any owner whose registration statement is accepted by the ~~board~~ department will receive coverage under the following general permit and shall comply with the requirements in the general permit and be subject to all requirements of 9VAC25-31-170 of the VPDES Permit Regulation.

General Permit No: VAG11
Effective Date: January 1, ~~2019~~ 2024
Expiration Date: December 31, ~~2023~~ 2028

GENERAL PERMIT FOR CONCRETE PRODUCTS FACILITIES AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended, and pursuant to the State Water Control Law and regulations adopted pursuant thereto, owners of concrete products facilities are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in board regulations that prohibit such discharges.

The authorized discharge shall be in accordance with the information submitted with the registration statement, this cover page, Part I-Effluent Limitations, Monitoring Requirements, ~~and~~ Special Conditions, Part II-Stormwater Management, and Part III-Conditions Applicable to All VPDES Permits, as set forth in this permit.

Part I

A. Effluent limitations and monitoring requirements.

1. Process wastewater.

During the period beginning with the permittee's coverage under this general permit and lasting until the permit's expiration date, the permittee is authorized to discharge process wastewater that may contain input from vehicle wash water, or vehicle or equipment degreasing activities, and may be commingled with stormwater associated with industrial activity, or both. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfalls:

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS			MONITORING REQUIREMENTS	
	Average	Maximum	Minimum	Frequency (3)	Sample Type
Flow (MGD)	NL	NL	NA	1/3 Months	Estimate
Total Suspended Solids (mg/l)	30	60	NA	1/3 Months	Grab
pH (standard units)	NA	9.0(1)	6.0(1)	1/3 Months	Grab
Total Petroleum Hydrocarbons(2) (mg/l)	NA	15	NA	1/3 Months	Grab

NL = No limitation, monitoring required
NA = Not applicable
(1)Where the Water Quality Standards (9VAC25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.
(2)Total Petroleum Hydrocarbons limitation and monitoring are only required where a discharge contains process wastewater generated from the vehicle or equipment degreasing activities. Total Petroleum Hydrocarbons shall be analyzed using EPA SW-846 Method 8015 B (1996), 8015C (2000), 8015C (2007), 8015 D (2003) for diesel range organics or EPA 40 CFR Part 136.

[3]1/3 months means one sample collected per calendar quarter with reports due to the DEQ regional office no later than the 10th day of April, July, October, and January.

2. Stormwater associated with industrial activity from concrete products facilities.

During the period beginning with the permittee's coverage under this general permit and lasting until the permit's expiration date, the permittee is authorized to discharge stormwater associated with industrial activity that does not combine with other process wastewaters prior to discharge. Samples taken in compliance with the monitoring requirements specified below shall be taken at outfalls:

Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTICS	DISCHARGE LIMITATIONS BENCHMARK MONITORING		MONITORING REQUIREMENTS[3], [5]	
	Maximum	Minimum	Frequency[4]	Sample Type
Flow (MG)	NL	NA	1/Year	Estimate[1]
Total Suspended Solids (mg/l)	NL[2]	NA	1/Year	Grab[2]
pH (standard units)	NL[2]	NL[2]	1/Year	Grab[2]

NL = No limitation, monitoring required
NA = Not applicable
[1]Estimate of the total volume of the discharge during the storm event ~~in accordance with the operation and maintenance manual~~.
[2] If the benchmark monitoring for TSS exceeds 100 mg/l maximum or the pH falls outside of the range of 6.0-9.0 standard units, the permittee shall evaluate the overall effectiveness of the stormwater pollution prevention plan (SWPPP) in controlling the discharge of pollutants to receiving waters. Benchmark concentration values are not effluent limitations. Exceedance of a benchmark concentration does not constitute a violation of this permit and does not indicate that violation of a water quality standard has occurred; however, it does signal that modifications to the SWPPP are necessary, unless justification is provided in the routine facility inspection.
[3]Specific storm event data shall be reported with the Discharge Monitoring Report (DMR) in accordance with Part II A.
[4]1/year means one sample taken per calendar year with the annual DMR due to the DEQ regional office no later than the 10th day of January of each year.
[5]Quarterly visual monitoring shall be performed and recorded in accordance with Part II C.

B. Special conditions.

1. There shall be no discharge of floating solids or visible foam in other than trace amounts. There shall be no solids deposition or oil sheen from petroleum products in surface water as a result of the industrial activity in the vicinity of the outfall.

2. Except as expressly authorized by this permit, no product, materials, industrial wastes, or other wastes resulting from the purchase, sale, mining, extraction, transport, preparation, or storage of raw or intermediate materials, final product, byproduct or wastes shall be handled, disposed of, or stored so as to permit a discharge of such product, materials, industrial wastes, or other wastes to surface waters.

3. Vehicles and equipment utilized during the industrial activity on a site must be operated and maintained in such a manner as to minimize the potential or actual point source pollution of surface waters. Fuels, lubricants, coolants, and hydraulic fluids, or any other petroleum products, shall not be disposed of by discharging on the ground or into surface waters. Spent fluids shall be disposed of in a manner so as not to enter the surface or ground waters of the state and in accordance with the applicable state and federal disposal regulations. Any spilled fluids shall be cleaned up and disposed of in a manner so as not to allow their entry into the surface or ground waters of the state.

4. All washdown and washout of trucks, mixers, transport buckets, forms or other equipment shall be conducted within designated washdown and washout areas. All washdown and washout water shall be collected for recycle or collected and treated to meet the limits in Part I A prior to discharge to the receiving stream.

5. Any waste concrete and any dredged solids from the settling basins shall be managed within a designated area, and any wastewaters including stormwater generated from these activities shall be collected for recycle or treated prior to discharge.

6. Wastewater should be reused or recycled whenever feasible.

7. No sewage discharges to surface waters are permitted under this general permit.

8. Operation and maintenance (O&M) manual.

a. Within 180 days after the date of coverage under this general permit, the permittee shall develop or review and update, as appropriate, an O&M manual for the permitted facility. The O&M manual shall include procedures and practices for the mitigation of pollutant discharges for the protection of state waters from the facility's operations and to ensure compliance with the requirements of the permit. The manual shall address, at a minimum:

(1) O&M practices for the process wastewater treatment units, if applicable, and chemical and material storage areas;

(2) Methods for estimating process wastewater flows, if applicable;

(3) Management and disposal procedures of process wastewater solids, if applicable;

(4) Temporary and long-term facility closure plans that shall include (i) treatment, removal, and final disposition of residual wastewater, if applicable, contaminated stormwater held at the facility, and solids; (ii) fate of structures; (iii) a removal plan for all exposed industrial materials; and (iv) description of the stabilization of land in which they were stored or placed;

(5) Testing requirements and procedures;

(6) Recordkeeping and reporting requirements; and

(7) Duties and roles of responsible officials.

b. The permittee shall operate the treatment works in accordance with the O&M manual. The O&M manual shall be reviewed and updated at least annually and shall

be signed and certified in accordance with Part III K of this permit. The O&M manual shall be made available for review by department personnel upon request.

c. For facilities that do not operate process wastewater treatment units, O&M requirements included in Part I 8 a (4) through 8 a (7) shall be included in either the O&M manual or the SWPPP.

9. If the concrete products facility discharges through a municipal separate storm sewer system to surface waters, the permittee shall notify the owner of the municipal separate storm sewer system of the existence of the discharge and include that notification with the registration statement. The notification shall include the following information: the name of the facility, a contact person and contact information (telephone and email), the location of the discharge, the nature of the discharge, and the facility's VPDES general permit number.

10. The permittee shall ensure that all process wastewater basins and lagoons maintain a minimum freeboard of one foot at all times except during a 72-hour transition period after a ~~measurable~~ rainfall event that results in a discharge from the site. During the 72-hour transition period, no discharge from the basins and lagoons shall occur unless it is in accordance with this permit. Within 72 hours after a ~~measurable~~ rainfall event that results in a discharge from the site, the freeboard in all basins and lagoons shall be returned to the minimum freeboard of one foot. Where basins are operated in a series mode of operation, the one-foot freeboard requirement for the upper basins may be waived provided the final basin will maintain the freeboard requirements of this special condition. A description of how the permittee will manage the facility to adhere to one foot of freeboard shall be included in the O&M manual required in Part I B 8 a (1). Should the one-foot freeboard not be restored by the end of the 72-hour transition period, the permittee shall take measures to correct the problem before the next rain event. In addition, the permittee shall immediately begin to monitor and document the freeboard on a daily basis until the freeboard is returned to the minimum of one foot.

11. Process wastewater, commingled process wastewater, and stormwater or stormwater treatment units designed to operate as "no discharge" shall have no discharge of wastewater or pollutants except in storm events greater than a 25-year, 24-hour storm event. In the event of such a discharge, the permittee shall report an unusual or extraordinary discharge per Part III H of this permit. No sampling or DMR is required for these discharges as they are considered to be discharging in emergency discharge conditions. All other conditions in Part I B, Part II, and Part III apply. 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. The operation of these systems shall not contravene the Water Quality Standards (9VAC25-260), as adopted and amended by the board, or any provision of the State Water Control Law.

12. The permittee shall notify the department as soon as he knows or has reason to believe:

a. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) One hundred micrograms per liter (100 µg/l) of the toxic pollutant;

(2) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the ~~board~~ department in accordance with 9VAC25-31-220 F.

b. That any activity has occurred or will occur which would result in any discharge, on a nonroutine or infrequent basis, of a toxic pollutant which is not limited in this permit if that discharge will exceed the highest of the following notification levels:

(1) Five hundred micrograms per liter (500 µg/l) of the toxic pollutant;

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten times the maximum concentration value reported for that pollutant in the permit application; or

(4) The level established by the ~~board~~ department in accordance with 9VAC25-31-220 F.

13. All settling basins used for treatment and control of process wastewater or process wastewater commingled with stormwater that were constructed on or after February 2, 1998, shall be lined with concrete or any other impermeable materials. Regardless of date of construction, all settling basins used for treatment and control of process wastewater or process wastewater commingled with stormwater that are expanded or dewatered for major structural repairs shall be lined with concrete or any other impermeable materials.

14. ~~Settled wastewater may be used on site for the purposes of dust suppression or for spraying stockpiles.~~ Dust suppression shall be carried out as a best management practice but not as a wastewater disposal method ~~provided that ponding or direct run-off from the site does not occur during or immediately following its application~~. Water used for dust suppression may be discharged provided that it has been filtered, settled, or similarly treated. Settled wastewater may be used on site for the purpose of dust suppression or for spraying stockpiles. Dust suppression shall not occur during a ~~"measurable" rain event (~~a storm event that results in an actual discharge from the site~~)~~.

15. Compliance reporting under Part I A.

a. The quantification levels (QL) shall be less than or equal to the following concentrations:

Effluent Characteristic	Quantification Level
TSS	1.0 mg/l
TPH	5.0 mg/l

The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the test method.

b. Reporting.

(1) Monthly average. Compliance with the monthly average limitations or reporting requirements for the parameters listed in Part I A shall be determined as follows: All concentration data below the QL listed in subdivision 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL listed shall be treated as it is reported. An arithmetic average shall be calculated using all reported data, including the defined zeros, for the month. This arithmetic average shall be reported on the DMR as calculated. If all data are below the QL then the average shall be reported as "<QL." If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(2) Daily maximum. Compliance with the daily maximum limitations or reporting requirements for the parameters listed in Part I A shall be determined as follows: All

concentration data below the QL listed in subdivision 15 a of this subsection shall be treated as zero. All concentration data equal to or above the QL shall be treated as reported. An arithmetic average of the values shall be calculated using all reported data, including the defined zeros, collected for each day during the reporting month. The maximum value of these daily averages thus determined shall be reported on the DMR as the daily maximum. If all data are below the QL then the average shall be reported as "<QL." If reporting for quantity is required on the DMR and the calculated concentration is <QL then report "<QL" for the quantity, otherwise use the calculated concentration.

(3) Any single datum required shall be reported as "<QL" if it less than the QL listed in subdivision 15 a of this subsection. Otherwise the numerical value shall be reported. The QL must be less than or equal to the QL in subdivision 15 a of this subsection.

(4) The permittee shall report at least two significant digits for a given parameter. Regardless of the rounding convention used (i.e., five always rounding up or to the nearest even number) by the permittee, the permittee shall use the convention consistently and shall ensure that consulting laboratories employed by the permittee use the same convention.

16. 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 ~~an approved TMDL has been established~~ a TMDL has been approved prior to the term of this permit shall implement measures and controls 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 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.

17. Adding or deleting outfalls. The permittee may add new or delete existing outfalls at the facility as necessary and appropriate. The permittee shall update the O&M manual and SWPPP and notify the department of all outfall changes within 60 days of the change. The permittee shall submit an updated registration statement including an updated SWPPP site map.

18. Notice of termination.

a. The owner may terminate coverage under this general permit by filing a complete notice of termination with the department. 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 process wastewater or stormwater associated with the industrial activity;

(2) A new owner has assumed responsibility for the facility. A notice of termination does not have to be submitted if a VPDES Change of Ownership Agreement form has been submitted;

(3) All discharges associated with this facility have been covered by an individual VPDES permit or an alternative VPDES permit; or

(4) Termination of coverage is being requested for another reason, provided the ~~board~~ department agrees that coverage under this general permit is no longer needed.

b. The notice of termination shall contain the following information:

(1) Owner's name, mailing address, telephone number, and email address (if available);

(2) Facility name and location;

(3) VPDES general permit registration number for the facility; and

(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, a closure plan has been implemented according to the O&M manual, and there are no longer discharges from the facility;

(c) A statement indicating that all discharges 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).

c. The following certification: "I certify under penalty of law that all concrete products ~~waste water~~ wastewater and stormwater discharges from the identified facility that are authorized by this VPDES general permit have been eliminated, or covered under a VPDES individual or alternative permit, or that I am no longer the owner of the facility, 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 concrete products ~~waste water~~ wastewater or stormwater in accordance with the general permit, and that discharging pollutants 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."

d. The notice of termination shall be signed in accordance with Part III K.

e. The notice of termination shall be submitted to the DEQ regional office serving the area where the concrete products facility discharge is located.

19. Temporary closure at inactive and unstaffed sites waiver.

a. A waiver of the effluent monitoring, benchmark monitoring, visual monitoring, and routine facility inspections may be granted by the ~~board~~ department at a facility that is both inactive and unstaffed and there are no industrial materials or activities exposed to stormwater. The waiver request shall be submitted to the ~~board~~ department for approval and shall include the information in the temporary closure plan specified in Part I B 8 a (4), the facility's VPDES general permit registration number; a contact person, telephone number, and email address (if available); the reason for the request; the date the facility became or will become inactive and unstaffed; and the date the closure plan will be completed. The waiver shall be signed and certified in accordance with Part III K. If this waiver is granted, the permittee must retain a copy of the request and the ~~board's~~ department's written approval of the waiver in the SWPPP. The permittee is required to conduct an annual routine facility inspection in accordance with ~~Part II F 6 f (5)~~ Part II D 2 e. A stormwater discharge is not required at the time of this annual routine facility inspection.

b. To reactivate the site the permittee must notify the department within 30 days of reopening the facility and commencing any point source discharges of either treated process wastewater or stormwater runoff associated with industrial activities. Upon reactivation all effluent monitoring, benchmark monitoring, visual monitoring, and routine facility inspections shall resume immediately. This notification must be

submitted to the department, signed in accordance with Part III K, and retained on site at the facility covered by this permit in accordance with Part III B.

c. The ~~board~~ department retains the right to revoke this waiver when it is determined that the discharge is causing, has a reasonable potential to cause, or contributes to a water quality standards violation.

20. The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards.

21. Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other applicable federal, state, or local statute, ordinance, or regulation.

Part II
Stormwater Management.

A. Monitoring ~~instructions~~ requirements.

1. Quarterly visual monitoring. The permittee shall perform and document visual monitoring of stormwater discharges associated with industrial activity from each outfall, except discharges waived in subdivision d. The visual monitoring must be made during normal working hours, at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.

a. Samples shall be collected in accordance with Part II A 3. No analytical tests are required to be performed on the samples.

b. Samples will be in a clean, colorless glass or plastic container and examined in a well-lit area.

c. The examination shall observe color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution.

d. If no storm event resulted in discharge 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.

e. When adverse weather conditions prevent the collection of samples, a substitute sample may be taken during a storm event that results in a discharge from the site in the next monitoring period. Adverse weather conditions are those that are dangerous or create inaccessibility for personnel, and may include such things as local flooding, high winds, electrical storms, or situations that otherwise make sampling impracticable, such as drought or extended frozen conditions. Narrative documentation of conditions necessitating the use of the waiver shall be kept with the SWPPP.

f. Visual monitoring documentation shall be maintained onsite with the SWPPP and shall include:

(1) Outfall location;

(2) Monitoring date and time;

(3) Monitoring personnel;

(4) Nature of the discharge (i.e., runoff or snow melt);

(5) 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

(6) Probable sources of any observed stormwater contamination;

2. Benchmark monitoring. If the benchmark monitoring for TSS exceeds 100 mg/l maximum or the pH falls outside of the range of 6.0-9.0 standard units, the permittee shall evaluate the overall effectiveness of the stormwater pollution prevention plan (SWPPP) in controlling the discharge of pollutants to receiving waters. Benchmark concentration values are not effluent limitations. Exceedance of a benchmark concentration does not constitute a violation of this permit and does not indicate that violation of a water quality standard has occurred; however, it does signal that modifications to the SWPPP are necessary, unless justification is provided in a routine facility inspection.

3. Monitoring instructions.

~~1.~~a. Collection and analysis of samples. Sampling requirements shall be assessed on an outfall by outfall basis. Samples shall be collected and analyzed in accordance with the requirements of Part III A.

~~2.~~b. When and how to sample. A minimum of one grab sample shall be taken resulting from a storm event that results in an actual discharge from the site ~~(defined as a "measureable storm event")~~, providing the interval from the preceding ~~measurable~~ storm event discharge is at least 72 hours. The 72-hour storm interval is waived if the permittee is able to document with the DMR that less than a 72-hour interval is representative for local storm events during the sampling period. 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 discharge provided that the permittee explains with the SWPPP why a grab sample during the first 30 minutes was impractical.

~~3.~~c. Recording of results. For each discharge measurement or sample taken pursuant to the storm event monitoring requirements of this permit, the permittee shall record and report with the DMR the following information:

~~a.~~ (1) Date ~~and duration (in hours)~~ of the storm events sampled;

~~b.~~ (2) Rainfall measurements or estimates (in inches) of the storm event that generated the sampled discharge; and

~~c.~~ (3) ~~Duration~~ Interval between the storm event sampled and the end of the previous ~~measurable~~ storm event that resulted in a discharge from the site.

4. Corrective actions. The permittee shall review the SWPPP and modify it as necessary to address any deficiencies noted in a and b below. Revisions to the SWPPP shall be completed within 60 days following the discovery of the deficiency. When control measures need to be modified or added, implementation shall 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 shall 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 shall include appropriate nonstructural and temporary controls to be implemented in the affected portion of the facility prior to completion of the permanent control measure. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP. The permittee shall take corrective action whenever:

a. Benchmark monitoring, 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;

b. 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.

Any corrective actions taken shall be documented and retained with the SWPPP.

B. Representative outfalls - substantially identical outfalls. If a facility has two or more exclusively stormwater 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, frequency of discharges, and stormwater management practices occurring within the drainage areas of the outfalls, 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. ~~Representative outfalls must be identified in the registration statement submitted for coverage under this permit.~~ Substantially identical outfall monitoring can apply to quarterly visual and benchmark monitoring. The permittee must include the following information in the SWPPP:

1. The locations of the outfalls;

2. ~~Why the~~ An evaluation, including available monitoring data, indicating the outfalls are expected to discharge substantially identical effluents~~, including evaluation of monitoring data where available~~;

3. Estimates of the size of the drainage area (in square feet) for each of the outfalls; and

4. An estimate of the runoff coefficient of the drainage areas (low: under 40%; medium: 40% to 65%; high: above 65%).

~~C. Quarterly visual monitoring of stormwater quality. The permittee shall perform and document visual monitoring of stormwater discharges associated with industrial activity from each outfall, except discharges waived in Part II C 4 . The visual monitoring must be made during normal working hours, at least once in each of the following three-month periods: January through March, April through June, July through September, and October through December.~~

~~1. Samples will be in a clean, colorless glass or plastic container and examined in a well-lit area.~~

~~2. Samples will be collected within the first 30 minutes (or as soon thereafter as practical, but not to exceed three hours, provided that the permittee explains in the SWPPP why an examination during the first 30 minutes was impractical) of when the runoff or snowmelt begins discharging. All such samples shall be collected from the discharge resulting from a storm event that results in an actual discharge from the site (defined as a "measurable storm event") providing the interval from the preceding measurable storm event is at least 72 hours. The required 72-hour storm event interval is waived where the preceding measurable storm event did not result in a measurable discharge from the facility. The 72-hour storm event interval may also be waived where the permittee documents that less than a 72-hour interval is representative for local storm events during the season when sampling is being conducted.~~

~~3. The examination shall observe color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution.~~

~~4. If no qualifying storm event resulted in discharge from the facility during a monitoring period, or adverse weather conditions create dangerous conditions for personnel during each measurable storm event during a monitoring period, visual monitoring is exempted provided this is documented in the SWPPP.~~

~~5. Visual monitoring reports shall be maintained onsite with the SWPPP. The report shall include the outfall location, the monitoring date and time, monitoring 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.~~

~~6. Whenever the visual monitoring shows obvious indicators of stormwater pollution, the SWPPP and stormwater controls shall be updated per Part II F.~~

~~D. Allowable nonstormwater discharges. The following nonstormwater discharges are authorized by this permit.~~

~~1. Discharges from emergency firefighting activities;~~

~~2. Fire hydrant flushings;~~

~~3. Potable water including water line flushings;~~

~~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 fertilizer have been applied in accordance with the approved labeling;~~

~~7. 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 to prevent the discharge of pollutants;~~

~~8. Routine external building washdown that does not use detergents or hazardous cleaning products;~~

~~9. Uncontaminated ground water or spring water;~~

~~10. Foundation or footing drains where flows are not contaminated with process materials; and~~

~~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).~~

~~E.~~ C. Releases of hazardous substances or oil in excess of reportable quantities. The discharge of hazardous substances or oil in the stormwater discharges from this facility shall be prevented or minimized in accordance with the SWPPP for the facility. This permit does not authorize the discharge of hazardous substances or oil resulting from an onsite spill. This permit does not relieve the permittee of the reporting requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 or § 62.1-44.34:19 of the Code of Virginia.

Where a release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR Part 302 occurs during a 24-hour period:

1. The permittee is required to notify the department in accordance with the requirements of Part III G as soon as he has knowledge of the discharge;

2. Where a release enters a municipal separate storm sewer system (MS4), the permittee shall also notify the owner of the MS4; and

3. The SWPPP required by this permit shall be reviewed to identify measures to prevent the reoccurrence of such releases and to respond to such releases, and the plan must be modified where appropriate.

~~F.~~ D. Stormwater pollution prevention plans (SWPPP). A SWPPP shall be developed and implemented for the facility covered by this permit. ~~The SWPPP shall include best management practices (BMPs) that are reasonable, economically practicable, and appropriate in light of current industry practices. The BMPs shall be selected, designed, installed, implemented, and maintained in accordance with good engineering practices to eliminate or reduce the pollutants in all stormwater discharges from the facility. The SWPPP shall also include any control measures necessary for the stormwater discharges to meet applicable water quality standards.~~ The SWPPP is intended to document the selection, design, and installation of control measures, including BMPs, to minimize the pollutants in all stormwater discharges from the facility and to meet applicable effluent limitations and water quality standards.

The SWPPP requirements of this general permit may be fulfilled, in part, by incorporating by reference other plans or documents such as an erosion and sediment control plan, a spill prevention control and countermeasure (SPCC) plan developed for the facility under § 311 of the Clean Water Act or BMP programs otherwise required for the facility provided that the incorporated plan meets or exceeds the SWPPP requirements of Part II F 6 (Contents of SWPPP). All plans incorporated by reference into the SWPPP become enforceable under this permit. If a plan incorporated by reference does not contain all the requirements of Part II F 6, the permittee shall develop the missing SWPPP elements and include them in the required plan.

1. Deadlines for SWPPP preparation and compliance.

a. Owners of existing facilities ~~that were covered under the 2013 Concrete Products General Permit~~ who are continuing coverage under this general permit shall update and implement any revisions to the SWPPP within 60 days of the ~~board~~ department granting coverage under this permit.

b. Owners of new facilities, facilities previously covered by an expiring individual permit, and existing facilities not currently covered by a VPDES permit who elect to be covered under this general permit shall prepare the SWPPP 60 days prior to commencing operations and implement the SWPPP prior to ~~commencing operations~~ a stormwater discharge.

c. Where the owner of an existing facility that is covered by this permit changes, the new owner of the facility shall update and implement any revisions to the SWPPP within 60 days of the ownership change.

d. Upon a showing of good cause, the director may establish a later date in writing for the preparation and compliance with the SWPPP.

~~2. Signature and SWPPP review.~~

~~a. The SWPPP shall be signed in accordance with Part III K and be retained on-site at the facility covered by this permit in accordance with Part III B. For inactive sites, the SWPPP may be kept at the nearest office of the permittee.~~

~~b. The permittee shall make the SWPPP or other information available to the department upon request.~~

~~c. The director, or his designee, may notify the permittee in writing at any time that the SWPPP, BMPs, or other components of the facility's stormwater program do not meet one or more of the requirements of this part. Such notification shall identify specific provisions of the permit that are not being met and may include required modifications to the stormwater program, additional monitoring requirements, and special reporting requirements. Within 60 days of such notification from the director, or as otherwise provided by the director, the permittee shall make the required changes to the SWPPP and shall submit to the department a written certification that the requested changes have been made.~~

~~3. Maintaining an updated SWPPP. The permittee shall review and amend the SWPPP as appropriate whenever:~~

~~a. There is construction or a change in design, operation, or maintenance that has a significant effect on the discharge or the potential for the discharge of pollutants to surface waters;~~

~~b. Routine inspections or visual monitoring determine that there are deficiencies in the BMPs;~~

~~c. Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;~~

~~d. There is a spill, leak, or other release at the facility; or~~

~~e. There is an unauthorized discharge from the facility.~~

~~4. SWPPP modifications shall be made within 60 calendar days after discovery, observation, or event requiring a SWPPP modification. Implementation of new or modified BMPs (distinct from regular preventive maintenance of existing BMPs described in Part II F 7) shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the director. The amount of time taken to modify a BMP or implement additional BMPs shall be documented in the SWPPP.~~

~~5. If the SWPPP modification is based on a release or unauthorized discharge, include a description and date of the release, the circumstances leading to the release, actions taken in response to the release, and measures to prevent the recurrence of such releases. Unauthorized releases and discharges are subject to the reporting requirements of Part III G of this permit.~~

~~6.~~2. Contents of SWPPP. The SWPPP shall include, at a minimum, the following items:

a. Pollution prevention team. Each SWPPP shall identify the staff individuals by name or title that comprise the facility's stormwater pollution prevention team. The pollution prevention team is responsible for assisting the facility or plant manager in developing, implementing, maintaining, revising, and ensuring compliance with the facility's SWPPP. Specific responsibilities of each staff individual on the team shall be identified and listed.

b. Site description. The site description shall include the following:

(1) A description of the industrial activities at the facility.

(2) A site map identifying the following:

(a) Boundaries of the property and the size of the property in acres;

(b) Location and extent of significant structures and impervious surfaces;

(c) Locations of all stormwater conveyances including ditches, pipes, swales, and inlets, and the directions of stormwater flow using arrows to indicate which direction stormwater will flow;

(d) Locations of stormwater control measures, including BMPs;

(e) Locations of all surface water bodies, including wetlands;

(f) Locations of identified potential pollutant sources identified in Part II D 2 c;

(g) Locations where significant spills or leaks identified under Part II D 2 c (3) have occurred;

(h) Locations of stormwater outfalls, monitoring locations, an approximate outline of the area draining to each outfall, the drainage area of each outfall in acres, the longitude and latitude of each outfall, the location of any municipal separate storm system (MS4) conveyance receiving discharge from the facility and each outfall

identified with a unique numerical identification code. For example: Outfall number 001, Outfall Number 002, etc.;

(i) Location and description of all nonstormwater discharges;

(j) Location of any storage piles containing salt;

(k) Location and source of suspected run-on to the site from an adjacent property if the run-on is suspected of containing significant quantities of pollutants; and

(l) Locations of fueling stations, vehicle or equipment degreasing activities, maintenance areas, loading or unloading areas, vehicle wash down areas, vehicle wash out areas, bag house or other dust control device, recycle ponds, sedimentation ponds, or clarifiers or other devices used for the treatment of process wastewater (and the areas that drain to the treatment device).

~~b.~~ c. Summary of potential pollutant sources. The ~~plan~~ SWPPP shall identify each separate area at the facility where industrial materials or activities ~~at the facility~~ are exposed to stormwater. Industrial materials or activities include~~:~~ material handling equipment or activities, industrial machinery, raw materials, industrial production and processes, intermediate products, byproducts, final products, and waste products. Material handling activities include: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product, or waste product. The description shall include:

(1) Activities in area. A list of the industrial activities ~~(e.g., material storage, equipment fueling and cleaning, cutting steel beams)~~ exposed to storm water; ~~and~~

(2) Pollutants. A list of the ~~associated pollutants , pollutant constituents, or industrial chemicals for each activity~~ pollutants, pollutant constituents, or industrial chemicals associated with each industrial activity that could potentially be exposed to stormwater. The pollutant list shall include all significant materials handled, treated, stored, or disposed that have been exposed to stormwater in the three years prior to the date this SWPPP was prepared or amended. This list shall include any hazardous substances or oil at the facility.

~~c. Site map. The site map shall document:~~

~~(1) An outline of the drainage area of each stormwater outfall that are within the facility boundaries;~~

~~(2) Each existing structural control measure to reduce pollutants in stormwater runoff;~~

~~(3) Surface water bodies;~~

~~(4) Locations where materials are exposed to precipitation;~~

~~(5) Locations where major spills or leaks identified under Part II F 6 d have occurred;~~

~~(6) Locations of fueling stations, vehicle or equipment degreasing activities, maintenance areas, loading or unloading areas, vehicle wash down areas, vehicle wash out areas, bag house or other dust control device, recycle ponds, sedimentation ponds, or clarifiers or other devices used for the treatment of process wastewater (and the areas that drain to the treatment device);~~

~~(7) Locations used for the storage or disposal of wastes; liquid storage tanks; processing areas; and storage areas;~~

~~(8) Outfall locations, designation (e.g., 001) and the types of discharges contained in the drainage areas of the outfalls;~~

~~(9) For each area of the facility that generates stormwater discharges associated with industrial activity with a potential for containing significant amounts of pollutants, locations of stormwater conveyances including ditches, pipes, swales, and inlets, and~~

~~the directions of stormwater flow and an identification of the types of pollutants that are likely to be present in stormwater discharges associated with industrial activity. Factors to consider include the toxicity of the chemicals; quantity of chemicals used, produced, or discharged; the likelihood of contact with stormwater; and history of leaks or spills of toxic or hazardous pollutants; and~~

~~(10) Flows with a potential for causing erosion shall be identified.~~

~~d.~~ (3) Spills and leaks. The SWPPP shall clearly identify areas where potential spills and leaks that can contribute pollutants to stormwater discharges can occur and their corresponding outfalls. The SWPPP shall include ~~A~~ a list of significant spills and leaks of toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance during the three-year period prior to the date this SWPPP was prepared or amended. ~~are exposed to precipitation or that otherwise drain to a stormwater conveyance at the facility after the date of three years prior to the date of coverage under this general permit. Such list shall be updated as appropriate during the term of the permit.~~ The list shall be updated within 60 days of the incident if significant spills or leaks occur in exposed areas of the facility during the term of the permit.

~~e.~~ (4) Sampling data. The ~~plan~~ SWPPP shall include ~~a summary of existing~~ stormwater discharge sampling data ~~taken at the facility. The summary shall include, at a minimum, any data~~ collected during the previous three years.

~~f.~~ d. Stormwater controls.

(1) ~~BMPs~~ Control measures shall be implemented for all areas identified in Part II ~~F 6 b~~ D 2 c (Summary of potential pollutant sources) to prevent or control pollutants in stormwater discharges from the facility. ~~All reasonable steps shall be taken to control or address the quality of discharges from the site that may not originate at the facility.~~ If applicable, regulated stormwater discharges from the facility include stormwater run-on that commingles with stormwater discharges associated with industrial activity at the facility. The SWPPP shall describe the type, location, and implementation of ~~all BMPs~~ control measures for each area where industrial materials or activities are exposed to stormwater. Selection of control measures shall take into consideration:

(a) That preventing stormwater from coming into contact with polluting materials is generally more effective, and less costly, than trying to remove pollutants from stormwater;

(b) Control measures generally must be used in combination with each other for most effective water quality protection;

(c) Assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures;

(d) That minimizing impervious areas at the facility can reduce runoff and improve groundwater recharge and stream base flows in local streams (however, care must be taken to avoid groundwater contamination);

(e) Flow attenuation by use of open vegetated swales and natural depressions can reduce in-stream instream impacts of erosive flows;

(f) Conservation or restoration of riparian buffers will help protect streams from stormwater runoff and improve water quality; and

(g) Treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

(2) Good housekeeping measures. ~~Good housekeeping requires the clean and orderly maintenance of areas that may contribute pollutants to stormwater discharges.~~ The permittee shall keep clean all exposed areas of the facility that are potential sources

of pollutants in stormwater. ~~Particular attention should be paid to areas where raw materials are stockpiled, material handling areas, storage areas, liquid storage tanks, vehicle fueling and maintenance areas, and loading or unloading areas.~~ The permittee shall perform the following good housekeeping measures to minimize pollutant discharges:

(a) Include a schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks, and containers;

(b) Sweep or vacuum as feasible;

(c) Store materials in containers constructed of appropriate materials;

(d) Manage all waste containers to prevent a discharge of pollutants;

(e) Minimize the potential for waste, garbage, and floatable debris to be discharged by keeping areas exposed to stormwater free of such materials or by intercepting such materials prior to discharge; and,

(f) ~~The SWPPP shall describe procedures performed to prevent~~ Prevent or minimize the discharge of: spilled cement, aggregate (including sand and gravel), kiln dust, fly ash, settled dust, or other significant material in stormwater from paved portions of the site that are exposed to stormwater. Sweep or vacuum paved surfaces of the site that are exposed to stormwater at regular intervals or use other equivalent measures to minimize the potential discharge of these materials in stormwater. Indicate in the SWPPP the frequency of sweeping, vacuuming, or other equivalent measures (e.g., wash down the area and collect or treat and properly dispose of the washdown water). Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but sweeping, vacuuming, or other equivalent measures shall be performed at least once a week in areas where cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed. Prevent the exposure of fine granular solids (including cement, fly ash and kiln dust) to stormwater, where practicable, by storing these materials in enclosed silos, hoppers, or buildings or under other covering. The generation of dust and off-site vehicle tracking of raw, final or waste materials, or sediments shall be minimized.

(3) Preventive maintenance. A preventive maintenance program shall involve regular inspection, testing, maintenance, and repairing of all industrial equipment and systems to avoid breakdowns or failures that could result in leaks, spills and other releases. This program is in addition to the specific BMP maintenance required under Part II ~~F 7~~ E (Maintenance ~~of BMPs~~).

(4) Spill prevention and response procedures. The SWPPP shall describe the procedures that will be followed for preventing and responding to spills and leaks~~.~~ , including:

(a) Preventive measures ~~include~~ , such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;

(b) Response procedures ~~shall include~~ , including ~~(i)~~ notification of appropriate facility personnel, emergency agencies, and regulatory agencies and ~~(ii)~~ procedures for stopping, containing, and cleaning up spills. Measures for cleaning up hazardous material spills or leaks shall be consistent with applicable ~~RCRA~~ Resource Conservation and Recovery Act regulations at 40 CFR Part 264 and 40 CFR Part 265. Employees who may cause, detect, or respond to a spill or leak shall be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals shall be a member of the pollution prevention team;

(c) Procedures for plainly labeling containers (e.g., "used oil," "spent solvents," "fertilizers and pesticides," etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur; and

(d) Contact information for individuals and agencies that must be notified in the event of a spill shall be included in the SWPPP and in other locations where it will be readily available.

~~(5) Routine facility inspections.~~

~~(a) During normal facility operating hours inspections of areas of the facility covered by the requirements in this permit must be conducted and shall include observations of the following:~~

~~(i) Areas where industrial materials or activities are exposed to stormwater, including material handling areas, above ground storage tanks, hoppers or silos, dust collection or containment systems, and truck wash down or equipment cleaning areas;~~

~~(ii) Discharge points; and~~

~~(iii) Best management practices.~~

~~(b) Inspections shall be conducted at least quarterly. At least once each calendar year, the routine facility inspection should be conducted during a period when a stormwater discharge is occurring.~~

~~(c) Inspections shall be performed by personnel 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 BMPs. At least one member of the stormwater pollution prevention team shall participate.~~

~~(d) Routine facility inspections shall be documented and maintained with the SWPPP. Document all findings including:~~

~~(i) Inspection date;~~

~~(ii) Names of the inspectors; and~~

~~(iii) Observations of any discharges; the physical condition of and around all outfalls (e.g., concrete product in the stream or turbidity); leaks or spills from industrial equipment, drums, tanks or other containers; offsite tracking of industrial materials or sediment; any additional best management practices that need to be repaired, maintained, or added; and any incidents of noncompliance.~~

~~(e) A set of tracking or followup procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained with the SWPPP. Any deficiencies in the implementation of the SWPPP that are found 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. The results of the inspections shall be documented in the SWPPP, along with the dates and descriptions of any corrective actions that were taken in response to any deficiencies or opportunities for improvement that were identified.~~

~~(f) The requirement for routine facility inspections is waived for facilities that have maintained an active VEEP E3/E4 status.~~

(5) Eliminating and Minimizing Exposure. To the extent practicable, manufacturing, processing, and material storage areas, including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations, shall be located inside, or protected by a storm-resistant covering to prevent exposure to rain, snow, snowmelt, and runoff. Unless infeasible, facilities shall implement the following:

(a) Use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from potential sources of pollutants;

(b) Locate materials, equipment, and activities so that potential leaks and spills are contained, or able to be contained, or diverted before discharge;

(c) Clean up spills and leaks immediately, upon discovery of the spills or leaks, using dry methods (e.g., adsorbents) to prevent the discharge of pollutants;

(d) Store leaking vehicles and equipment indoors, or if stored outdoors, use drip pans and adsorbents;

(e) Utilize appropriate spill or overflow protections equipment;

(f) Perform all vehicle maintenance or equipment maintenance or equipment cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also capture any overspray; and

(g) Drain fluids from equipment and vehicles that will be decommissioned, and for any equipment and vehicles that remain unused for extended periods of time, inspect at least monthly for leaks.

(6) Employee training. The permittee shall implement a stormwater employee training program for the facility. The SWPPP shall include a schedule for all types of necessary training and shall document all training sessions and the employees who received the training. Training shall be provided at least annually 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 (e.g., inspectors, maintenance personnel, etc.). The training shall cover the components and goals of the SWPPP and include such topics as spill response, good housekeeping, material management practices, BMP operation and maintenance, etc. The SWPPP shall include a summary of any training performed.

(7) Sediment and erosion control. The SWPPP shall identify areas at the facility that, due to topography, land disturbance (e.g., construction, landscaping, sit grading), or other factors, have a potential for soil erosion. The permittee shall identify and implement structural, vegetative, or stabilization ~~BMPs~~ control measures to prevent or control on-site and off-site erosion and sedimentation. Flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if the flows would otherwise create erosive conditions.

(8) Management of runoff. The SWPPP shall describe the stormwater run-off management practices (i.e., permanent structural ~~BMPs~~ control measures) for the facility. These types of ~~BMPs~~ control measures ~~are typically~~ shall be used to divert, infiltrate, reuse, or otherwise reduce pollutants in stormwater discharges from the site. ~~Appropriate measures may include: vegetative swales and practices, reuse of collected stormwater (such as for a process or as an irrigation source), inlet controls (such as oil/water separators), snow management activities, infiltration devices, wet detention/retention devices; or other equivalent measures. Some structural BMPs~~ Structural control measures may require a separate permit under § 404 of the Clean Water Act and the Virginia Water Protection Permit Program Regulation (9VAC25-210) before installation begins.

e. Routine facility inspections. Personnel 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 shall regularly inspect all areas of the facility where industrial materials or activities are exposed to stormwater. At least one member of the stormwater pollution prevention team shall participate.

(1) Inspections include areas where industrial materials or activities are exposed to stormwater, including material handling areas, above ground storage tanks, hoppers or silos, dust collection or containment systems, and truck wash down or equipment cleaning areas, discharge points and control measures.

(2) Inspections shall be conducted at least quarterly during normal facility operating hours. At least once each calendar year, the routine facility inspection should be conducted during a period when a stormwater discharge is occurring.

(3) The inspections shall include at a minimum:

(a) Inspection date;

(b) Names of the inspectors; and

(c) Observations of any discharges; the physical condition of and around all outfalls (e.g., concrete product in the stream or turbidity); leaks or spills from industrial equipment, drums, tanks or other containers; offsite tracking of industrial materials or sediment; any additional best management practices that need to be repaired, maintained, or added; and any incidents of noncompliance.

(4) A set of tracking or follow-up procedures shall be used to ensure that appropriate actions are taken in response to the inspections. Records of inspections shall be maintained with the SWPPP. Any deficiencies in the implementation of the SWPPP that are found 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. The results of the inspections shall be documented in the SWPPP, along with the dates and descriptions of any corrective actions that were taken in response to any deficiencies or opportunities for improvement that were identified.

(5) The requirement for routine facility inspections is waived for facilities that have maintained an active VEEP E3/E4 status.

~~7.~~ E. Maintenance. ~~of BMPs. All BMPs identified in the SWPPP shall be maintained in effective operating condition. Stormwater BMPs identified in the SWPPP shall be observed during active operation where feasible (i.e., during a stormwater runoff event) to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.~~

1. The SWPPP shall include a description of procedures and a regular schedule for preventive maintenance of all ~~BMPs~~ control measures and shall include a description of the back-up practices that are in place should a runoff event occur while a ~~BMP~~ control measure is ~~off-line~~ off-line. The effectiveness of nonstructural BMPs shall also be maintained by appropriate means (e.g., spill response supplies available and personnel trained, etc.).

2. All control measures identified in the SWPPP shall be maintained in effective operating condition and shall be observed at least annually when a stormwater discharge is occurring to ensure that they are functioning correctly. Where discharge locations are inaccessible, nearby downstream locations shall be observed. The observations shall be documented in the SWPPP.

3. If ~~site~~ routine facility inspections required by Part II ~~F 6 f (5)~~ D 2 d ~~(Routine facility inspections)~~ identify ~~BMPs~~ control measures that are not operating effectively, repairs or maintenance shall be performed before the next 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. In the interim, back-up measures shall be employed and documented in the SWPPP until repairs or maintenance is complete. Documentation shall be kept with the SWPPP of maintenance and repairs of BMPs,

including the dates of regular maintenance, dates of discovery of areas in need of repair or replacement, and for repairs, dates that the BMPs returned to full function, and the justification for any extended maintenance or repair schedules.

~~8.~~ F. Nonstormwater discharges.

~~a. Except for flows from emergency firefighting activities, the SWPPP must include:~~

~~(1) Identification of each allowable nonstormwater source;~~

~~(2) The location where it is likely to be discharged; and~~

~~(3) Descriptions of appropriate BMPs for each source.~~

~~b. Documentation that all outfalls have been evaluated annually for the presence of unauthorized discharges (i.e., discharges other than stormwater, the authorized nonstormwater discharges described in Part II D, or discharges covered under a separate VPDES permit or this permit). The documentation shall include:~~

1. Discharges of certain sources of nonstormwater listed in Part II F 3 below are allowable discharges under this permit. All other nonstormwater discharges are not authorized and shall be either eliminated or covered under a separate VPDES permit.

2. Annual outfall evaluation for unauthorized discharges. The SWPPP shall include documentation that all stormwater outfalls associated with industrial activity have been evaluated annually for the presence of unauthorized discharges.

The documentation shall include:

~~(1)~~ a. The date of the evaluation;

~~(2)~~ b. A description of the evaluation criteria used;

~~(3)~~ c. A list of the outfalls or onsite drainage points that were directly observed during the evaluation;

~~(4)~~ d. A description of the results of the evaluation for the presence of unauthorized discharges; and

~~(5)~~ e. The actions taken to eliminate identified unauthorized discharges.

3. The following nonstormwater discharges are authorized by this permit:

a. Discharges from emergency firefighting activities;

b. Fire hydrant flushing, managed in a manner to avoid an instream impact;

c. Potable water, including water line flushing, 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 fertilizers have been applied in accordance with the approved labeling;

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;

h. Routine external building washdown that does not use detergents or hazardous cleaning products;

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)

G. Signature and SWPPP review.

1. Signature and location. The SWPPP, including any revisions to the SWPPP to document any corrective actions taken as required by Part II A 4 shall be signed in accordance with Part III K, dated, and retained on-site at the facility covered by this permit. All other changes to the SWPPP, and other permit compliance documentation, must be signed and dated by the person preparing the change or documentation. For inactive or unstaffed facilities, the plan may be kept at the nearest office of the permittee.

2. Availability. The permittee shall retain a copy of the current SWPPP required by this permit at the facility, and it shall be immediately available to the department, EPA or the operator of an MS4 receiving discharges from the site at the time of an on-site inspection or upon request.

3. Required modifications. The permittee shall modify the SWPPP whenever necessary to address all corrective actions required by Part II A 4 (Corrective Actions). Changes to the SWPPP shall be made in accordance with the corrective action deadlines in Part II A 4, and shall be signed and dated in accordance with Part III K. The director may notify the permittee at any time the SWPPP, control measures, or other components of the facility's stormwater program do not meet one or more of the requirements of this permit. The notification shall identify specific provisions of the permit that are not being met and may include required modifications to the stormwater program, additional monitoring requirements, and special reporting requirements. The permittee shall make any required changes to the SWPPP within 60 days of receipt of such notification, unless permission for a later date is granted in writing by the director, and shall submit a written certification to the director that the requested changes have been made.

H. Maintaining an updated SWPPP.

1. The permittee shall review and amend the SWPPP as appropriate whenever:

a. There is construction or a change in design, operation, or maintenance at the facility that has an effect on the discharge, or the potential for the discharge, of pollutants from the facility;

b. Routine inspections or visual monitoring determine that there are deficiencies in the control measures, including BMPs;

c. Inspections by local, state, or federal officials determine that modifications to the SWPPP are necessary;

d. There is a significant spill, leak or other release at the facility; or

e. There is an unauthorized discharge from the facility.

f. The department notifies the permittee that a TMDL has been developed and applies to the permitted facility, consistent with Part I B 16.

2. SWPPP modifications shall be made within 60 calendar days after the discovery, observation, or event requiring a SWPPP modification. Implementation of new or modified control measures shall be initiated before the next storm event if possible, but no later than 60 days after discovery, or as otherwise provided or approved by the director. The amount of time taken to modify a control measure or implement additional control measures shall be documented in the SWPPP.

3. If the SWPPP modification is based on a significant spill, leak, release, or unauthorized discharge, 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 III G of this permit.

Part III
Conditions Applicable to All VPDES Permits.

A. Monitoring.

1. Samples and measurements taken as required by this permit shall be representative of the monitored activity.

2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency unless other procedures have been specified in this permit.

3. The permittee shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

4. Samples taken as required by this permit shall be analyzed in accordance with 1VAC30-45 (Certification for Noncommercial Environmental Laboratories) or 1VAC30-46 (Accreditation for Commercial Environmental Laboratories).

B. Records.

1. Records of monitoring information shall include:

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

b. The individuals who performed the sampling or measurements;

c. The dates and times analyses were performed;

d. The individuals who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

2. The permittee shall retain (i) records of all monitoring information including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, (ii) copies of all reports required by this permit, and (iii) records of all data used to complete the registration statement for this permit for a period of at least three years from the date that coverage under this permit expires or is terminated. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the permittee, or as requested by the ~~board~~ department.

C. Reporting monitoring results.

1. The permittee shall submit the results of the monitoring required by this permit not later than the 10th day of the month after monitoring takes place, unless another reporting schedule is specified elsewhere in this permit. Monitoring results shall be submitted to the department's regional office.

2. Monitoring results shall be reported on a D~~ischarge Monitoring Report (DMR)~~ DMR or on forms provided, approved or specified by the department. 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. If the permittee monitors any pollutant specifically addressed by this permit more frequently than required by this permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency

or using procedures specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.

4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

D. Duty to provide information. The permittee shall furnish to the department, within a reasonable time, any information that the ~~board~~ department may request to determine whether cause exists for terminating coverage under this permit or to determine compliance with this permit. The ~~board~~ department may require the permittee to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from ~~its~~ the permittee's discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the State Water Control Law. The permittee shall also furnish to the department upon request copies of records required to be kept by this permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized discharges. Except in compliance with this permit, or another permit issued by the ~~board~~ department, it shall be unlawful for any person to:

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

2. Otherwise alter the physical, chemical or biological properties of such state waters and make them detrimental to the public health, or to animal or aquatic life, or to the use of such waters for domestic or industrial consumption, for recreation, or for other uses.

G. Reports of unauthorized discharges. Any permittee who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance into or upon state waters in violation of Part III F; or who discharges or causes or allows a discharge that may reasonably be expected to enter state waters in violation of Part III F, shall notify the department of the discharge immediately upon discovery of the discharge, but in no case later than 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department, within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;

2. The cause of the discharge;

3. The date on which the discharge occurred;

4. The length of time that the discharge continued;

5. The volume of the discharge;

6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate, and prevent a recurrence of the present discharge or any future discharges not authorized by this permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

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 (see Part III I 3), in no

case later than 24 hours, the department ~~by telephone~~ after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The permittee shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part III I 1 b. Unusual and extraordinary discharges include any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;
2. Breakdown of processing or accessory equipment;
3. Failure or taking out of service some or all of the treatment works; and
4. Flooding or other acts of nature.

I. Reports of noncompliance.

1. The permittee shall report any noncompliance that may adversely affect state waters or may endanger public health.

a. An oral report shall be provided within 24 hours from the time the permittee becomes aware of the circumstances. The following shall be included as information that shall be reported within 24 hours under this subdivision:

(1) Any unanticipated bypass; and

(2) Any upset that causes a discharge to surface waters.

b. A written report shall be submitted within five days and shall contain:

(1) A description of the noncompliance and its cause;

(2) The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(3) Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

The ~~board~~ department may waive the written report on a case-by-case basis for reports of noncompliance under Part III I if the oral report has been received within 24 hours and no adverse impact on state waters has been reported.

2. The permittee shall report all instances of noncompliance not reported under Part 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.

~~NOTE:~~ 3. The immediate (within 24 hours) reports required in Part III G, H and I ~~may~~ shall be made to the department's regional office ~~by telephone, FAX, or online at http://www.deq.virginia.gov/Programs/PollutionResponsePreparedness/MakingaReport.aspx~~. Reports maybe made by telephone, FAX, or online at https://www.deq.virginia.gov/get-involved/pollution-response (online reporting preferred). For reports outside normal working hours, ~~leave a message and this shall fulfill the immediate reporting requirement.~~ the online portal shall be used. For emergencies, ~~the Virginia Department of Emergency Services maintains a 24 hour telephone service at~~ call the Virginia Department of Emergency Management's Emergency Operations Center (24-hours) 1-800-468-8892.

~~3.~~ 4. Where the permittee becomes aware that it failed to submit any relevant facts in a permit registration statement, or submitted incorrect information in a permit registration statement or in any report to the department, it shall promptly submit such facts or information.

J. Notice of planned changes.

1. The permittee shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The permittee plans alteration or addition to any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced:

(1) After promulgation of standards of performance under § 306 of Clean Water Act that are applicable to such source; or

(2) After proposal of standards of performance in accordance with § 306 of Clean Water Act that are applicable to such source, but only if the standards are promulgated in accordance with § 306 within 120 days of their proposal;

b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are subject neither to effluent limitations nor to notification requirements specified elsewhere in this permit; or

c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit registration process or not reported pursuant to an approved land application plan.

2. The permittee shall give advance notice to the department of any planned changes in the permitted facility or activity that may result in noncompliance with permit requirements.

K. Signatory requirements.

1. Registration statements. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation or (ii) the manager of one or more manufacturing, production, or operating facilities provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations and initiating and directing other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit registration requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a public agency includes (i) the chief executive officer of the agency or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports and other information. All reports required by permits and other information requested by the ~~board~~ department shall be signed by a person described in Part III K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Part III K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. A duly authorized representative may thus be either a named individual or any individual occupying a named position; and

c. The written authorization is submitted to the department.

3. Changes to authorization. If an authorization under Part III K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Part III K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under Part III K 1 or 2 shall make the following certification:

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

L. Duty to comply. The permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the State Water Control Law and the Clean Water Act, except that noncompliance with certain provisions of this permit may constitute a violation of the State Water Control Law but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for permit coverage termination; or denial of a permit coverage renewal ~~registration~~.

The permittee shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants ~~and with standards for sewage sludge use or disposal established under § 405(d) of the Clean Water Act~~ within the time provided in the regulations that establish these standards or prohibitions ~~or standards for sewage sludge use or disposal~~, even if this permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee shall apply for and obtain coverage under a new permit. All permittees with currently effective permit coverage shall submit a new application at least 60 days before the expiration date of the existing permit, unless permission for a later date has been granted by the ~~board~~ department. The ~~board~~ department shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

N. Effect of a permit. This permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state, or local law or regulations.

O. State law. Nothing in this permit shall be construed to preclude the institution of any legal action under, or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in permit conditions on "bypass" (Part III U), and "upset" (Part III V) nothing in this permit shall be construed to relieve the permittee from civil and criminal penalties for noncompliance.

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

Q. Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by the permittee only when the operation is necessary to achieve compliance with the conditions of this permit.

R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering state waters.

S. Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

U. Bypass.

1. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. The permittee may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Part III U 2 and U 3.

2. Notice.

a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, prior notice shall be submitted, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part III I.

3. Prohibition of bypass.

a. Bypass is prohibited, and the ~~board~~ department may take enforcement action against a permittee for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The permittee submitted notices as required under Part III U 2.

b. The ~~board~~ department may approve an anticipated bypass, after considering its adverse effects, if the ~~board~~ department determines that it will meet the three conditions listed in Part III U 3 a.

V. Upset.

1. An upset constitutes an affirmative defense to an action brought for noncompliance with ~~technology based~~ technology-based permit effluent limitations if the requirements of Part III V 2 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

2. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the permittee can identify the causes of the upset;

b. The permitted facility was at the time being properly operated;

c. The permittee submitted notice of the upset as required in Part III I; and

d. The permittee complied with any remedial measures required under Part III S.

3. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The permittee shall allow the director, or his ~~designee,~~ an authorized representative (including an authorized contractor acting as a representative of the administrator), upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy at reasonable times any records that must be kept under the conditions of this permit;

3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and the State Water Control Law, any substances or parameters at any location.

For purposes of this section, the time for inspection shall be deemed reasonable during regular business hours and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. Permit actions. Permit coverage may be terminated for cause. The filing of a request by the permittee for a permit termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Y. Transfer of permit coverage.

1. Permits are not transferable to any person except after notice to the department.

2. Coverage under this permit may be automatically transferred to a new permittee if:

a. The current permittee notifies the department within 30 days of the transfer of the title to the facility or property unless permission for a later date has been granted by the ~~board~~ department;

b. The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

c. The ~~board~~ department does not notify the existing permittee and the proposed new permittee of its intent to deny the new permittee coverage under the permit. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in Part III Y 2 b.

Z. Severability. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

FACT SHEET DRAFT
REISSUANCE OF A VPDES GENERAL PERMIT
FOR CONCRETE PRODUCTS FACILITIES
2023 Reissuance

The Virginia State Water Control Board has under consideration the reissuance of a general VPDES permit for point source discharges for process water and stormwater from the concrete products facilities to surface waters.

Permit Number: VAG11
Name of Permittee: Any owner of a qualifying concrete products facility in the Commonwealth of Virginia.
Facility Location: Commonwealth of Virginia
Receiving Stream: Surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in Board Regulations which prohibit such discharges. Discharge to surface waters may be through a municipal separate storm sewer system.

The Virginia State Water Control Board has under consideration the reissuance of the VPDES general permit from the concrete products industrial category. The category of discharges is appropriately controlled under a general permit. The category of discharges involves facilities with the same or similar types of operations and the facilities discharge the same or similar types of wastes. The draft general permit requires that all covered facilities meet standardized effluent limitations and monitoring requirements. This permit will be effective January 1, 2024 and will expire on December 31, 2028.

This document gives pertinent information concerning the legal basis, scientific rationale and justification for the issuance or reissuance of the VPDES permit listed below. This permit is a minor industrial permit. The discharge results from the operations of a concrete products facilities. The effluent limitations contained in this permit will maintain the Water Quality Standards in 9VAC25-260. This permit action consists of revisions to the permit, as needed, due to changes in applicable laws, regulations, guidance, and available technical information.

All pertinent information is on file and may be inspected, and arrangements made for copying by contacting Elleanore Daub at:

Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, Virginia 23218
TEL: (804) 659-2655
FAX: (804) 698-4178
E-mail: elleanore.daub@deq.virginia.gov

Activities Covered by this General Permit and Process Descriptions

This general permit will cover point source discharges of process wastewaters and stormwater runoff associated with the operation of concrete products facilities that fall under the industrial classification systems below. Coverage also includes temporary or portable ready-mixed plants erected on or near construction sites. This general permit does not exclude the coverage for a concrete product facility with a secondary industrial activity co-located on site as long as the secondary activity does not generate any point source discharges or the point source discharge is covered under a separate VPDES permit.

1. North American Industry Classification System (NAICS) Code 327331 – Concrete Block and Brick Manufacturing, (Executive Office of the President, Office of Management and Budget, United States, 2017) and Standard Industrial Classification (SIC) Code 3271 - Concrete Block and Brick (Office of Management and Budget (OMB) SIC Manual, 1987);

2. NAICS Code 327332 Concrete Pipe Manufacturing , NAICS Code 327390 Other Concrete Product Manufacturing, NAICS Code 327999 All Other Miscellaneous Nonmetallic Mineral Product Manufacturing (dry mix concrete manufacturing only) and SIC Code 3272 - Concrete Products, Except Block and Brick; or

3. NAICS Code 327320 Ready-Mix Concrete Manufacturing and SIC Code 3273 - Ready-Mixed Concrete, including both permanent and portable plants.

These facilities are collectively defined as "Concrete Products Facilities." The types of industrial activities are described below.

SIC 3273 - Ready-mix

Ready-mixed concrete is basically produced by two methods: dry batch mixing and central mixing. For dry batch mixing, the mix of cement and aggregate is weighed and transferred in a dry state to the truck along with a proportioned amount of water. The concrete is mixed in the truck on the way to the job. For central mixing, the concrete is prepared in a central mixer then transferred to a truck mixer or agitator for delivery.

In addition to cement, fly ash and aggregate, ready-mixed concrete typically contains admixtures and entrained air. Entrained air improves resistance to freezing and thawing. Admixtures may include calcium chloride, triethanolamine, calcium salt, lignosulfunic acid, vinosol, saponin, keratin, sulfonated hydrocarbon, fatty acid glyceride, vinyl acetate, and styrene copolymer of vinyl acetate as ingredients. These compounds may be added to obtain desired characteristics, such as slower or more rapid curing times.

Generally, there are two types of ready-mixed concrete plants: permanent (also known as stationary) and temporary which are usually portable. A permanent plant usually produces various types of concrete for numerous customers. The permanent plant may operate either as a dry batch mixing plant or central mixing plant. A large facility may even consist of both processes. Portable plants are used on large highway and airport paving jobs. These plants can operate using either dry batch mixing or central mixing. Portable plants have the same significant materials and industrial activities as permanent facilities. Therefore, portable plants are covered under this general permit.

The wastewater discharge from ready-mixed concrete plants includes truck washout, truck wash-off, central mixer washout, water from wet waste concrete, stormwater runoff.

Process wastewater is generated by the cleaning of trucks and equipment that come in contact with cement and "wet" concrete. Trucks are usually washed on the outside after they are loaded with fresh concrete, before leaving the plant. They are also washed inside and out at the end of the day. Washing down of areas where this cleaning takes place also generates process wastewater. Process wastewater can be generated from engine steam cleaning in the vehicle/equipment maintenance shop. Discharges of process wastewater may contain

some stormwater associated with industrial activity which has come in contact with raw material stockpiles, dried waste concrete, or vehicle parking or maintenance areas. The stormwater can be contaminated at the truck loading site and at the truck washing area.

Treatment or control of process wastewater and commingled stormwater usually consists of settling basins to reduce the solids content and acid addition to neutralize the high pH of the wastewater. Solids removal may be accomplished through a series of settling ponds or sloped slab separation basins. Mechanical clarification devices such as screw washers are used by some facilities to recover coarse aggregate and sand for reuse. The clarified wastewater may be completely or partially recycled and reused. When discharge is necessary, pH neutralization often is required prior to discharge. Mode of discharge can be batch or continuous.

Stormwater associated with industrial activity may be discharged from ready-mixed concrete plants. This stormwater may have come in contact with or been exposed to raw material (sand, gravel or stone) stockpiles, dried waste concrete, or vehicle parking or maintenance areas. Fugitive dust is prevalent on the grounds at concrete plants. Shrouds and vacuum recovery units are used to minimize dust releases at concrete mixing and truck loading locations. Cement and aggregate unloading from railroad cars, trucks or barges is another potential source of contamination for stormwater. No treatment is normally employed prior to such discharge. Some facilities store the stormwater in a retention pond and operate the basin in a "no-discharge" mode. The water collected in the retention pond either evaporates, infiltrates, or is used as process water on site.

SIC 3272 - Concrete Products, Except Block and Brick
Concrete Products, Except Block and Brick include concrete pipe, precast concrete products, and prestressed concrete products.

Concrete Pipe. Concrete pipe products include: culvert pipe (reinforced and non-reinforced), storm sewer pipe (reinforced and non-reinforced), sanitary sewer pipe (reinforced and non-reinforced), pressure pipe (reinforced, prestressed, pretensioned and other pressure pipe), irrigation pipe and drain (tile), and other concrete pipe (e.g., manholes and conduits).
Concrete pipe is generally produced by three methods: (1) the vertical packerhead (tamping) method; (2) the vertical cast method; and (3) the spin casting production method. The vertical packerhead method uses a machine called a packerhead to compact and vibrate a moist concrete mix into a steel form. The method is used to produce pipe up to five feet in diameter. The vertical cast method is used to produce reinforced pipe. Due to labor cost and time, this method is generally limited to production of reinforced pipe over five feet in diameter. A wet concrete mix from a central mixter is transported by buckets and poured into a vertical steel form containing a reinforcing cage. The steel forms are stripped from the pipe after the concrete sets. The spin casting production method is used to produce reinforced pipe up to four feet in diameter. The form containing a reinforcing cage is placed horizontally and rotated at a high rate, while concrete is added by a reciprocating nozzle. The spinning action densifies the concrete on the inside of the form and dewaters it. The inner surface of the pipe is finished by a mechanical roller. Reinforced concrete pressure pipe, produced by spin casting, uses a hydraulically tested sheet steel cylinder form that remains as part of the finished pipe.

All concrete pipe is cured at ambient conditions or spray cured, until it reaches a certain green strength, at which time it is cured by low pressure steam either in a kiln or in a chamber

constructed around the pipe. For pipe produced by the packerhead method, the forms are usually removed before steam curing, while for the vertical cast and spin casting methods the forms usually remain on the pipe during curing. In all cases except reinforced concrete pressure pipe, a form release oil is used. In the production of reinforced concrete pressure pipe additional processes include: hydraulic testing of the cylinder, wrapping the cured pipe with high strength steel wire, and coating the steel wire wrap with concrete grout. There is no waste water from atmospheric curing. Waste water from steam curing and spray curing contains suspended solids, oil and grease and has a high pH.

Precast Concrete Products. Precast concrete products include: roof and floor units (slabs and tile; joints and beams); architectural wall panels; pilings, posts and poles; cast stone (products for architectural purposes); prefabricated building systems; other precast construction prod.; burial vaults and boxes; silo staves; septic tanks; dry-mixed concrete materials (e.g., Sakrete); other precast (e.g., laundry tubs).

Simple precast concrete products are produced by pouring the concrete from a mixer into steel forms, and allowing the product to cure, either at ambient conditions, with low pressure steam, or with a water spray. Curing takes place in two steps, first with the form on then off. The second curing step usually takes place at ambient conditions. Reinforced concrete products contain steel structural members to provide increased strength.

Precast architectural wall panels are generally finished to produce a decorative surface of exposed aggregate. For the most common production method, a retarder is spread in the form bottom, reinforcing steel is placed in the form, and the concrete mix is cast. When the concrete has set and the form is removed, the surface is washed with a weak acid solution, sandblasted, or washed with high pressure water to clean away the unset surface cement and expose the course aggregate. The panel is then cured completely in a storage yard.

Prestressed Concrete Products. Prestressed concrete products are chiefly used as structural and architectural components and include: single tees, double tees, and channels; piling, bearing piles, and sheet piles; bridge beams; solid and hollow cored slabs and panels; other prestressed products (e.g., arches); joist, girders, and beams (other than bridge beams).

Prestressed concrete products are produced in similar fashion as precast reinforced concrete products with the substitution of steel cables under tension instead of steel rods for reinforcement. Prestressed concrete products may be either pretensioned or post-tensioned. The wastewater discharge from Concrete Products, Except Block and Brick facilities includes transport bucket and central mixer washout, form wash-off, condensate from steam curing, spray curing wastewater, surface finishing water, spin cast wash-water, pre-wetting of imbedded pressure pipe, stormwater, boiler blowdown, and miscellaneous equipment wash-off. Pollutants in the wastewater discharge include suspended solids, oil and grease, and high pH.

SIC 3271 - Concrete Block and Brick

Concrete block and brick are classified into the following products: structural block produced with lightweight aggregate such as cinder, expanded shale, pumice or other materials; structural block produced with heavyweight aggregate such as sand, gravel, crushed stone or other materials; decorative block - such as screen block, split block, slump block and shadowal block; and concrete brick.

The manufacturing process for concrete block and brick consists of mixing, forming, and curing. Typically, the aggregate, cement and water are weighed and mixed in batches of about four cubic yards in a rotary mixer. The concrete mix used for production of block and brick contains less water than ready-mixed concrete. The type of aggregate being used will determine if a lightweight or heavyweight product is produced. Color may be added to the mix to produce decorative block. The mixed concrete is fed into an automatic block molding machine, where the moist mix is rammed, pressed or vibrated into the desired shape. Following forming, the material is stacked onto iron framework cars and allowed to cure. To produce a structural high-strength block within a reasonable time period, the block must be cured under moist conditions. The three basic methods of curing are: (1) atmospheric; (2) low pressure steam; and (3) autoclave or high pressure steam.

Atmospheric curing produces a lower strength block than the other two methods of curing. Atmospheric curing uses ambient heat and humidity, and heat of hydration to cure the block, and also includes curing within enclosures at ambient conditions. Curing usually takes place for about four hours. There are no additional wastewaters produced from this curing process. In the low pressure steam method, the loaded curing cars are placed into a chamber or kiln where low pressure steam less than 150 psi is injected from perforated pipes for approximately 8-10 hours, depending on mix conditions, user specifications, and ambient temperature. Waste water from this curing method consists primarily of steam condensate, which contains some suspended solids, dissolved solids, COD, oil and grease and a high pH. The low pressure steam is generated by a boiler which requires periodic blowdown.

The autoclave or high pressure steam curing method produces a higher strength block with less shrinkage in less time than the low pressure steam curing method. For this method the curing cars are loaded in a large horizontal, cylindrically shaped autoclave where high pressure steam (greater than 150 psi) is injected or convected. After a curing cycle of about 8 hours the steam is released to the atmosphere and the blocks are removed and stored. An alternative method of steam production uses a hot oil convection method, where water is placed in a trough within the autoclave and hot oil heats the water into steam. Following curing, the autoclave is allowed to cool and a portion of the steam condenses back into the trough. Periodically the trough water is discharged because the alkalinity, due to the pickup of calcium oxide, makes the water corrosive to the steel racks of the curing cars. Wastewater discharges from the autoclave curing process can include boiler blowdown, autoclave blowdown condensate, and autoclave purge. Pollutants include suspended solids, COD, oil and grease, and high pH, resulting from autoclave blowdown condensate and in the convection process, autoclave purge.

The primary source of wastewater from concrete block and brick facilities is equipment wash-off, including: delivery trucks, conveyor belts, transport buckets, central mixers and forms. Generally only suspended solids are a problem in this wastewater and can be handled with simple settling. Other potential sources of wastewater include: accidental spill wash-down and stormwater runoff. Spill wash-down and stormwater runoff can be handled with other wash-waters.

General Permit Coverage and Registration

The general permit has a term of 5 years. Every authorization under this general permit will expire at the same time (December 31, 2028). All existing permittees will receive renewed coverage on

the same date (January 1, 2024), provided a complete registration statement has been filed 60 days prior to the general permit's prior expiration date (December 31, 2023).

The registration asks the question if a stormwater pollution prevention plan (SWPPP) has been prepared. The registration statement instructs the new applicants to have a SWPPP before commencement of discharge and existing permittees to update and implement revisions to the SWPPP within 60 days of coverage. The registration also asks for representative/substantially identical outfall information to be submitted with the registration. One of the questions to support representative outfalls asks for monitoring data, if available. The permittees that discharge to an MS4 are required to submit notification to the MS4. A copy of a letter or email to the MS4 will suffice.The registration also asks for State Corporation Commission entity identification number. Also portable concrete plants must submit a closure plan with the registration in order to be approved for coverage. The items needed in a closure plan include treatment, removal and final disposition of residual wastewater, contaminated stormwater held at the facility and solids, fate of structures, a removal plan for all exposed industrial materials and description of the stabilization of land in which they were stored or placed.

All persons desiring to be covered by this general permit must register with the Department by filing a registration statement and applicable fees ($600). The registration statement shall be submitted and a notification of coverage issued prior to any discharges or other activities for which this permit is required.

Concrete Products facilities that are discharging process wastewater or stormwater associated with industrial activity to surface waters on the effective date of this general permit and which have not been issued an individual VPDES permit, are required to submit the registration statement 60 days prior to expiration. Existing operations with individual VPDES permits that wish to seek coverage under the proposed general permit would have to file a registration statement at least 240 days prior to the expiration date of the individual VPDES permit. This gives staff some time to decide whether they can have coverage and if not, the permittee can still meet the 180 day before expiration VPDES application requirement. For all new concrete products facilities that will have discharges of process wastewater or stormwater associated with industrial activity and that will begin activities after the effective date of this permit, the registration statement shall be filed at least 60 days prior to the commencement of operation of the concrete plant unless a different date is approved by the department.

Any permittee 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. Antibacksliding will be considered prior to granting the 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 procedures. This general permit will not apply to any new or increased discharge that will result in significant effects to the receiving waters. The determination is made in accordance with the State Water Control Board's Antidegradation Policy contained in the Virginia Water Quality Standards, 9VAC25-260-30.

All facilities that the Department believes are eligible for coverage under this general permit will be authorized to discharge under the terms and conditions of the permit after a complete registration statement is submitted, the applicable permit fee is paid and the Department sends a copy of the general permit to the applicant. If this general permit is inappropriate, the applicant

will be so notified and the requirement that an individual permit or alternate general permit is needed will remain in effect.

Part I A - Effluent Limitations, Monitoring Requirements and Their Basis

The parameters to be limited in process wastewater discharges are pH, total suspended solids (TSS) and total petroleum hydrocarbons (TPH). These parameters were chosen based on the evaluation of 1992-1996 DMR data for the issuance of the first general 'ready-mix' permit in 1998. TPH, is a pollutant of concern when vehicle or equipment degreasing wastewater are commingled with the process wastewater. Specific rationale for all parameters and when they apply is discussed below.

1. Discharge of process wastewater which may contain input from the vehicle/equipment maintenance activities and may be commingled stormwater runoff:

Parameter	Limitation	Frequency[3]
Flow	No limit, estimate and report average and maximum values	
Total Suspended Solids	30 mg/l avg, 60 mg/l max.	
pH	6.0 minimum, 9.0 maximum[1]	
Total Petroleum Hydrocarbons[2]	15 mg/l maximum	

(1) Where the Water Quality Standards (9 VAC 25-260) establish alternate standards for pH in the waters receiving the discharge, those standards shall be the maximum and minimum effluent limitations.

(2) Total Petroleum Hydrocarbons limits are only to be placed in the permit when vehicle degreasing occurs on site. Vehicle degreasing or equipment degreasing has been clearly defined to mean the washing or steam cleaning of engines or other drive components of a vehicle or equipment in which the purpose is to degrease and clean petroleum products. It does not mean washing sediment or concrete off trucks. Total Petroleum Hydrocarbons shall be analyzed using the EPA SW-846 Methods 8015B (1996), 8015C (2000 or 2007), 8015D (2003) for diesel range organics or 40 CFR 136.

A QL of 5.0 mg/L has been established for TPH. The QLs are consistent with the VPDES individual and general permit program QLs.

(3) All grab samples are collected quarterly.

TSS

Although there are no water quality standards or federal effluent guidelines for total suspended solids for the industrial category covered by the general permit, the Department has decided that such limits are necessary for the protection of the receiving waters. The total suspended solids limitations are established at levels which, based on the Department's experience with individual VPDES permits, are achievable with conventional treatment technology and which will prevent the build-up of solids on the bottoms of receiving waters.

The pH limitation is based upon Virginia's Water Quality Standards (9VAC25-260). Where alternate standards for pH are established in the Water Quality Standards, those standards may be used. Because the facility may discharge into the receiving water at zero low flow conditions, the limitation of the water quality standard on the effluent is appropriate.

TPH

Due to the concern that process wastewater generated from engine steam cleaning during vehicle or equipment degreasing will carry petroleum-based pollutants (diesel range organics), this

general permit proposes a TPH limitation of 15 mg/l for a discharge with such input. The TPH maximum limitation is based on the ability of simple oil/water separator equipment. Historically, oil and grease (O&G) limits have been placed in the VPDES permits for many facilities that handle petroleum products or where contamination by petroleum products is of concern. The O&G limits now are expressed as Total Petroleum Hydrocarbons (TPH) instead since there is little reason to expect fatty matter from plant and animal sources. Based on the recommendation provided by Guidance Memo # 96-002, a one to one ratio between O&G and TPH is assumed. The TPH testing protocols were updated during the 2003 general permit issuance, in 2008 and 2013.

All limits should be considered as two significant digits for compliance purposes as per special condition Part I.B.15.b.(4) and in accordance with Guidance Memo No. 06-2016 Significant Figures for Discharge Monitoring Reports.

2. Discharge of stormwater which does not combine with other process:

Parameter	Benchmark Monitoring
Flow	No limit, estimate volume (MG) discharged during entire monitored storm event
Total Suspended Solids	100 mg/l
Total pH	6.0 – 9.0 standard units

The permit states that should the benchmark monitoring for TSS exceed 100 mg/l maximum or the pH fall outside of the range of 6.0-9.0 standard units, the permittee shall evaluate the overall effectiveness of the SWPPP in controlling the discharge of pollutants to receiving waters. Benchmark concentration values are not effluent limitations. Exceedance of a benchmark concentration does not constitute a violation of this permit and does not indicate that violation of a water quality standard has occurred; however, it does signal that modifications to the SWPPP are necessary, unless justification is provided in the routine facility inspection (Part II D e). The SWPPP does not have to be modified if justification is provided. For example, if all appropriate BMPs are in place and maintained correctly, that would be sufficient justification to indicate that the exceedence was an anomaly and additional modification of the SWPP is unnecessary.

Monitoring is required once per calendar year by grab sample, collected during the first thirty minutes of the discharge. If during the first thirty minutes it was impracticable, then a grab sample shall be taken during the first three hours of discharge.

Guidance on the conduct of stormwater sampling is provided by the EPA in the document titled Industrial Stormwater Montioring and Sampling /Guide, EPA832-B-09-003.

Samples taken in compliance with the monitoring requirements specified in Part II A (Stormwater Management) shall be taken at the outfall location(s) identified in the approved registration statement. In the cases where discharges to surface waters are through the municipal separate storm sewer systems, samples should be taken at the point where the discharge enters the municipal separate storm sewer system.

The monitoring requirements for stormwater are consistent with the monitoring requirements of the original stormwater general permits (1994) which were based on EPA's Baseline Industrial Activity Storm Water General Permit (1992). Historically, oil and grease (O&G) limits have been placed in the VPDES permits for many facilities that handle petroleum products or where contamination by petroleum products is of concern. The O&G monitoring requirement from 1998

- 2008 was expressed as Total Petroleum Hydrocarbons (TPH) instead of O&G since there is little reason to expect fatty matter from plant and animal sources. Based on the recommendation provided by Guidance Memo # 96-002, a one to one ratio between O&G and TPH was assumed. In 2013, the TPH limit was removed from stormwater monitoring. Total petroleum hydrocarbons are not suggested for monitoring in this type of industrial stormwater by the EPA per the NPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP), 2015. Also, levels consistently have remained undetectable or very low over the years. In 2003, in order to maintain consistency with the EPA NPDES MSGP, total recoverable iron was added and chemical oxygen demand deleted from the parameter list for stormwater discharges, In 2013, the total recoverable iron limit was removed from stormwater monitoring primarily because iron is naturally high in soils in Virginia and expected to be high in stormwater. Also, there is no feasible alternative to remove iron in stormwater when it is naturally occurring (except to the amount the existing technology removes solids and solids are limited under the permit). DEQ has collected iron data from stormwater since 1998 and has no reason to continue to monitor. The DEQ does not think that total iron is an appropriate benchmark for Virginia. Other surrounding states (Maryland and North Carolina) do not use iron as a benchmark. The 2021 EPA NPDES MSGP no longer includes iron as a benchmark for this industrial sector (sector E). TSS is a more appropriate benchmark to determine SWPPP success.

Quarterly visual monitoring was added in 2003. Specific storm event data is required to be submitted with the DMR.

Part I B - Special Conditions

1. Restriction of floating solids, visible foam, solids deposition or oil sheen.
This condition is required to implement the Water Quality Standards (9VAC25-260-20). Restriction of oil sheen is to ensure that the petroleum products that are on the site do not appear in the stream. Accidental spills of petroleum products are cleaned up immediately so as not to enter surface waters as per special condition #3. If vehicle degreasing is occurring on the site then those process water discharges have total petroleum hydrocarbon limits. This addition is just an added measure of protection and something the inspector can look for to ensure proper BMPs, clean up measures or treatment is occurring.

Restriction of solids deposition in surface water in the vicinity of the outfall as a result of the industrial activity. This requirement is due to concerns from staff of concrete and raw product residue entering the stream at some operations. Improved housekeeping on site should maintain this requirement.

2. Materials handling/storage
Raw materials and products are to be stored and handled so that any untreated discharge of pollutants to surface waters is prevented. This includes leftover wet concrete that is returned to the site. This wet concrete should be disposed of in an area that will collect any water or stormwater that will be in contact with the wet concrete.

3. Vehicles and equipment maintenance
Vehicles and equipment used in the industrial activity are to be operated and maintained in a manner that prevents pollution of surface or ground waters. This special condition addresses best management practices for activities associated with vehicle maintenance that take place at a typical concrete products facility.

4. Restrictions of washing activities
All washdown and washout of trucks, mixers, transport buckets, forms or other equipment is restricted to the designated washdown and washout areas. Wastewater generated in this area is to be recycled or collected amd treated to meet the limits in Part I A prior to discharge. The storage of raw materials and washing of trucks and other equipment are necessary aspects of concrete products facilities. These activities are allowed by the general permit as long as they are handled in a way that provides for treatment of any wastewater prior to discharge. This special condition is consistent with EPA's MSGP for "concrete products facilities" for industrial stormwater and applies to all equipment that is washed out of product (not just trucks).

5. Restrictions of waste concrete reclamation
Waste concrete is wet concrete that returns to the plant is either reclaimed at the truck washing facility or it is unloaded on the plant site for drying and later reclamation for off-site fill or road base. The general permit restricts this practice to a designated area and prohibits any untreated discharge from it to surface waters. Until this concrete is dry, this wet waste concrete should be in a designated area that drains to the settling basins, the wet concrete is completely contained and cannot reach the receiving stream (even during normal (not 25-year-24 hour storm event) rain events) or the facility operates in a 'no-discharge' mode (see special condition 11 below). The same requirement applies to the dredged solids from the settling basins.

6. Recycle and Reuse
Wastewater should be reused or recycled whenever feasible. This is not a requirement and is a general suggestion seen in other general permits. The industry can reuse settled wastewater for dust suppression.

7. Prohibition of sewage discharge
The discharge of sewage is not permitted under the draft general permit. The limits of the permit do not address pollutants of concern in sewage.

8. Operation and maintenance (O&M) manual requirement
The permittee is required to develop and implement an O&M Manual which includes procedures and practices for the mitigation of pollutant discharges and for the protection of state waters from the facility's operations. This will document procedures for plant personnel so that the other special conditions can be met. It specifies operations and maintenance practices for process wastewater treatment units and chemical and material storage areas, methods for estimating process wastewater flow, process wastewater solids management and disposal procedures, temporary and long-term facility closure plans, testing requirements and procedures, recordkeeping and reporting requirements and duties and roles of responsible officials. Facilities shall develop or review and update, as appropriate the O&M manual within 180 days of coverage and review annually thereafter. In 2013, the O&M special condition was reformatted, review periods made annual and specific items required for closure plans were added. These specific items include (i) treatment, removal, and final disposition of residual wastewater, contaminated stormwater held at the facility, and solids; (ii) fate of structures; (iii) a removal plan for all exposed industrial materials; and (iv) description of the stabilization of land in which they were stored or placed. For the 2019 permit, the O&M manual was amended to allow O&M requirements inapplicable to process wastewater units to be included in the SWPPP. This was in response to public comment for facilities that only have stormwater discharges.

9. Notification of municipal separate storm sewer system
If the facility discharges through a municipal separate storm sewer system (MS4) to surface waters, the permittee must notify the owner of the storm sewer of the presence of the discharge and provide a copy of such notice to DEQ at the time of registration.

10. Freeboard requirement
The purpose of this special condition is to prevent overflow. A minimum freeboard of one foot for the basins and lagoons is required to be maintained except during a 72-hour transition period after a measurable rainfall event. The transition period will provide sufficient flexibility for proper operation and maintenance of the facility. During the transition period, no discharge from the basins and lagoons shall occur unless it is in accordance with this permit. Within 72 hours after a measurable rainfall event, the freeboard must return to the minimum freeboard of one foot. Where basins are operated in a series mode of operation, the one foot freeboard requirement for the upper basins may be waived provided the final basin will maintain the freeboard requirements of this special condition. This reflects existing practice and design of these basins. It is deemed reasonable and protective since the additional treatment provided by series basins is preferred. A description of how the permittee will manage the facility to adhere to one foot of freeboard in included in the O&M manual. The daily inspection requirement is only required if the one-foot freeboard is not restored by the end of the 72-hour transition period. The continuous daily log requirement was removed in 2019 in response to public comment.

11. Requirement for "no discharge" mode operation
In the cases where either the process wastewater which may be commingled with stormwater runoff, or the stormwater associated with industrial activity are retained in a treatment/storage system which operates in a "no-discharge" mode, this general permit prohibits any discharge of pollutants to surface waters from such system except in the case of a storm event which is greater than a 25-year, 24 hour storm event. This special condition only applies to those operations which the permittee had designated as "no-discharge" in the accepted registration statement. If a discharge does occur, the permittee is required to report an unusual or extraordinary discharge per Part III H (Conditions applicable to all permits). This reporting reminder was added in the 2019 reissuance and is the same reporting required in the non-metallic mineral mining general permit (9VAC25-190) for “no-discharge” facilities. The recognition of “no discharge” facilities was included in this permit because prior to the VPDES discharge general permit in 1993, many facilities were covered under a VPA “no discharge” certificate. These facilities often still have stormwater discharges.

12. Notification levels
The permittee is required to report the discharge of any toxic pollutant from any activity that has occurred or will occur when that discharge, either on routine or non-routine basis, will exceed the highest of the listed notification levels. This condition is required by the VPDES Permit Regulation (9VAC25-31-200 A).

13. Liner requirements for the settling basins
In order to comply with the statutory mandate (State Water Control Law §62.1-44.15:5.2), House Bill 972 passed by the 1998 Session of the General Assembly and effective July 1, 1998, all settling basins, used for treatment and control of process wastewater and commingled stormwater that were constructed on or after February 2, 1998, are required to be lined with concrete or any other impermeable materials prior to commencing operation. The law also states that the general permit may include a requirement that settling basins built before

February 2, 1998 may include the same requirement. Regardless of date of construction, all settling basins used for treatment and control of process wastewater or process wastewater commingled with stormwater that are expanded or dewatered for major structural repairs shall be lined with concrete or any other impermeable materials. Major structural repairs include e.g. construction activites that disturb the bottom or sides of the basin.

Concrete is the liner material of choice (as opposed to clay, for example) because settling basins are routinely shoveled out with heavy equipment. This requirement is not intended for basins constructed as best management practices for stormwater.

14. Reuse of treated (settled) wastewater for dust control or spraying stockpiles
Reuse of settled wastewater for dust suppression or spraying stockpiles is allowed and must be carried out as a best management practice and not a wastewater disposal method. This condition is to ensure that reuse of treated wastewater on site for these purposes is managed properly so that none of the water enters surface waters without being treated first. Much of the reused wastewater is adsorbed and evaporated but some may enter the treatment system. Dust suppression must not be carried out in a rain event that results in a discharge from the site as that is unnessessary and more likely to result in a discharge of the untreated water.

15. Compliance reporting
In accordance with Guidance Memo#00-2001, Amendment #3 and Guidance Memo 06-2016 (Significant Figures for Discharge Monitoring Reports, this special condition identifies the quantification levels for TPH and prescribes data handling protocols for the purposes of compliance reporting. In accordance with Guidance Memo 06-2016, the condition ensures that the permittee reports discharge monitoring in two significant digits. The QL is defined as the lowest concentration used to calibrate a measurement system in accordance with the procedures published for the test method. This is the definition of QL used in all permits.

16. TMDL Requirements
EPA does not want DEQ to authorize general permits that are not in conformance with any applicable TMDL. This was a requirement added to the regulation in section 50 'Authorization to Discharge.' Staff thought it important to repeat as a special condition in the permit itself as follows:

"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 assumptions and requirements of the TMDL. The department shall provide written notification to the owner that a facility is subject to the TMDL rquirements. If the TMDL establishes a numeric wasteload allocation that applies to discharges from the facility, the owner shall perform monitoring in accordance with 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."
For most TMDLs, the general permits are considered in aggregate and are not given individual waste load allocations. Currently, the concrete facilties with wasteload allocations are for sediment and already have TSS monitoring in the permit.

17. Adding and deleting outfalls.
This is a special condition that allows for adding or deleting outfalls. The permittee must update the O&M manual and the SWPPP within 60 days of the change. This happens occasionally and

staff wanted a clear way to do this in the permit. The DEQ 2009 industrial stormwater general permit has similar language.

18. Terminations
This special condition describes how terminations of a general permit will be implemented because permittees need to know this is an option available to them.

19. Temporary facility closures
This is a special condition was added that describes how temporary facility closures at inactive and unstaffed sites will be implemented. Inactive site waivers are recognized in EPAs MSGP. In 2019, this special condition was amended to require an annual routine facility inspection to correspond with requirements in the EPA MSGP. The special condition was also clarified to state the stormwater management requiements that are waived at an inactive stie (effluent, benchmark and visual monitoring and routine facility inpsections (except for once per year)).

20. Water Quality Standards
This is a general requirement that *"The discharges authorized by this permit shall be controlled as necessary to meet applicable water quality standards."* This matches similar language going into other general permits.

21. Responsibilities Other Laws
This is a special condition that reminds the permittee that they must still comply with other laws. "*Approval for coverage under this general permit does not relieve any owner of the responsibility to comply with any other federal, state or local statute, ordinance or regulation*." This requirement is part of the regulation at section 50 C and staff thought it should be repeated in the permit to remind the permittee of the responsibility.

Part II Stormwater Management
This section is generally based on the 2019 VPDES Industrial Stormwater General Permit (ISW GP) and the 2021 EPA's Multi-Sector General Permit (MSGP). There are a few differences based on TAC consensus.

Part II A Monitoring requirements
This provides instructions for quarterly visual monitoring, benchmark monitoring, monitoring instructions and corrective actions.

Visual examination of these areas will provide a useful and inexpensive means for permittees to evaluate the effectiveness of their stormwater pollution prevention plans and make any necessary modifications in housekeeping to address the results of the visual monitoring.

Benchmark monitoring is a means by which to measure the concentration of a pollutant in a stormwater discharge. Analytical results are quantitative and therefore can be used to compare results from year to year and to quantify the improvement in stormwater quality attributable to the stormwater pollution prevention plan, 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.

Monitoring Instructions are typical for stormwater sampling. An interval from the previous storm event of 72-hours is required to allow the industrial site to operate normally, have industrial

pollutants be deposited on surfaces and give the stormwater controls opportunity to act properly. The 3-hour collection event is in order to capture the “first flush” of pollutants coming off the site in order to identify if the stormwater controls are working properly to capture the industrial pollutants that may have been deposited on impervious surfaces.

Corrective actions is included in the permit for actions the permittee must take if benchmark monitoring concentration values are exceeded, if inspections turn up a deficiency at the facility and modifications to the stormwater control measures are necessary to meet the permit requirements 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 applicable water quality standards. The corrective action section stipulates time limits for implementing actions to remedy deficiencies. These time frames are not grace periods within which an operator is relieved of any liability for a permit violation. If the original inadequacy constitutes a permit violation, then that violation is not deferred by the time frame the permit has allotted for corrective action. The time limits are those that DEQ considers reasonable for making the necessary repairs or modifications, and are included specifically so that inadequacies are not allowed to persist indefinitely. Failure to take the necessary corrective action within the stipulated time limit could constitute an additional and independent permit violation.

Part II B Representative Outfalls – substantially identical outfalls
Representative outfalls are decided and approved with the registration statement and will be identified on e-DMR.

Part II C Releases of hazardous substances or oil in excess of reportable quantities
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 stormwater pollution prevention plan 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.

Part II D Stormwater Pollution Prevention Plans (SWPPP)
The SWPPP is basically a set of best management practices used to eliminate or reduce pollutants in stormwater from reaching surface waters.

1. Deadlines. For an existing facility, revisions to the SWPPP shall be done within 60 days of coverage under the permit or ownership change. For a new discharge, the plan shall be prepared 60 days prior to commencing operations and implementing the SWPPP prior to a stormwater discharge. A later date may be established by the department.

2. Contents of the SWPPP. The SWPPP contains the pollution prevention team, site description (including a map), summary of potential pollutants sources (including activities, pollutants, spills and leaks and sampling data), stormwater controls (including control measure considerations, good housekeeping, preventive maintenance, spill prevention and response procedures, eliminating and minimizing exposure implementation, employee training, sediment and erosion control and management of runoff) and routine facility inspections.

Pollution prevention team is the first step in the process of developing and implementing a stormwater pollution prevention plan. A qualified team of individuals needs to be responsible for developing the plan and assisting the facility or plant manager in its implementation.

Site descriptions and a site map assists permittees in identifying issues and setting priorities for the selection, design and implementation of measures taken to control stormwater pollution and in identifying potential changes in materials, materials management practices, or site features over time. It is also important for training and executing proper inspections.

Summary of potential pollutant sources is a good narrative method to see the risk potential that sources of pollution pose to stormwater quality.

Good housekeeping is important because it involves using practical and cost-effective methods to identify ways to maintain a clean and orderly facility and keep contaminants out of surface waters and storm sewers.

Preventative maintenance involves continuous maintenance of stormwater management devices and other equipment and systems to avoid breakdowns so stormwater pollution prevention is likely to be continuous and effective at all times.

Spill prevention and response procedures can be used to eliminate unexpected stormwater pollution whan implemented properly and timely. 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.

Eliminating and minimizing exposure is important in situations where it is feasible to protect industrial materials by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, or run-off. These practices may eliminate stormwater pollution entirely at the site.

Employee training is important because employees should clearly understand the proper procedures and requirements and have the equipment necessary to implement a successful stormwater management program.

Sediment and erosion controls are important for 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. Also flow velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel if flows create erosive conditions.

Management of runoff is important to direct the flow of stormwater away from areas of exposed industrial materials or pollutant sources. Permittees must divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff. Such practices can also divert polluted runoff to natural areas or locations where other kinds of treatment occurs. Examples to do this are us of vegetative swales, collection and reuse of stormwater, inlet controls, snow management, infiltration devices, and wet detention/retention basins.

Routine facility inspections are to ensure that control measures (e.g., BMPs) are operating and properly maintained on a regular basis and to actively observe the effectiveness of control

measures during rain events.

Part II E Maintenance
The permittee must maintain all control measures identified in the plan in effective operating condition. The maintainence procedures and a schedule for maintainence and back up practices shall be included. If the facility site inspections identify BMPs that are not operating effectively, the permittee must perform maintenance before the next anticipated storm event, or as necessary to maintain the continued effectiveness of stormwater controls.

Parti II F Nonstormwater discharges
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. Discharges from the site must be evaluated for unauthorized discharges annually. The evaluation documentation includes date, description of the evaluation criteria, list of outfalls or onsite drainage points observed, results of any actions taken to eliminate unauthorized discharges. The list of allowable nonstormwater discharges is also in this subsection.

Part II G Signature and SWPPP review
Part II H Maintaining an Updated SWPPP
Signature requirements are a standard permit condition pursuant to 9VAC25-31-110 and 40 CFR 122.22 and to ensure the decision makers are aware of SWPPP modifications. Reviews and a schedule and are necessary to keep the SWPPP updated in a timely fashion.

Part III Conditions Applicable to All Permits
This section contains language fromt the permit regulation at 9VAC25-31-190 for conditions applicable to all permits. Differences are described below.

Part III B - Records retention is 3 years from permit expiration or termination rather than from the date of sampling. This makes more sense for documents like SWPPPs.

Part III C - Reporting monitoring results is amended to provided discharge monitoring electronic reporting requirements to comply with 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 and reports must be submitted electronically.

Part III M – Duty to reapply is changed to 60 days before expiration to match the registration statement requirements in 9VAC25-193-60.

Part III Y – Transfer of permits allows for transfer of permits within 30 days of the transfer of the title instead of 30 days prior to the transfer. Permittees are rarely able to notify the department 30 days prior to a transfer and this is a reasonable allowance for general permits.

Throughout Part III, references to “revoke and reissue” and “modification” have been removed because these permit actions do not apply to general permit coverage. Also references to “permit” and “applications” are replaced with “permit coverage” and “registrations.”

Office of Regulatory Management

Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-193
VAC Chapter title(s)	9VAC25-193- Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Concrete Products Facilities
Action title	Reissuance of a general permit for the discharge of effluent resulting from manufacturing of concrete products and ready-mix concrete.
Date this document prepared	October 5, 2022

Cost Benefit Analysis

Table 1a must be completed for all actions. Tables 1b and 1c must be completed for actions (or portions thereof) where the agency is exercising discretion, including those where some of the changes are mandated by state or federal law or regulation. Tables 1b and 1c are not needed if **all** changes are mandated, and the agency is not exercising any discretion. In that case, enter a statement to that effect.

(1) Direct Costs & Benefits: Identify all specific, direct economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (A direct impact is one that affects entities regulated by the agency and which directly results from the regulatory change itself, without any intervening steps or effects. For example, the direct impact of a regulatory fee change is the change in costs for these regulated entities.) When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo. One bullet has been provided, add additional bullets as needed.

(2) Quantitative Factors:
  (a) Enter estimated dollar value of total (overall) direct costs described above.
  (b) Enter estimated dollar value of total (overall) direct benefits described above.
  (c) Enter the present value of the direct costs based on the worksheet.
  (d) Enter the present value of the direct benefits based on the worksheet.

(3) Benefits-Costs Ratio: Calculate d divided by c OR enter it from the worksheet.

(4) Net Benefit: Calculate d minus c OR enter it from the worksheet.

(5) Indirect Costs & Benefits: Identify all specific, indirect economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (An indirect impact is one that results from responses to the regulatory change, but which are not directly required by the regulation. Indirect impacts of a regulatory fee change on regulated entities could include a change in the prices they charge, changes in their operating procedures or employment levels, or decisions to enter or exit the regulated profession or market. Indirect impacts also include responses by other entities that have close economic ties to the regulated

entities, such as suppliers or partners.) If there are no indirect costs or benefits, include a specific statement to that effect.

(6) Information Sources: Describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.

(7) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

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)

(1) Direct Costs & Benefits	• **Rearranged the stormwater management requirements, added corrective actions, added an additional stormwater control measure to consider and added an additional stormwater control measure to implement (eliminate and minimize exposure of industrial areas).** Direct Costs: No direct economic cost to regulated entities expected beyond the additional administrative time permittees may spend to address the new control measures and rearrange the permit citations in their stormwater pollution prevention. It is not expected that permittees will need to install or construct additional control measures due to the new requirements. The new control measures add more tools in their toolbox to control stormwater pollution. Direct Benefits: No direct economic benefit to regulated entities. • **Added TMDL monitoring where a TMDL has been approved prior to the term of this permit and a numeric wasteload allocation has been assigned to that facility.** Direct Costs: There are currently no TMDLs approved prior to the term of this permit where a numeric wasteload allocation has been assigned with the exception of sediment TMDLs. This does not add additional direct costs because total suspended solids are the pollutant of concern in sediment TMDLs and these facilities are already limited for and have controls installed to meet these TMDL

	requirement total suspended solids for process water and stormwater. Direct Benefits: No direct economic benefit to regulated entities. There are currently 225 concrete products facilities covered under this permit. Each one would be subject to the changes described herein.

(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) See above	(c) n/a	
Direct Benefits	(b) See above	(d) n/a	
(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a

(5) Indirect Costs & Benefits	There may be operating procedures that change as a result of the stormwater amendments.
(6) Information Sources	n/a
(7) Optional	

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)
This table addresses current requirements and the implications of not making any changes. In other words, describe the costs and benefits of maintaining the current regulatory requirements as is.

(1) Direct Costs & Benefits	Direct Costs: Maintaining the current requirements would have no direct economic cost to regulated entities. Direct Benefits: Maintaining the current requirements would have no direct economic benefits to the regulated entities.

(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) None	(c) n/a	
Direct Benefits	(b) None	(d) n/a	
(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a
(5) Indirect Costs & Benefits	No indirect costs or benefits under the status quo.		
(6) Information Sources			
(7) Optional			

Table 1c: Costs and Benefits under an Alternative Approach

This table addresses an alternative approach to accomplishing the objectives with different requirements. These alternative approaches may include the use of reasonably available alternatives in lieu of regulation, or information disclosure requirements or performance standards instead of regulatory mandates.

(1) Direct Costs & Benefits	**Regulating industrial discharges to state waters through the reissuance of a general permit regulation 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 permit. The permit fee for owners to obtain coverage under this general permit is $600. If this general permit were not available, these owners 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 2,388 would also apply (total of 11,940 per permittee for a 5-year permit term). Additionally, a public notice would need to be published in a local newspaper twice at each reissuance. This is estimated at $900 each 5 years.** **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.**

(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) See above	(c) n/a	
Direct Benefits	(b) See above	(d) n/a	
(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a
(5) Indirect Costs & Benefits	n/a		
(6) Information Sources	n/a		
(7) Optional	n/a		

Impact on Local Partners

(1) Describe the direct costs and benefits (as defined on page 1) for local partners in terms of real monetary costs and FTEs. Local partners include local or tribal governments, school divisions, or other local or regional authorities, boards, or commissions. If local partners are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of total (overall) direct costs described above.
  (b) Enter estimated dollar value of total (overall) direct benefits described above.
(3) Indirect Costs & Benefits: Describe any indirect benefits and costs (as defined on page 1) for local partners that are associated with all significant changes. If there are no indirect costs or benefits, include a specific statement to that effect.
(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.
(5) Assistance: Identify the amount and source of assistance provided for compliance in both funding and training or other technical implementation assistance.
(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 2: Impact on Local Partners

(1) Direct Costs & Benefits	There are no direct costs and benefits for local partners in terms of real monetary costs and FTEs. This general permit coverage applies to private industries.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) n/a
(3) Indirect Costs & Benefits	n/a
(4) Information Sources	n/a
(5) Assistance	n/a
(6) Optional	

Economic Impacts on Families

(1) Describe the direct costs and benefits (as defined on page 1) to a typical family of three (average family size in Virginia according to the U. S. Census) arising from any proposed regulatory changes that would affect the costs of food, energy, housing, transportation, healthcare, and education. If families are not affected, include a specific statement to that effect and a brief explanation of the rationale.

(2) Quantitative Factors:
   (a) Enter estimated dollar value of direct costs.
   (b) Enter estimated dollar value of direct benefits.

(3) Indirect Costs & Benefits: Describe any indirect costs and benefits (as defined on page 1) to a typical family of three that are most likely to result from the proposed changes.

(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.

(5) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 3: Impact on Families

(1) Direct Costs & Benefits	There is no potential impact of the proposed regulatory action on the institution of the family and family stability.
(2) Quantitative Factors	n/a
Direct Costs	(a) n/a
Direct Benefits	(b) n/a
(3) Indirect Costs & Benefits	n/a
(4) Information Sources	n/a
(5) Optional	

Impacts on Small Businesses

(1) Describe the direct costs and benefits (as defined on page 1) for small businesses. For purposes of this analysis, "small business" means the same as that term is defined in § 2.2-4007.1. If small businesses are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of direct costs.
  (b) Enter estimated dollar value of direct benefits.
(3) Indirect Costs & Benefits: Describe the indirect benefits and costs (as defined on page 1) for small businesses that are most likely to result from the proposed changes.
(4) Alternatives: Add a qualitative discussion of any equally effective alternatives that would make the regulatory burden on small business more equitable compared to other affected business sectors, and how those alternatives were identified.
(5) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.

(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 4: Impact on Small Businesses

(1) Direct Costs & Benefits	Small businesses would have the same impact as described in 1a above. 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) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) n/a
(3) Indirect Costs & Benefits	n/a
(4) Alternatives	n/a
(5) Information Sources	n/a
(6) Optional	

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.

Table 5: Total Number of Requirements

	Number of Requirements			
Chapter number	**Initial Count**	**Additions**	**Subtractions**	**Net Change**
9VAC25-193-60 (Registration)	22	0	0	0
9VAC25-193-70 Part I (Limits and Special Conditions)	28	0	0	0
9VAC25-193-70 Part II Stormwater	22	3	0	+3
9VAC25-193-70 Part III (Conditions for All Permits)	26	0	0	0

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Travis A. Voyles
Acting Secretary of Natural and Historic Resources

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

MEMORANDUM

TO: State Water Control Board Members

DATE: November 22, 2022 (Revised October 19, 2022 Memorandum)

FROM: Derick Winn, Office of VPDES Permits

SUBJECT: Virginia Pollution Discharge Elimination System (VPDES) General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s) Amendments to 9VAC25-890 and Reissuance of the General Permit

The current VPDES General Permit Regulation for Discharges of Stormwater from Small MS4s will expire on October 31, 2023, and the regulation establishing this general permit is being amended to reissue another five-year permit. The staff is bringing this proposed regulation amendment before the State Water Control Board (Board) to request authorization to hold a public comment period and a public hearing. Draft amendments showing proposed changes to the current regulation and the Agency Town Hall background document which includes the following summary of changes:

1. Adding definitions for common MS4 terminology and modifying the high-priority facility definition.
2. Requiring electronic submission of annual reports after at least three months' notice provided by the Department in accordance with 9VAC25-31-1020.
3. Adding permit conditions specific to traditional and nontraditional MS4 permittees to address existing permit conditions that are inherently not applicable to nontraditional permittees or not practicable for nontraditional permittee implementation.
4. Requiring third phase Chesapeake Bay TMDL action plan submittal and completion of 100% of required nitrogen, phosphorus, and sediment reductions no later than 10/31/2028.
5. Requiring Chesapeake Bay TMDL implementation annual status reports be maintained as separate documents from annual reports and posted to the permittee's publically accessible stormwater webpage.

6. Requiring permittees to provide MS4 maps in a GIS shapefile format and no longer allowing pdf format to satisfy this requirement and establishing data standards for GIS shapefile submission.
7. Adding provisions allowing permittees to adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Each observation point screened may be counted as one outfall screening activity equivalent; however, at least 50% of the minimum annual screening events must include outfalls. These provisions are voluntary and permittees may choose to adopt this approach at their discretion.
8. Removing electronic BMP database requirements as these requirements are duplicative of BMP Warehouse reporting requirements.
9. Moving BMP warehouse reporting conditions to new permit section (Part III) and adding reporting requirements for ecosystem restoration projects.
10. Reformatting and integrating good housekeeping requirements:
    a. For written procedures, differentiating between the objectives each procedure shall meet and activities that require procedures.
    b. Incorporating existing good housekeeping permit conditions into written procedure requirements and improving linkage to contract language and training requirements.
    c. Removed subjectivity from SWPPP applicability, clarified SWPPP requirements, and integrated utilization of applicable written good housekeeping procedures.
11. Requiring good housekeeping written procedures for the following activities:
    a. Requiring permittees that apply anti-icing and deicing agents to update road, street, sidewalk, and parking lot procedures to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage.
    b. Requiring permittees to develop written procedures for renovation and significant exterior maintenance activities.
    c. Clarifying written good housekeeping procedures for temporary storage of landscaping materials recognizing that long-term bulk storage meets the definition of a high-priority facility.
12. Requiring DCR approval and renewal of nutrient management plans.
13. Requiring chloride TMDL Action Plans where applicable.
14. Requiring inspection and maintenance procedures for ecosystem restoration projects.
15. Removing sediment reduction requirements from the Chesapeake Bay TMDL special condition.

The technical advisory committee consisted of representatives of state and federal agencies, local governments, consultants, planning district commissions, non-profit environmental groups, and DEQ staff. The proposed regulation takes into consideration the recommendations of a technical advisory committee formed for this regulatory action with the exception of item fifteen above. The decision to remove specific sediment reduction requirements arose late in the regulation development process and is consistent with the Chesapeake Bay Program Principals' Staff Committee's August 12, 2019 final decision. DEQ has provided the TAC with the attached Proposed 9VAC25-890-40 Part II A Sediment Revision Sheet document. With the Board's authorization, DEQ is proposing to include the removal of the Part II A sediment reduction

requirements in the proposed amendments to be posted on Virginia Town Hall and recommends specifically soliciting comments on the removal of requirements in the public notice advertisement.

A Notice of Intended Regulatory Action (NOIRA) for the amendment was issued on September 27, 2021. Public comments are summarized in the attached Agency Background Document.

The Office of the Attorney General will need to review the proposed regulation for certification of statutory authority. The U.S. Environmental Protection Agency will also need to review and approve the general permit prior to final adoption.

Attachments: General Permit
Proposed 9VAC25-890-40 Part II A Sediment Revision Sheet
Draft Fact Sheet (Revised)
Agency Background Document (Town Hall)
TAC Membership List

cc: Scott Morris
Andrew Hammond
Allan Brockenbrough

The following persons will participated on the technical advisory committee for amendment of the VPDES General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (VAR04):

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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)	9VAC25-890
VAC Chapter title(s)	General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4)
Action title	Amend and Reissue the Small MS4 General Permit
Date this document prepared	October 14, 2022

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 rulemaking is proposed in order to amend and reissue the existing general permit which expires on October 31, 2023. The general permit governs local governments and state and federal agencies that discharge stormwater from municipally owned separate storm sewer systems located within the Census Urbanized Area as determined by the Bureau of Census.

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 Virginia Code § 62.1-44.15 (5a) which states, "All certificates issued by the Board under this chapter shall have fixed terms. The term of a Virginia Pollutant Discharge Elimination System permit shall not exceed five years." This general permit expires on October 31, 2023 and must be reissued in order to make coverage available for Small Municipal Separate Storm Sewer Systems discharging to surface waters. 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.

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.

APA: Administrative Process Act
BMP: Best Management Practices
CFR: Code of Federal Regulations
DCR: Department of Conservation and Recreation
DEQ: Department of Environmental Quality
EPA (U.S. EPA): United States Environmental Protection Agency
MEP: Maximum Extent practicable
MS4: Municipal Separate Storm Sewer System
NPDES: National Pollutant Discharge Elimination System
SWPPP: Stormwater Pollution Prevention Plan
TAC: Technical Advisory Committee
TMDL: Total Maximum Daily Load
USC: United States Code
VAC: Virginia Administrative Code
VPDES: Virginia Pollutant Discharge Elimination System

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.

The basis of this regulation is §62.1-44.15:25 of the Code of Virginia which authorizes the State Water Control Board under the Virginia Stormwater Management Act to issue, deny, revoke, terminate or amend stormwater permits and adopt regulations for the control of stormwater discharges from Municipal Separate Storm Systems to surface 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

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 proposed regulatory action protects water quality in the Commonwealth of Virginia which is essential to the health, safety and welfare of Virginia's citizens. The proposed action authorizes municipal owners or operators of separate storm sewer systems located within the Census Urbanized Area to discharge stormwater to waters of the state. The general permit establishes the minimum control measures to reduce the potential discharge of pollutants in municipal stormwater as well as requirements for demonstration of compliance with TMDL wasteload allocations for local watersheds and the Chesapeake Bay. The primary issue that needs to be addressed is that the existing general permit expires on October 31, 2023 and must be reissued to authorize small MS4s to continue to discharge under the general permit. This regulatory action updates the permit and the regulation to be consistent with other VPDES general permits 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.

Substantive changes to the regulation includes the following revisions:

1. Adding definitions for common MS4 terminology and modifying the high-priority facility definition.
2. Requiring electronic submission of annual reports after at least three months' notice provided by the Department in accordance with 9VAC25-31-1020.
3. Adding permit conditions specific to traditional and nontraditional MS4 permittees to address existing permit conditions that are inherently not applicable to nontraditional permittees or not practicable for nontraditional permittee implementation.
4. Requiring third phase Chesapeake Bay TMDL action plan submittal and completion of 100% of required nitrogen, phosphorus, and sediment reductions no later than 10/31/2028.
5. Requiring Chesapeake Bay TMDL implementation annual status reports be maintained as separate documents from annual reports and posted to the permittee's publically accessible stormwater webpage.
6. Requiring permittees to provide MS4 maps in a GIS shapefile format and no longer allowing pdf format to satisfy this requirement and establishing data standards for GIS shapefile submission.
7. Adding provisions allowing permittees to adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an

outfall. Each observation point screened may be counted as one outfall screening activity equivalent; however, at least 50% of the minimum annual screening events must include outfalls. These provisions are voluntary and permittees may choose to adopt this approach at their discretion.

8. Removing electronic BMP database requirements as these requirements are duplicative of BMP Warehouse reporting requirements.
9. Moving BMP warehouse reporting conditions to new permit section (Part III) and adding reporting requirements for ecosystem restoration projects.
10. Reformatting and integrating good housekeeping requirements:
    a. For written procedures, differentiating between the objectives each procedure shall meet and activities that require procedures.
    b. Incorporating existing good housekeeping permit conditions into written procedure requirements and improving linkage to contract language and training requirements.
    c. Removed subjectivity from SWPPP applicability, clarified SWPPP requirements, and integrated utilization of applicable written good housekeeping procedures.
11. Requiring good housekeeping written procedures for the following activities:
    a. Requiring permittees that apply anti-icing and deicing agents to update road, street, sidewalk, and parking lot procedures to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage.
    b. Requiring permittees to develop written procedures for renovation and significant exterior maintenance activities.
    c. Clarifying written good housekeeping procedures for temporary storage of landscaping materials recognizing that long-term bulk storage meets the definition of a high-priority facility.
12. Requiring DCR approval and renewal of nutrient management plans.
13. Requiring chloride TMDL Action Plans where applicable.
14. Requiring inspection and maintenance procedures for ecosystem restoration projects.

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 advantages to the public and the agency are that a VPDES general permit will continue to be available to small MS4s to enable them to discharge safely to surface waters without the increased cost and more complicated application process associated with issuing an individual permit. Additionally, advantages to the Commonwealth of Virginia is the implementation of additional nutrient and sediment reductions from municipal stormwater discharges to the Chesapeake Bay watershed and local receiving waters. Another advantage to the agency is that the clarifications to permit requirements and best management practices will assist with permit reporting, inspections and compliance reviews. There are no disadvantages to the public, agency, or Commonwealth.

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 requirements that exceed applicable federal 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 is applicable statewide to any government entity operator of a municipal separate stormwater sewer system within the 2010 census defined urbanized area. The proposed amendments to the regulation apply statewide within the 2010 census defined urbanized area, with the exception of the Chesapeake Bay TMDL Special Condition, which only applies to 2010 census defined urbanized area within the Chesapeake Bay watershed. The proposed amendments to the regulation affect colleges, universities, and correctional facilities administered by state agencies. The general permit regulation implements the Commonwealth of Virginia's Chesapeake Bay TMDL Phase I, II, and III WIPs dated November 29, 2010, March 30, 2012, and August 23, 2019. These WIPs establish reductions in the load of total nitrogen, total phosphorus, and total suspended solids for regulated MS4s that discharge to receiving waters located in the Chesapeake Bay Watershed.

The proposed amendments are expected to impose a greater material water quality impact on any state agency in the Chesapeake Bay watershed than those state agencies outside of the Chesapeake Bay watershed.

DCR has expressed concerns regarding expired nutrient management plans held by MS4 permittees. The authority for nutrient management plan approval and renewal is unclear in the current permit. The proposed permit establishes DCR as the nutrient management plan approving authority and the nutrient management plan approval and renewal provisions were discussed with the DCR Director of Soil and Water Conservation and nutrient management staff. Permit conditions were developed based on DCR recommendations to ensure workload issues will not result from permit reissuance.

Localities Particularly Affected:
This general permit regulation is applicable statewide to any government entity operator of a municipal separate stormwater sewer system within the 2010 census defined urbanized area. The proposed amendments to the regulation apply statewide within the 2010 census defined urbanized area, with the exception of the Chesapeake Bay TMDL Special Condition, which only applies to 2010 census defined urbanized area within the Chesapeake Bay watershed. The general permit regulation implements the Commonwealth of Virginia's Chesapeake Bay TMDL Phase I, II, and III WIPs dated November 29, 2010, March 30, 2012, and August 23, 2019. These WIPs establish reductions in the load of total nitrogen, total phosphorus, and total suspended solids for regulated MS4s that discharge to receiving waters located in the Chesapeake Bay Watershed.

The proposed amendments are expected to impose a greater material water quality impact on any locality in the Chesapeake Bay watershed than those localities outside of the Chesapeake Bay watershed.

Federal Agencies and Regional Authorities Particularly Affected:
This general permit regulation is applicable statewide to any operator of a municipal separate stormwater sewer system within the 2010 census defined urbanized area. The proposed amendments to the regulation apply statewide within the 2010 census defined urbanized area, with the exception of the Chesapeake Bay TMDL Special Condition, which only applies to 2010 census defined urbanized area within the Chesapeake Bay watershed. The proposed amendments to the regulation affect military installations, medical centers, research centers, transportation authorities, and correctional facilities administered by federal agencies and regional authorities. The general permit regulation implements the Commonwealth of Virginia's Chesapeake Bay TMDL Phase I, II, and III WIPs dated November 29, 2010, March 30, 2012, and August 23, 2019. These WIPs establish reductions in the load of total nitrogen, total phosphorus, and total suspended solids for regulated MS4s that discharge to receiving waters located in the Chesapeake Bay Watershed.

The proposed amendments are expected to impose a greater material water quality impact on any federal agency or regional authority in the Chesapeake Bay watershed than those federal agencies or regional authorities outside of the Chesapeake Bay watershed.

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 reissuance of the VPDES general permit accomplishes the objectives of applicable law and minimizes the costs to a small MS4 operator and simplifies the application process. Without the general permit, a small MS4 operator would be required to obtain an individual permit, which would increase the complexity of a permit application and permit costs.

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.

The following comments were received:

Commenter	Comment	Agency response
Patrick Fanning and Joe Wood Chesapeake Bay Foundation (CBF)	1. CBF believes Virginia committed to three cycles of reductions for small MS4s to be implemented by 2025. 2. CBF believes Phase I MS4s are even farther off track, with some permit cycles lagging the General Permit by more than five years. 3. CBF requests to accelerate the timeline for evaluating and updating TMDL Action Plans to six months. 4. CBF requests DEQ to identify new requirements in this permit reissuance to address other parameters, including PCBs and chloride. 5. Requested to be on the TAC.	1. DEQ committed to three full permits to allow MS4 operators to achieve pollution reductions for the Chesapeake Bay TMDL. Virginia is on track to meet 2025 reduction goals in aggregate. Overachieved reductions from the wastewater sector will cover MS4 reduction shortfalls until 100% of MS4 reductions are implemented after 2025. 2. Comment noted, but not applicable to this Phase II MS4 Rulemaking. 3. A draft Phase III Chesapeake Bay TMDL action plan is required to be submitted with the registration statement and there is little to no benefit in requiring a final action plan six months after the effective date of the permit versus the current requirement to have a final action plan 12 months after permit issuance. Regardless of when the final action plan is due, the plan must be fully implemented and 100% of reductions must be achieved by 10/31/28. 4. Three PCB TMDLS are in development and permittees will have to develop PCB TMDL action plans for any PCB TMDLs approved by EPA prior to October 31, 2023. The proposed permit introduces new requirements for road, street, sidewalk, and parking lot maintenance written procedures to be updated to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage. Chloride TMDL action plan requirements have been introduced to the proposed permit and include requiring traditional permittees to implement of at least two education and outreach strategies increasing awareness of anti-icing and deicing agent application impacts on receiving waters and encourages implementation of enhanced BMPs for application, handling, and storage of anti-icing and deicing agents. Action plans are also required to implement at least two additional BMPs for pollution prevention and good housekeeping. 5. Appointed to the TAC.

Commenter	Comment	Agency response
Anna Killius James River Association (JRA)	1. JRA believes Virginia's Phase III Watershed Implementation Plan (WIP), suggests that the Commonwealth is not on track to meet its Bay cleanup goals. 2. JRA requests the permit be reissued in a timely manner and include stringent measures that will help set the developed sector up for success in meeting the WIP, the Bay TMDL, and the James River's chlorophyll a criteria. 3. Requested to be on the TAC.	1. See response to CBF above. 2. DEQ intends to reissue the general permit 11/1/23 without administrative continuance. Many permittees are struggling to find a path to 100% of their Chesapeake Bay TMDL reduction goals; however, DEQ remains committed to assisting permittees with achieving required reductions by the end of the next permit term. The proposed permit includes a new provision requiring a minimum 40% of achieved reductions be maintained throughout the next permit term. The draft permit introduces requirements for Chesapeake Bay TMDL implementation annual status reports that shall be maintained as separate documents and posted to the permittee's publically accessible stormwater webpage in order to ensure pertinent information is reported that clearly demonstrates permittee progress and also allows DEQ and interested parties to easily track permittee progress. 3. Appointed to the TAC.

Timothy Mitchell Virginia Municipal Stormwater Association (VAMSA)	1. General Structure and Key Features – Recommends wholesale changes not be made. 2. Recommends to maintain three permit terms for achieving Chesapeake Bay TMDL reductions. 3. The reissued permit should be based on the MEP compliance standard, and should allow MS4 communities to implement adaptive, iterative, and financially feasible programs for improving water quality over time. 4. VAMSA requests that DEQ delete references to anticipated end dates for local TMDL action plans. 5. VAMSA supports reissuance with a July 1, 2023 effective date and with annual reports due each year by October 1st (with a July 1 to June 30 reporting period). 6. VAMSA supports keeping the existing permit text that allows a permittee to obtain nutrient or sediment credits to comply with Chesapeake Bay TMDL reduction requirements. 7. VAMSA supports keeping the existing regulatory text in 9VAC25-890(20)(E) that gives: (i) a permittee the opportunity to explain extraordinary circumstances, like COVID, that may impact compliance efforts and (ii) the Board the discretion to consider these Acts of God when making enforcement decisions. 8. VAMSA supports keeping the existing regulatory text in the Small MS4 GP that allows a permittee to choose strategies for minimum control measures 1, 2, and Bacterial TMDLs. 9. VAMSA requests that DEQ clarify with reissuance that the permittee must report on stormwater complaints related to regulated land-disturbance in the MS4 service area. 10. The current permit requires that permittees reflect on the MS4 map: (i) the estimated regulated acreage draining to the outfall or point of discharge and (ii) the	1. The draft permit does not introduce major changes, but rather clarifies and streamlines existing requirements and also builds upon requirements in the existing permit framework in the spirit of the iterative and adaptive approach DEQ promotes in the MS4 Program. 2. DEQ remains committed to ensuring three full permit terms to achieve Chesapeake Bay TMDL required reductions. 3. MEP remains the compliance standard for this permit and demonstrated progress towards meeting a WLA constitutes MEP for this permit (i.e. achieving a WLA may not be MEP for some TMDLs) 4. See previous comment. 5. DEQ discussed reissuance date options with the TAC and consensus was reached on establishing 11/1/23 as the effective date of the permit. TAC members appeared to desire staying consistent with the current permit cycle timeline and DEQ aims to have the permit reissued by this 11/1/23 in accordance with TAC recommendations. No changes to annual report due dates were proposed by DEQ or the TAC. 6. DEQ thanks VAMSA for its support and the proposed permit clarifies nutrient and sediment credits generated in a local nutrient or sediment TMDL within the Chesapeake Bay watershed that are transferred to a permittee may be applied to both the Chesapeake Bay and local applicable TMDL. 7. DEQ thanks VAMSA for its support. 8. DEQ thanks VAMSA for its support. 9. The mechanism for the public to report stormwater pollution complaints is intended to promote public involvement in stormwater issues effecting the permittee's community. Minimum control measure 2 is not intended to be limited in scope to complaints derived from the MS4 service area since it is not expected that citizens should consider whether or not their complaint pertains to the permittee's regulated MS4 service area. For annual reporting purposes, limiting complaints reported to the MS4 service area may create

	predominant land use for each outfall discharging to an impaired water. VAMSA requests that these requirements be deleted. 11. VAMSA requests that DEQ allow a permittee to adopt a risk-based approach to outfall screening. 12. VAMSA requests that DEQ clarify in reissuance that permittees are not expected to investigate each pre-2013 BMP to assess/verify pervious and impervious acres treated. 13. VAMSA urges DEQ to include stormwater managers from VAMSA localities across the State. 14. Requested Lisa Ochsenhirt be on the TAC.	an additional task of determining which complaints need to be captured in the annual report and which complaints may be omitted. After much debate with the TAC, the proposed permit amends the public complaint annual reporting requirement to require a summary of stormwater pollution complaints received and specifically excludes flooding complaints. Additionally, this reporting requirement was revised to specify only complaints received under the procedures and mechanism established in accordance with minimum control measure 2 are required to be included in annual reports. These changes were made in response to concerns the TAC raised in regard to complaint annual reporting requirements being too broad and could be interpreted as requiring permittee staff to contact every department that may have received stormwater complaints and compile complaints for annual reporting. 10. It is imperative that permittees include estimated regulated acreage draining to the outfall in the MS4 outfall information table or in a GIS shapefile attribute table in order for the permittee characterize lands draining to permittee's MS4. This required data field is consistent with the Chesapeake Bay TMDL special condition requiring permittees to determine the acreage of land draining to the permittee's system within the 2010 census urbanized area. DEQ recognizes that lands outside of the 2010 census urbanized area draining to regulated outfalls may be an important component of characterizing permittee MS4s; however, since this lands are unregulated, characterization of such lands is fully at the discretion of the permittee. After much discussion with the TAC and DEQ TMDL staff, it was determined that the predominate land use for each outfall discharging to impaired waters is a generalized mapping data element not useful to permittees or DEQ. The Virginia Land Cover Dataset (VLCD) used in conjunction with outfall drainage delineation data can be utilized for TMDL development. This outfall data requirement has been removed from the proposed permit 11. The proposed permit introduces provisions allowing permittees to adopt a

Commenter	Comment	Agency response
		risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Each observation point screened may be counted as one outfall screening activity equivalent. These provisions are voluntary and permittees may choose to adopt this approach at their discretion. 12. The proposed permit replaces requirements for the permittee to maintain an electronic BMP database with BMP Warehouse reporting requirements and the BMP pervious area treated is not a required reporting data field in the BMP Warehouse; however, total acres and impervious acres treated are required reporting data fields. It is imperative that permittees report total acres and impervious acres treated by BMPs reported to the BMP Warehouse (as applicable) since this information is crucial for Chesapeake Bay TMDL modeling efforts and for the purposes of the BMP Warehouse and the proposed permit, BMP Warehouse reporting is required statewide while the electronic BMP database maintained by the permittee will no longer be required for the purposes of the proposed permit. 13. Four local stormwater mangers participated on the TAC from eastern and western regions of the state. 14. Lisa Ochsenhirt appointed to the TAC.
Normand Goulet Northern Virginia Regional Commission	Requested to be on the TAC.	Appointed to the TAC.
Jillian Sunderland Hampton Roads Planning District Commission	Requested to be on the TAC.	Appointed to the TAC.
John Burke Montgomery County	Requested to be on the TAC.	Appointed to the TAC.

Commenter	Comment	Agency response
Erin Hawkins City of Lynchburg	Requested to be on the TAC.	Appointed to the TAC.
Dan Frisbee City of Charlottesville	Requested to be on the TAC.	Appointed to the TAC and subsequently withdrew due to covid-19 concerns and FOIA required in-person TAC meetings.
Jessica Wenger University of Virginia	Requested to be on the TAC.	Appointed to the TAC.
Ashely Hall Stantec	Requested to be on the TAC.	Appointed to the TAC.
Ginny Sneed American Society of Civil Engineers - Virginia	Requested to be on the TAC.	Appointed to the TAC.
Erin Rountree City of Suffolk	Requested to be on the TAC.	Appointed to the TAC.

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 department 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 agency/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 Jeff Selengut, P.O. Box 1105, Richmond, Virginia 23219, 804-659-1314 and Jeffrey.Selengut@deq.virginia.gov. 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
9VAC25-890		Provisions on "Board" authority outside the context promulgating regulations.	Changed "Board" to "Department" pursuant to SB 657 of the 2022 General Assembly session transferring authority from the board to the department outside the context of promulgating regulations where applicable. No impact.
9VAC25-890 (Title)		General (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (formerly Part XV, 4VAC50-60 MS4s)	Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s). Rationale: Title updated to be consistent with other VPDES regulation titles and removed former DCR citation. Removed "small" from provisions referring to "small MS4s" for consistency with provisions that follow the title of this general permit regulation. No impact.
9VAC25-890-1. Definitions.		The words and terms used in this chapter shall have the meanings defined in the Virginia Stormwater Management Act (Article 2.3 (§ 62.1-44.15:24 et seq.) of Chapter 3.1 of Title 62.1 of the Code of Virginia) and 9VAC25-870 unless the context clearly indicates otherwise, except that for the purposes of this chapter:	The words and terms used in this chapter shall have the meanings defined in the Virginia Stormwater Management Act (Article 2.3 (§ 62.1-44.15:24 et seq.) of Chapter 3.1 of Title 62.1 of the Code of Virginia) and the Virginia Stormwater Management Program (VSMP) Regulation 9VAC25-870 unless the context clearly indicates otherwise, except that for the purposes of this chapter: Rationale: Added "Virginia Stormwater Management Program (VSMP) Regulation" title to 9VAC25-870 for clarification. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-890-1. Definitions.		New proposed definition.	"Annual practice" means a nonstructural best management practice such as street or storm drain cleaning that reduces pollution for one compliance year upon implementation. This definition was added to provide clarification that pollutant reductions generated by annual practices are creditable towards one compliance year for TMDL action plans (i.e., pollutant reductions generated must correspond to one compliance year). No impact.
9VAC25-890-1. Definitions.		New proposed definition.	"Ecosystem restoration projects" means practices implemented to reestablish and maintain natural systems that prevent, reduce, or remediate pollutant loadings. Examples of ecosystem restoration projects include stream restoration, shoreline restoration, land-use conversion, and reforestation. This permit introduces the term ecosystem restoration projects in several provisions in order to recognize the regulatory distinction between ecosystem restoration projects and stormwater management facilities. No impact.
9VAC25-890-1. Definitions.		"High-priority facilities" means facilities owned or operated by the permittee that actively engage in one or more of the following activities: (i) composting, (ii) equipment storage and maintenance, (iii) materials storage, (iv) pesticide storage, (v) storage for public works, (vi) recycling, (vii) salt storage , (viii) solid waste handling and transfer, and (ix) vehicle storage and maintenance.	"High-priority facilities" means facilities owned or operated by the permittee with drainage to any permitted MS4 that actively engage in one or more of the following activities: (i) composting, (ii) equipment storage , cleaning, and maintenance, (iii) long-term bulk materials storage, (iv) pesticide ,herbicide, and fertilizer storage, (v) recycling, (vi) anti-icing and deicing agent storage, handling, and transfer, (vii) solid waste handling and transfer, and (viii) permittee

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			owned or operated vehicle washing, maintenance, and salvage. Added the qualifier "with drainage to an MS4" to "facilities owned or operated by the permittee," recognizing drainage to an MS4 is important for classifying high-priority facilities (HPFs). The following modifications were made to activities defining high-priority facilities HPFs: (ii) Added "cleaning" to equipment storage and maintenance for clarification. (iii) Added "long-term bulk" to materials storage as a qualifier to distinguish large permanent storage areas such as facility maintenance yards that continuously store building materials from smaller temporary material storage areas such as temporary on-site storage of construction and maintenance supplies. (iv) Added "herbicide and fertilizer" to pesticide storage for clarification. (v) Removed storage for public works" since this activity is ambiguous and overlaps other activities defining HPFs. (vi) Replaced "salt" with "anti-icing and deicing agent" to include all chemicals used for anti-icing and deicing and for consistency with the Virginia Salt Management Strategies (SaMS) guidance document. (vi) Added "handling and transfer" for clarification. (viii) Added "washing" and "salvage" to vehicle maintenance for clarification. Removed "storage" since this permit intent is not to classify every municipal parking lot as a HPF. "Salvage" was added to distinguish parking lots from

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			damaged vehicle storage which have higher risk for leaking and pollutant discharges. Impact: Facilities that do not discharge to permitted MS4 are no longer classified as HPFs. Municipal parking lots are no longer classified as HPFs.
9VAC25-890-1. Definitions.		New proposed definition.	"Nontraditional MS4 permittee" or “nontraditional permittee” means a government entity that operates a regulated MS4 that is not under the authority of a county board of supervisors, a city council, or a town council. Nontraditional is a category of Phase II MS4 permittees and this term has been in common use within the MS4 program for many years. This permit introduces the term nontraditional permittee in several provisions recognizing the differences in jurisdictional authority between traditional local governments and all other government entities considered nontraditional permittees. Nontraditional permittees may include but are not limited to operators of state and federal facilities such as transportation infrastructure, college campuses, hospitals, correctional facilities, military installations, administrative campuses, and research facilities. Nontraditional permittees may also include local authority operators for facilities such as public school and other regional authorities that may operate an MS4. Traditional and nontraditional permittee differences in authority, public, and systems necessitated the need for distinct permit

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			conditions for traditional and nontraditional permittees. No impact.
9VAC25-890-1. Definitions.		New proposed definition.	"Traditional MS4 permittee" or “traditional permittee” means a local government that operates a regulated MS4 under the authority of a county board of supervisors, a city council, or a town council. Traditional is a category of Phase II MS4 permittees and these terms have been in common use within the MS4 program for many years. This permit introduces the terms traditional and nontraditional permittee in several provisions recognizing the differences in jurisdictional authority between traditional local governments and all other government entities considered nontraditional permittees. Traditional permittees are limited to counties, cities, and towns. Traditional and nontraditional permittee differences necessitated the need for distinct permit conditions for traditional and nontraditional permittees. No impact.
9VAC25-890-10 A.		This general permit regulation governs point source stormwater discharges from regulated small municipal separate storm sewer systems (small MS4s) to surface waters of the Commonwealth of Virginia. This general permit will become effective on November 1, 2018 and will expire October 31, 2023.	This general permit regulation governs point source stormwater discharges from regulated small municipal separate storm sewer systems (MS4s) to surface waters of the Commonwealth of Virginia. Nonmunicipal stormwater or wastewater discharges are not authorized by this permit except in accordance with 9VAC25-890-20 D. Removed “small” for consistency with provisions that follow the title of this general permit regulation.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			No impact.
9VAC25-890-10 B. date of the state permit.		This general permit will become effective on November 1, 2018 and will expire October 31, 2023.	This general permit will become effective on November 1, 2023 and will expire October 31, 2028. Updated the effective and expiration date of the general permit. No impact.
9VAC25-890-15. Applicability of incorporated references based on the dates that they became effective.		Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in Title 40 CFR is referenced and incorporated in this chapter, that regulation shall be as it exists and has been published in the July 1, 2017, update. The final rule published in the Federal Register on August 28, 2017 (82 FR 40836), which amends 40 CFR Part 136, is also incorporated by reference in this chapter.	Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in Title 40 CFR is referenced and incorporated in this chapter, that regulation shall be as it exists and has been published in the July 1, 2021, update. Consolidated and updated the Title 40 CFR publication date. No impact.
9VAC25-890-20 A. Authorization to discharge		Any operator covered by this general permit is authorized to discharge stormwater from the small municipal separate storm sewer system (MS4) to surface waters of the Commonwealth of Virginia provided that: 1. The operator submits a complete and accurate registration statement in accordance with 9VAC25-890-30 and that registration statement is accepted by the board; 4. The board has not notified the operator that the discharge is ineligible for coverage in accordance with subsection C of this section.	Any operator covered by this general permit is authorized to discharge stormwater from the MS4 to surface waters of the Commonwealth of Virginia provided that: 1. The operator submits a complete and accurate registration statement in accordance with 9VAC25-890-30 and that registration statement is accepted by the department; 4. The department has not notified the operator that the discharge is ineligible for coverage in accordance with subsection C of this section. Removed “small municipal separate storm sewer system” as the acronym for MS4 is spelled out in a previous section. “Board” has been changed to “department” recognizing the transfer of authority.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			No impact.
9VAC25-890-20 C. Authorization to discharge		The board will notify an operator that the discharge is not eligible for coverage under this general permit in the event of any of the following:	The department will notify an operator that the discharge is not eligible for coverage under this general permit in the event of any of the following: "Board" has been changed to "department" recognizing the transfer of authority. No impact.
9VAC25-890-20 D 3. Authorization to discharge		The nonstormwater discharges or flows are identified in this subdivision D 3 and have not been identified by the operator or by the board as significant contributors of pollutants to the small MS4: g. Discharges from potable water sources; p. Flows from riparian habitats and wetlands; q. Dechlorinated swimming pool discharges; r. Street wash waters; s. Discharges or flows from firefighting activities; t. Discharges from noncommercial fundraising car washes if the washing uses only biodegradable, phosphate-free, water-based cleaners	The nonstormwater discharges or flows are identified in this subdivision D 3 and have not been identified by the operator or by the department as significant contributors of pollutants to the small MS4: Rationale: "Board" has been changed to "department" recognizing the transfer of authority and "small" has been removed from MS4. g. Discharges from potable water sources managed in a manner to avoid instream impact; Rationale: Added "managed in a manner to avoid instream impact" for clarification recognizing discharges of potable may have an instream impact depending on the volume of the discharge and the size of the stream. q. Dechlorinated freshwater swimming pool discharges managed in a manner to avoid instream impact; Rationale: Added "freshwater" to exclude saltwater swimming pool discharges and "managed in a manner to avoid instream impact" for clarification.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			r. Street and pavement wash waters that do not contain cleaning additives or are otherwise managed in a manner to avoid instream impact; Rationale: Added “pavement wash waters that do not contain cleaning additives or are otherwise managed in a manner to avoid instream impact” for clarification. s. Discharges or flows from emergency firefighting activities; Rationale: Added “emergency” to distinguish from non-emergency activities. t. Discharges or flows of water for fire prevention or firefighting training activities managed in a manner to avoid instream impact in accordance with § 9.1-207.1 of the Code of Virginia; Rationale: Added t. to distinguish from emergency activities subject to § 9.1-207.1 of the Code of Virginia. u. Discharges from noncommercial fundraising car washes if the washing uses only biodegradable, phosphate-free, water-based cleaners in accordance with § 15.2-2114.1 of the Code of Virginia; or Rationale: Added “in accordance with § 15.2-2114.1 of the Code of Virginia” for context. No impact.
9VAC25-890-20 K. Continuation of permit coverage.		1. Any permittee that was authorized to discharge under the state permit effective July 1, 2013, and that submits a complete registration statement on or before June 1, 2018, is authorized to continue to	1. Any permittee that was authorized to discharge under the state permit effective November 1, 2018, and that submits a complete registration statement on or before October 1, 2023, is authorized to continue to discharge under the

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		discharge under the terms of the July 1, 2018, state permit until such time as the board either: 2. When the permittee is not in compliance with the conditions of the expiring or expired general permit, the board may choose to do any or all of the following: a. Initiate enforcement action based upon the 2013 general permit;	terms of the November 1, 2018, state permit until such time as the department either: 2. When the permittee is not in compliance with the conditions of the expiring or expired general permit, the department may choose to do any or all of the following: a. Initiate enforcement action based upon the 2018 general permit; Rationale: Updated timeframes consistent with previous permit. No impact.
9VAC25-890-30 A 2. Registration statement.		In order to continue uninterrupted coverage under the general permit, operators of small MS4s shall submit a new registration statement no later than June 1, 2018, unless permission for a later date has been granted by the board. The board shall not grant permission for registration statements to be submitted later than the expiration date of the existing state permit.	In order to continue uninterrupted coverage under the general permit, operators of small MS4s shall submit a new registration statement no later than October 1, 2023, unless permission for a later date has been granted by the department. The board shall not grant permission for registration statements to be submitted later than the expiration date of the existing state permit. Rationale: Updated timeframes consistent with previous permit. No impact.
9VAC25-890-30 B 5. Registration statement.		None.	If the MS4 is operated under the authority of a city council or a county board of supervisors, indicate if public school facilities are included in the application. Rationale: The department is requesting this information in order to determine which public school systems have permit coverage Impact: Any school system that is not covered under a localities MS4 program or separate MS4 permit coverage may be required to obtain MS4 Permit coverage.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
9VAC25-890-30 B 10.		For those permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, a draft second phase Chesapeake Bay TMDL action plan; and	For permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018 whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, a draft third phase Chesapeake Bay TMDL action plan; and Updated to require a draft third phase Chesapeake Bay TMDL action plan with registration. No Impact
9VAC25-890-40. General permit.		Effective Date: November 1, 2018 Expiration Date: October 31, 2023	Effective Date: November 1, 2023 Expiration Date: October 31, 2028 Rationale: New permit cycle. No impact.
9VAC25-890-40. General permit.		The authorized discharge shall be in accordance with the registration statement filed with the department, this cover page, Part I - Discharge Authorization and Special Conditions, Part II - TMDL Special Conditions, and Part III - Conditions Applicable to All State and VPDES Permits, as set forth in this general permit.	The authorized discharge shall be in accordance with the registration statement filed with the department, this cover page, Part I - Discharge Authorization and Special Conditions, Part II - TMDL Special Conditions, and Part III - DEQ BMP Warehouse Reporting, and Part IV - Conditions Applicable to All State and VPDES Permits, as set forth in this general permit. Part I Discharge Authorization and Special Conditions Rationale: General permit has been reorganized to include “DEQ BMP Warehouse Reporting” as Part III and added Part I Discharge Authorization and Special Conditions heading. No impact.
Part I B.		The permittee shall develop, implement, and enforce a MS4 program designed to reduce the discharge of pollutants from the	Removed “small” from in front of “MS4” to maintain consistency throughout the permit.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		small MS4 to the maximum extent practicable.	
Part I C 2 a.		The general VPDES permit for the discharge of stormwater shall not exceed the expiration date of the permit.	The general VPDES permit for the discharge of stormwater shall not exceed October 31, 2028, unless the department grants a later date. Rationale: This section pertains to permittees receiving initial coverage under the proposed permit the department recognizes there may be circumstances where permit coverage was issued late in the permit cycle and fully developing a program plan in shortened term may not be feasible. Impact: Department may offer flexibility to new permittees for program development timelines.
Part I D.		1. The permittee shall submit an annual report to the department no later than October 1 of each year in a format as specified by the department. The report shall cover the previous year from July 1 to June 30.	1. The permittee shall submit an annual report to the department no later than October 1 of each year in a method, (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department: the required content of the annual report is specified in Part I E. The report shall cover the previous year from July 1 to June 30. 2. Following notification from the department of the start date for the required electronic submission of annual 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically. Rationale: Added annual reporting clarification on method, (i.e. how

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			the permittee must submit) and format (i.e. how the report shall be laid out. The format and required content of the annual report is specified in Part I E. Methods and Annual reporting requirements have been updated to reflect the new notification requirements for the department. The method of annual report submittals "Nform" is being developed by the department and guidance for the use of Nform will be provided to permittees on Nform annual report submittals once the MS4 Nform module is fully developed for roll-out and permittee use. Nform permittee reporting is part of the department's strategy to fulfill EPA's e-reporting rule. Impact: Allows DEQ and permittees to comply with EPA e-reporting rule.
Part I D.4		For those permittees with requirements established under Part II A, the annual report shall include a status report on the implementation of the Chesapeake Bay TMDL action plan in accordance with Part II A of this permit including any revisions to the plan.	Removed from this section. Rationale: Moved to reporting requirements for the Chesapeake Bay TMDL special condition have Part II A of this permit. No impact
Part I D.6		For the purposes of this permit, the MS4 program plan and, annual report shall be maintained separately and submitted to the department as required by this permit as two separate documents.	For the purposes of this permit, the MS4 program plan annual reports, the Chesapeake Bay TMDL action plan, and Chesapeake Bay TMDL implementation annual status reports, shall be maintained as separate documents and submitted to the department as required by this permit as separate documents. Rationale: Added additional clarification that the MS4 program plan, annual reports, the Chesapeake Bay TMDL action

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			plan, and Chesapeake Bay TMDL implementation annual status reports, shall be maintained as separate documents primarily to promote public transparency and to facilitate department tracking to ensure permittees achieve 100% of the Chesapeake Bay TMDL target reductions by the end of the permit cycle. Impact: Require those permittees that have combined documents to split them into separate documents.
Part I E.1.b		The permittee shall identify no less than three high-priority stormwater issues to meet the goal of educating the public in accordance with Part I E 1 a. High-priority issues may include the following examples: Chesapeake Bay nutrients, pet wastes, local receiving water impairments, TMDLs, high-quality receiving waters, cation, planned green infrastructure redevelopment, planned ecosystem restoration, and illicit discharges from commercial sites.	The permittee shall identify no less than three high-priority stormwater issues to meet the goal of educating the public in accordance with Part I E 1 a. High-priority issues may include the following examples: Chesapeake Bay nutrients, pet wastes, local receiving water impairments, TMDLs, high-quality receiving waters, litter control, BMP maintenance, anti-icing and deicing agent application, planned green infrastructure redevelopment, planned ecosystem restoration, and illicit discharges from commercial sites. Rationale: Added “litter control, BMP maintenance, anti-icing and de-icing agent application, planned green infrastructure redevelopment, planned ecosystem restoration” to expand examples of high priority issues. No Impact.
Part I E.1.d		The permittee shall use two or more of the strategies listed in Table 1 below per year to communicate to the public the high-priority stormwater issues identified in accordance with Part I E 1 b including how to reduce stormwater pollution.	The permittee shall use two or more of the strategies listed in Table 1 below per year to communicate to the target audience the high-priority stormwater issues identified in accordance with Part I E 1 b including how to reduce stormwater pollution.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Rationale: Replaced “public” with “target audience” to clarify that a high priority issue might be targeted towards a specific audience which may include the general public. No impact.
Part I E.1 Table 1 Strategies for media materials		Information disseminated through electronic media, radio, televisions, movie theater, or newspaper	Information disseminated through electronic media, radio, televisions, movie theater, or newspaper, or GIS story maps Added GIS story maps to examples of media materials. Rationale: Added GIS story maps to examples of media materials to expand examples of public education and outreach strategies. No impact.
N/A	Part I E.1 Table 1: Strategies for Public Education and Outreach	None	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks Rationale: Expand examples of public education and outreach strategies. No impact.
N/A	Part I E.1 Table 1: Strategies for Public Meetings	None	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration, TMDL development, voluntary residential low impact development, or other stormwater issues Rationale: Expand examples of public education and outreach strategies. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Part I E.1.f (3)		Identification of the public audience to receive each high-priority stormwater message;	Identification of the target audience to receive each high-priority stormwater message; Rationale: Replaced “public” with “target audience” for consistency with EPA guidance and to clarify that a high priority issue might be targeted towards a specific audience which may include the general public. No impact
Part I E.1.f (4)		None	Nontraditional permittees may identify staff, students, and other facility users operated by the permittee as the target audience for education and outreach strategies. Rationale: Added (4) - Nontraditional permittees may identify staff, students, and other facility users operated by the permittee as the target audience for education and outreach strategies for clarification Impact: This added clarification will help nontraditional permittees to better define targeted audiences.
Part I E.1.f (5)		None	Traditional permittees may identify staff and students as part of the target audience for education and outreach strategies; however, staff shall not be the majority of the target audience. Rationale: Added (5) - Traditional permittees may identify staff and students as part of the target audience for education and outreach strategies; however, staff shall not be the majority of the target audience for clarification. Impact: This added clarification will help permittees better define target audiences while differentiating target audiences for traditional and nontraditional permittees.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Part I E.1.f (6)		None	Staff training required in accordance with Part I E 6 d does not qualify as a strategy for public education and outreach. Rationale: Added (6) - Staff training required in accordance with Part I E 6 d does not qualify as a strategy for public education and outreach. This added clarification reinforces the intent of the public education requirement and that education and outreach programs with all staff as the targeted audience are to be included in the good housekeeping training program. No impact
Part I E.1.g (1)		A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program; and	A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program; Rationale: Removed “and” No impact
Part I E.1.g (2)		None	A summary of the public education and outreach activities conducted for the report year, including the strategies used to communicate the identified high-priority issues; and Rationale: The added summary language is more useful in the annual report than a list as required by the replaced language. Impact: Changed submitted information from a list format to a more useful summary format.
Part I E.1.g (3)		A list of the strategies used to communicate each high-priority stormwater issue.	A description of any changes in high-priority stormwater issues including, strategies used to communicate high-priority stormwater issues, or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of the above changes.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Rationale: Revised language to "A description of any changes in high priority stormwater issues, strategies used to communicate high-priority stormwater issues, or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of the above changes." The revised language clarifies the expectations for documenting an iterative education and outreach program. No Impact.
Part I E.2.a. (2)		The public to provide input on the permittee's MS4 program plan;	The public to provide comments on the permittee's MS4 program plan; Rationale: Replaced "input" with "comments" to clarify expectations for public comment on program plans. No impact
Part I E.2.a (3)		Receiving public input or complaints;	Rationale: Removed (3) – "Receiving public input or complaints." This provision was redundant with Part I E 2 a (1) and (2) requirements and may inadvertently require permittees to capture input or complaints beyond the scope of this permit for issues such as flooding which this permit does not address. Impact: This revision makes the permit more stream-lined, less redundant, and clarifies department expectations.
Part I E.2.a (4)	9VAC25-890-40 E.2.a (3)	Responding to public input received on the MS4 program plan or complaints; and	Responding to public comments received on the MS4 program plan; and Rationale: Changed "input" to comments to maintain consistency with changes to Part I.E.2,a (2) above. No impact
Part I E.2.a (5)	Part I E.2.a (4)	Maintaining documentation of public input received on the MS4	Maintaining documentation of public comments received on the

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		program and associated MS4 program plan and the permittee's response.	MS4 program and associated MS4 program plan and the permittee's response. Rationale: Changed “input” to comments to maintain consistency with changes to Part I.E.2,a (2) and (4). No impact.
Part I E.2.b		No later than three months after this permit's effective date, the permittee shall develop and maintain a webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage:	No later than three months after this permit's effective date, the permittee shall update and maintain the webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage: Rationale: Changed “develop and maintain” to “update and maintain” as the webpage should already exist. No Impact.
N/A	Part I E.2.b(4)	None	For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the most current Chesapeake Bay TMDL action plan or location where the Chesapeake Bay TMDL action plan can be obtained; Rationale: Added to clarify permit requirement expectations in conjunction with maintaining Chesapeake Bay TMDL action plans as a separate document from the program plan in accordance with 9VAC25-890-40 D.6. No impact.
N/A	Part I E.2.b(5)	None	For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the Chesapeake Bay TMDL implementation annual status reports for each year of the term covered by this permit no later than 30 days after submittal to the department and no later than 30

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			days after the implementation status report has been deemed technically complete by the department if revisions were made as a result of a technical review completed by the department; Rationale: Added to clarify permit requirement expectations in conjunction with maintaining Chesapeake Bay TMDL implementation status reports as a separate document from the annual report in accordance with 9VAC25-890-40 D.6. No Impact.
Part I E.2.b(4)	Part I E.2.b(6)	A mechanism for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns in accordance with Part I E 2 a (1); and	Rationale: Re-numbered, no change in requirement. No impact.
Part I E.2.b(5)	Part I E,2,b,(7)	(7) Methods for how the public can provide input comments on the permittee's MS4 program plan in accordance with Part I E 2 a (2)	(7) Methods for how the public can provide input comments on the permittee's MS4 program plan in accordance with Part I E 2 a (2) and if applicable, the Chesapeake Bay TMDL action plan in accordance with Part II A 13. Rationale: Additional language added to clarify permit requirement expectations for receiving public comments on Chesapeake Bay TMDL action plans. No impact.
N/A	Part I E.2.b(8)	None	Federal and state nontraditional permittees with security policies preventing a MS4 program and stormwater pollution prevention webpage from being publicly accessible may utilize an internal staff accessible webpage such as an intranet webpage to meet the requirements of Part 1 E 2 b.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Rationale: Added to provide a mechanism for government entities with restrictive security policies such as DOD and correctional facilities to demonstrate compliance with MS4 program webpage requirements. No impact.
Part I E.2.c		The permittee shall implement no less than four activities per year from two or more of the categories listed in Table 2 below to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.	Traditional permittees shall implement no less than four activities per year from two or more of the categories listed in Table 2 below to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects. Rational Changed “The permittee” to ”Traditional permittees” to clarify permit requirement expectations for traditional permittees. No impact.
N/A	Part I E.2.d	None	d. Nontraditional permittees shall implement, promote, participate in, or coordinate on no less than four activities per year from two or more of the categories listed in Table 2 below to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects. Rationale: Added to clarify permit requirement expectations for nontraditional permittees. No impact.
Part I E.2 Table 2: Restoration		Stream or watershed clean-up day, adopt-a-water way program,	Stream, or watershed, shoreline, beach, or park clean-up day, adopt-a-water way program, tree plantings, and riparian buffer plantings Rationale: Expanded list of examples of restoration participation events
Part I E.2 Table 2:	Part I E.2 Table 2: Public	Booth at community fair, demonstration of stormwater control projects, presentation of	Booth at community fair, demonstration of stormwater control projects, presentation of

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Educational events	Education Activities	stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks, participation on environmental advisory committees	stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks Rationale: Expanded participation on environmental advisory committees in Table 2 Public meetings examples. No impact.
N/A	Part I E.2 Table 2: Public Meetings	None.	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration, TMDL development, voluntary residential low impact development, or other stormwater issues Rationale: Expanded participation on environmental advisory committees to Public meetings category in Table 2. No impact.
Part I E.2.d	Part I E.2.e	The permittee may coordinate the public involvement opportunities listed in Table 2 with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of the permit requirements.	Rationale: Re-numbered. No change in requirement. No impact
N/A	Part I E.2.f	None	The Permittee may include staff and students in public participation events; however, the activity cannot solely include or be limited to staff participants with stormwater, grounds keeping, and maintenance duties in order for an event to qualify as a public participation event. Rationale: Added f. to clarify permit requirement expectations. No impact.
N/A	Part I E.2.g	None	Staff training required in accordance with Part I E 6 d does not qualify as a public participation event unless the training activity

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			solicits participation from target audiences beyond staff or contractors with stormwater, grounds keeping, and maintenance duties. Rationale: Added g. to clarify permit requirement expectations. No impact.
Part I E. 2.e	Part I E.2.h	h. The MS4 program plan shall include: (1) The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns; (2) The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program; and (3) A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash collected from a stream cleanup, the number of participants in a hazardous waste collection event, etc.	Rationale: Re-numbered, no change. No Impact
Part I E. 2.f	Part I E.2.i	The annual report shall include the following information: (1) A summary of any public input on the MS4 program received (including stormwater complaints) and how the permittee responded; (2) A webpage address to the permittee's MS4 program and stormwater website;	The annual report shall include the following information: (1) A summary of any public comments on the MS4 program received and how the permittee responded; (2) A summary of stormwater pollution complaints received under the procedures established in Part I E 2 a (1) (excluding flooding

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		(3) A description of the public involvement activities implemented by the permittee; (4) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and (5) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.	complaints) and how the permittee responded; (3) A webpage address to the permittee's MS4 program and stormwater website; (4) Federal and state nontraditional permittees with security policies preventing the MS4 program and stormwater pollution prevention webpage from being publicly accessible utilizing an internal staff accessible website such as intranet shall provide evidence of the current internal MS4 program and stormwater pollution prevention webpage. (5) A description of the public involvement activities implemented by the permittee; (6) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and (7) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities. Rationale: Added (2) to clarify permit requirement expectation. Impact: removes flooding complaints from reporting requirements. Rationale: Added (4) to clarify permit requirements. No impact.
Part I E.3.a(1)		A map of the storm sewer system owned or operated by the permittee within the census urbanized area identified by the 2010 decennial census that includes, at a minimum:	An updated map of the MS4 owned or operated by the permittee within the census urbanized area identified by the 2010 decennial census no later than 12 months after the permit effective date that includes, at a minimum: Rationale: Revised the language in recognition that until the EPA decides its course of action in

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			regards to the US Census Bureau's changes to 'Urban Areas", no significant changes to the MS4 map are required by this permit reissuance and also recognizes the need for the department to obtain up to date MS4 mapping data for Bay TMDL and DEQ Electronic Data Mapper (EDM) initiatives. No impact
Part I E.3.a(2)		The permittee shall maintain an information table associated with the storm sewer system map that includes the following information for each outfall or point of discharge for those cases in which the permittee elects to map the known point of discharge in accordance with Part I E 3 a (1) (a):	The permittee shall maintain an outfall information table associated with the MS4 map that includes the following information for each outfall or point of discharge for those cases in which the permittee elects to map the known point of discharge in accordance with Part I E 3 a (1) (a): The outfall information table may be maintained as a shapefile attribute table. The outfall information table shall contain the following: Rationale: Revised language to clarify the use of GIS-compatible data tables and what information is required for the outfall information table. Impact: Makes maintaining the table less burdensome and more useful to the permittees.
Part I E.3.a(2)(f)		An indication as to whether the receiving water is listed as impaired in the Virginia 2016 305(b)/303(d) Water Quality Assessment Integrated Report; and	An indication as to whether the receiving water is listed as impaired in the Virginia 2020 305(b)/303(d) Water Quality Assessment Integrated Report; and Rationale: Update date to the most current report. No Impact.
Part I E.3.a(2)(g)		The predominant land use for each outfall discharging to an impaired water; and	Removed. Rationale: predominant land use information is not useful and burdensome for the permittees.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Impact: Less burdensome tracking requirements for the permittee without sacrificing useful information.
Part I E.3.a,(3)		No later than July 1, 2019, the permittee shall submit to DEQ, a GIS-compatible shapefile of the permittee's MS4 map as described in Part I E 3 a. If the permittee does not have an MS4 map in a GIS format, the permittee shall provide the map as a PDF document.	No later than 12 months after permit issuance, the permittee shall submit to DEQ, a format file geodatabase or two shapefiles that contain at a minimum: (a) A point feature class or shapefile for outfalls with an attribute table containing outfall data elements required in accordance with Part I E 3 a (2); and (b) A polygon feature class or shapefile for the MS4 service area as required in accordance with Part I E 3 a (1) (d) with an attribute table containing the following information: (i) MS4 operator name; (ii) MS4 permit number (VAR04); and (iii) MS4 service area pervious, impervious, and total acreage rounded to the nearest hundredth. Rational: Revised language to specify GIS-compatible formats for GIS data submittals to ensure consistency in data received by the department. Removed “If the permittee does not have an MS4 map in a GIS compatible format, the permittee shall provide the map as a PDF document” since open-source geospatial data software is available for use to permittees and there are also recorded tutorial resources for software use training available on YouTube, etc.

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			Added (a) and (b) to ensure consistency and adequate detail of the MS4 service area and data. Impact: All map submittals will be compatible with Agency GIS systems and guidelines.
N/A	Part I E.3.a(4)	None.	All file geodatabase feature classes or shapefiles shall be submitted in the following data format standards: (a) Point data in NAD83 or WGS84 decimal degrees global positional system coordinates; (b) Data projected in Virginia Lambert Conformal Conic format; (c) Outfall location accuracy shall be represented in decimal degrees rounded to at least the fifth decimal place for latitude and longitude to ensure point location accuracy (e.g., 37.61741, -78.15279); and (d) Metadata shall provide a description of each feature class or shapefile dataset, units of measure as applicable, coordinate system, and projection. Rationale: Added (4) to ensure consistency and adequate detail of the MS4 service area and data. Impact: Makes map files uniform, and more useful for various application, as well being compatible with Agency systems and guidelines.
Part I E.3.a(4)	Part I E.3.a(5)	No later than October 1 of each year, the permittee shall update the MS4 map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate preceding reporting period.	Renumbered, no change. No impact.
Part I E.3.a(5)	Part I E.3.a(6)	The permittee shall provide written notification to any downstream adjacent MS4 of any known physical interconnection	Re-numbered, no change. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		established or discovered after the effective date of this permit.	
Part I E.3.c(2)(d)	Part I E.3.c(2)(d)-(g)	A mechanism to track the following information: (i) The unique outfall identifier; (ii) Time since the last precipitation event; (iii) The estimated quantity of the last precipitation event; (iv) Site descriptions (e.g., conveyance type and dominant watershed land uses); (v) Whether or not a discharge was observed; and (vi) If a discharge was observed, the estimated discharge rate (e.g., width and depth of discharge flow rate) and visual characteristics of the discharge (e.g., odor, color, clarity, floatables, deposits or stains, vegetation condition, structural condition, and biology).	The permittee may adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Observation points may include points of interconnection, manholes, points of discharge, conveyances, or inlets suspected to have a high likelihood of receiving illicit discharges; (e) Each observation point screened may be counted as one outfall screening activity equivalent and counted towards the requirements of Part I E 3 c (2) (b) or (2) (c); however, at least 50% of the minimum annual screening events must include outfall screening; (f) Illicit discharges reported by the public and subsequent investigations may not be counted as screening events; however once the resolution of the investigation and the date the investigation was closed has been documented, an observation point may be established for future screening events; and Rationale: (d) was revised and (e)-(f) were added to expand the dry weather screening program to incorporate an optional risk based approached that goes beyond the outfall, based upon permittee historical programmatic IDDE knowledge and land use that allows for a more targeted approach. This risk-based option may allow for better resource allocation and a potentially more productive and directed screening efforts.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Impact: Increased flexibility for achieving permit conditions and program enhancement. (g) A checklist or mechanism to track the following information for dry weather screening events: (i) The unique identifier for the outfall or observation point; (ii) Time since the last precipitation event; (iii) The estimated quantity of the last precipitation event; (iv) Site descriptions (e.g., conveyance type and dominant watershed land uses); (v) Observed indicators of possible illicit discharge events such as, floatables, deposits, stains, and vegetative conditions (e.g., dying or dead vegetation, excessive vegetative growth, etc.); (vi) Whether or not a discharge was observed; (vii) If a discharge was observed, the estimated discharge rate and visual characteristics of the discharge (e.g., odor, color, clarity) and the physical condition of the outfall; and (viii) For observation points, the location, downstream outfall unique identifier, and risk factors or rationale for establishing the observation point. Rationale: Dry weather screening information tracking was reformatted and revised to incorporate the potential use of observation points for risk based approaches.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Observed indicators of illicit discharges were moved to (v) and the indicator list was expanded to ensure illicit discharge indicators are part of all dry-weather screening events and not limited to outfalls with an observed discharge present during inspection. Impact: Dry weather screening enhanced effectiveness.
Part I E.3.d(1)		The MS4 map and information table required by Part I E 3 a. The map and information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request;	The MS4 map and outfall information table required by Part I E 3 a. The map and outfall information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request; Rationale: Added “outfall” descriptor for “information table” clarification. No impact.
Part I E.3.e(1)-(3)		(1) A confirmation statement that the MS4 map and information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year; (2) The total number of outfalls screened during the reporting period as part of the dry weather screening program; and (3) A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows: (a) The source of illicit discharge;	A confirmation statement that the MS4 map and outfall information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year; (2) The total number of outfalls and observation points screened during the reporting period as part of the dry weather screening program; and (3) A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows: (a) The location and source of illicit discharge; Rationale: (1) Added “outfall” to “information table”, (2) added “and observation points,” and (3) (a) added “location and” to “source of illicit discharge” for clarification.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			No impact.
Part I E.4		Construction site stormwater runoff.	Construction site stormwater runoff and erosion and sediment control. Rationale: Added “and erosion and sediment control” for clarification on other state programs utilized for satisfying Part I E 4 requirements. No impact.
Part I E.4.a (1) and (2)		(1) If the permittee is a city, county, or town that has adopted a Virginia Erosion and Sediment Control Program (VESCP), the permittee shall implement the VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840); (2) If the permittee is a town that has not adopted a VESCP, implementation of a VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44:15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840) by the surrounding county shall constitute compliance with Part I E 4 a; such town shall notify the surrounding county of erosion, sedimentation or other construction stormwater runoff problems;	(1) If the traditional permittee is a city, county, or town that has adopted a Virginia Erosion and Sediment Control Program (VESCP), the permittee shall implement the VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840); (2) If the traditional permittee is a town that has not adopted a VESCP, implementation of a VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44:15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840) by the surrounding county shall constitute compliance with Part I E 4 a; such town shall notify the surrounding county of erosion, sedimentation or other construction stormwater runoff problems; Rationale: Added “traditional” permittee qualifier to (1) and (2) for clarification. No impact.
Part I E.4.a(3), (4) and (5)		(3) If the permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and	(3) If the nontraditional permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has developed standards and

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		has developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall implement the most recent department approved standards and specifications; or (4) If the permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall inspect all land disturbing activities as defined in § 62.1-44.15:51 of the Code of Virginia that result in the disturbance activities of 10,000 square feet or greater, or 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, as follows: (5) If the permittee is a subdivision of a local government such as a school board or other local government body, the permittee shall inspect those projects resulting in a land disturbance as defined in § 62.1-44.15.51 of the Code of Virginia occurring on lands owned or operated by the permittee that result in the disturbance of 10,000 square feet or greater, 2,500 square feet or greater in accordance with areas designated under the	specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall implement the most recent department approved standards and specifications; or (4) If the nontraditional permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall inspect all land disturbing activities as defined in § 62.1-44.15:51 of the Code of Virginia that result in the disturbance activities of 10,000 square feet or greater, or 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, as follows: (5) If the nontraditional permittee is a school board or other local government body, the permittee shall inspect those projects resulting in a land disturbance as defined in § 62.1-44.15.51 of the Code of Virginia occurring on lands owned or operated by the permittee that result in the disturbance of 10,000 square feet or greater, 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, or in accordance with more stringent thresholds established by the local government, as follows:

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		Chesapeake Bay Preservation Act, or in accordance with more stringent thresholds established by the local government, as follows:	Rationale: Added "nontraditional" permittee qualifier to (3), (4), and (5) for clarification. No impact.
Part I E.4.b		The permittee shall require implementation of appropriate controls to prevent nonstormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land disturbing activity inspections of the MS4. The discharge of nonstormwater discharges other than those identified in 9VAC25-890-20 D through the MS4 is not authorized by this state permit.	The permittee shall require implementation of appropriate controls to prevent nonstormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land disturbing activity inspections. The discharge of nonstormwater discharges other than those identified in 9VAC25-890-20 D through the MS4 is not authorized by this state permit. Rationale: Removed "of the MS4" for clarification. No impact.
Part I E 6 l (5)	Part I E 4 c	Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators shall obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;	Moved from MCM6 to MCM4 requirements to include certification requirements with other erosion and sediment control permit conditions. No change. No impact.
Part I E 4 c	Part I E 4 d	The permittee's MS4 program plan shall include:	Rationale: Moved to d. No change. No impact
Part I E 4 c (1)	Part I E 4 d (1)	If the permittee implements a construction site stormwater runoff control program in accordance with Part I E 4 a (1), the local ordinance citations for the VESCP program;	If the permittee implements an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (1), the local ordinance citations for the VESCP program; Rationale: Added "erosion and sediment control program" for clarification. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Part I E 4 c (2)	Part I E 4 d (2) and (3)	(2) If the permittee implements a construction site stormwater runoff control program in accordance with Part I E 4 a (3):	(2) If the permittee is a town that does not implement an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (2), the county ordinance citations for the VESCP program the town is subject to; (3) If the permittee implements annual standards and specifications for erosion and sediment control and construction site stormwater runoff in accordance with Part I E 4 a (3): Rationale: Added (2) for clarification on towns that do not implement an erosion and sediment control program. No impact.
Part I E 4 c (3)	Part I E 4 d (4)	A description of the legal authorities utilized to ensure compliance with Part I E 4 a to control construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;	A description of the legal authorities utilized to ensure compliance with Part I E 4 a for erosion and sediment control and construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements; Rationale: Reworded for clarity. No impact.
Part I E 4 c (4)	Part I E 4 d (5)	Written inspection procedures to ensure the requirements are maintained in accordance with 9VAC25-840-90 A and onsite erosion and sediment controls are properly implemented and all associated documents utilized during inspection including the inspection schedule;	For traditional permittees, written inspection procedures to ensure VESCP requirements are maintained in accordance with 9VAC25-840-90 A and onsite erosion and sediment controls are properly implemented in accordance with 9VAC25-840-60 B; Rationale: Reformatted to apply to traditional permittees with erosion and sediment control program requirements for written inspection procedures and inspection schedules to reduce regulatory redundancy. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Part I E 4 c (5)	Part I E 4 d (6)-(8)	Written procedures for requiring compliance through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and	(6) For nontraditional permittees, erosion and sediment control plans or annual standards and specifications shall be approved by the department in accordance with § 62.1-44.15:55. Compliance with approved erosion and sediment control plans or annual standards and specifications shall be ensured by the permittee with written inspection procedures that at minimum include the following: (a) An inspection checklist for documenting onsite erosion and sediment control structures and systems are properly maintained and repaired as needed to insure continued performance of their intended function; and (b) A list of all associated documents utilized for inspections including checklists, department approved erosion and sediment control plans, or the most recently department approved annual standards and specifications, and any other documents utilized. (7) Traditional permittees shall maintain written procedures for requiring VESCP compliance through corrective action or enforcement action in accordance with § 62.1-44.15:58 of the Code of Virginia. (8) Nontraditional permittees shall maintain written procedures for requiring compliance with department approved erosion and sediment control plans and annual standards and specifications through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and

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			Rationale: Clarified expectations for traditional and nontraditional permittees to facilitate nontraditional permittee compliance. Impact: Streamlines traditional permittee requirements and clarifies nontraditional permittee expectations.
Part I E 4 c (6)	Part I E 4 d (9)	The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the construction site stormwater runoff control requirements in Part I E 4.	The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing erosion and sediment control and construction site stormwater runoff control requirements in Part I E 4. Rationale: Added “erosion and sediment control” for clarification. No impact.
Part I E 4 d	Part I E 4 e	(1) If the permittee implements a construction site stormwater runoff program in accordance with Part I E 4 a (3): (a) A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved standards and specifications for erosion and sediment control; and (b) If one or more of the land disturbing projects were not conducted with the department approved standards and specifications, an explanation as to why the projects did not conform to the approved standards and specifications. (2) Total number of inspections conducted; and (3) The total number and type of enforcement actions implemented	(1) For nontraditional permittees: (a) A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved annual standards and specifications for erosion and sediment control; and (b) If any land disturbing projects were conducted without department approved annual standards and specifications, a list of all land disturbing projects that occurred during the reporting period with erosion and sediment control plan approval dates for each project. Rationale: Revised for nontraditional clarification. No impact. (2) Total number of erosion and sediment control inspections conducted; and

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		and the type of enforcement actions.	(3) Total number of each type of compliance action and enforcement action implemented and. Rationale: Revised for clarity. No impact.
Part I E 5 a (1) and (2)		(1) If the permittee is a city, county, or town, with an approved Virginia Stormwater Management Program (VSMP), the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Parts I E 5 b and c; (2) If the permittee is a town that has not adopted a VSMP, implementation of a VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) by the surrounding county shall constitute compliance with Part I E 5 a; such town shall notify the surrounding county of erosion, sedimentation, or other post-construction stormwater runoff problems and develop an inspection and maintenance program in accordance with Part I E 5 b and c;	(1) If the traditional permittee is a city, county, or town, with an approved Virginia Stormwater Management Program (VSMP), the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Parts I E 5 b and c; (2) If the traditional permittee is a town that has not adopted a VSMP, implementation of a VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) by the surrounding county shall constitute compliance with Part I E 5 a; such town shall notify the surrounding county of erosion, sedimentation, or other post-construction stormwater runoff problems and develop an inspection and maintenance program in accordance with Part I E 5 c and d; Rationale: Added “traditional” permittee qualifier for clarification. No impact.
N/A	Part I E 5 a (3)	None.	If the traditional permittee is a city, county, or town receiving initial permit coverage during the permit term and must obtain VSMP approval from the department, the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Parts I E 5 b and c no later than 60 months after receiving permit coverage; Rationale: Permit condition for new traditional permittees recognizing they may be required to adopt a VSMP program if not already a VSMP authority. Impact: Gives new traditional permittees time to develop VSMP.
Part I E 5 a (3)-(5)	Part I E 5 a (4)-(6)	(3) If the permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870), the permittee shall implement the most recent department approved standards and specifications and develop an inspection and maintenance program in accordance with Part I E 5 b; (4) If the permittee is a subdivision of a local government such as a school board or other local government body, the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 or in accordance with more stringent local requirements, if applicable, and with the implementation of a maintenance and inspection program consistent with Part I E 5 b. If the nontraditional permittee is a state agency; public institution	(4) If the nontraditional permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870), the permittee shall implement the most recent department approved standards and specifications and develop an inspection and maintenance program in accordance with Part I E 5 b; (5) If the permittee is a subdivision of a local government such as a school board or other local government body, the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 or in accordance with more stringent local requirements, if applicable, and with the implementation of a maintenance and inspection program consistent with Part I E 5 b. If the nontraditional permittee is a state agency; public institution of higher education including community colleges, colleges, and universities;

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		of higher education including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and Virginia Stormwater Management Regulations (9VAC25-870) the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 and with the implementation of a maintenance and inspection program consistent with Part I E 5 b; or (5) If the permittee is a school board or other local government body, the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 or in accordance with more stringent local requirements, if applicable, and with the implementation of a maintenance and inspection program consistent with Part I E 5 b.	or federal entity and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and Virginia Stormwater Management Regulations (9VAC25-870) the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 and with the implementation of a maintenance and inspection program consistent with Part I E 5 b; or (6) If the nontraditional permittee is a school board or other local government body, the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 or in accordance with more stringent local requirements, if applicable, and with the implementation of a maintenance and inspection program consistent with Part I E 5 b. Rationale: Added “nontraditional” qualifier for clarity. No impact.
Part I E 5 b		The permittee shall implement an inspection and maintenance program for those stormwater management facilities owned or operated by the permittee that discharges to the MS4 as follows:	The permittee shall implement an inspection and maintenance program for those stormwater management facilities owned or operated by the permittee as follows: Rationale: Removed “that discharges to the MS4” for clarification because stormwater management facilities owned or operated by the permittee within the MS4 service area are inherently part of the permittee’s system regardless of whether the facility discharges to the MS4.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			No impact.
Part I E 5 b (1)		The permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of its stormwater management facilities.	The permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of its stormwater management facilities. The permittee may utilize inspection and maintenance specifications developed by the Virginia Stormwater BMP Clearinghouse or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines. Rationale: Added clarification that permittees may utilized established inspection and maintenance specifications or maintenance plans. Impact: Reduces duplication of permittee efforts to develop procedures and promotes consistency with state specifications.
Part I E 6 l (6)	Part I E 5 (2)	Employees and contractors implementing the stormwater program shall obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations.	Rationale: Moved certification requirements to post-construction stormwater management. No impact.
Part I E 5 c		For those permittees described in Part I E 5 a (1) or (2) the permittee shall:	For traditional permittees described in Part I E 5 a (1), (2), or (3), the permittee shall: Rationale: Added "traditional" permittee requirement for clarification. No impact.
Part I E 5 c (1) (b)		Adequate long-term operation and maintenance by the owner of the stormwater management facility by requiring the owner to develop and record a	Require adequate long-term operation and maintenance by the owner of the stormwater management facility by requiring the owner to develop and record a maintenance agreement, including

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		maintenance agreement, including an inspection schedule to the extent allowable under state or local law or other legal mechanism;	an inspection schedule to the extent allowable under state or local law or other legal mechanism; Rationale: Added "Require" for clarification. No impact.
Part I E 5 c (2)		Utilize its legal authority for enforcement of the maintenance responsibilities if maintenance is neglected by the owner; and	Utilize its legal authority for enforcement of the maintenance responsibilities in accordance with 9VAC25-870-112 if maintenance is neglected by the owner; and Rationale: Added 9VAC25-870-112 for clarification. No impact.
N/A	Part I E 5 c (4)	None.	The permittee may utilize the inspection reports provided by the owner of a stormwater management facility as part of an inspection and enforcement program in accordance with 9VAC25-870-114 C. Rationale: Added (4) for clarification on satisfying inspection and enforcement program requirements. No impact.
Part I E 5 d-e	Removed	d. The permittee shall maintain an electronic database or spreadsheet of all known permittee-owned or permittee-operated and privately owned stormwater management facilities that discharge into the MS4. The database shall also include all BMPs implemented by the permittee to meet the Chesapeake Bay TMDL load reduction as required in Part II A. A database shall include the following information as applicable: (1) The stormwater management facility or BMP type;	Rationale: Removed because maintaining this database for the purposes of this permit is duplicative of BMP Warehouse Reporting requirements (moved to Part III). Impact: Reduces duplication of tracking and reporting requirements for stormwater management facilities.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		(2) The stormwater management facility or BMPs location as latitude and longitude; (3) The acres treated by the stormwater management facility or BMP, including total acres, pervious acres, and impervious acres; (4) The date the facility was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use June 30, 2005; (5) The 6th Order Hydrologic Unit Code in which the stormwater management facility is located; (6) Whether the stormwater management facility or BMP is owned or operated by the permittee or privately owned; (7) Whether or not the stormwater management facility or BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both; (8) If the stormwater management facility or BMP is privately owned, whether a maintenance agreement exists; and (9) The date of the permittee's most recent inspection of the BMP. e. The electronic database or spreadsheet shall be updated no later than 30 days after a new stormwater management facility is brought online, a new BMP is implemented to meet a TMDL load reduction as required in Part	

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		II, or discovered if it is an existing stormwater management facility.	
Part I E 5 f-g	Part III	f. The permittee shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities. g. No later than October 1 of each year, the permittee shall electronically report the stormwater management facilities and BMPs implemented between July 1 and June 30 of each year using the DEQ BMP Warehouse and associated reporting template for any practices not reported in accordance with Part I E 5 f including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.	Rationale: Moved to Part III in order to clarify stormwater management facilities are considered a subcategory of BMPs that are defined in the context of Part III. Impact: Clarifies reporting expectations for BMP Warehouse Reporting.
Part I E 5 h (1) (c)	Part I E 5 d (1) (c)	Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned BMPs.	Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned stormwater management facilities. Rationale: Changed “BMPs” to “stormwater management facilities” for consistency. No impact.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Part I E 5 h (4)	Part I E 5 d (4)	Written inspection procedures and all associated documents utilized during inspection of stormwater management facilities owned or operated by the permittee;	Written inspection and maintenance procedures and other associated template documents utilized during inspection and maintenance of stormwater management facilities owned or operated by the permittee; and Rationale: Changed for clarity. No impact.
Part I E 5 h (6)	Removed	The stormwater management facility spreadsheet or database incorporated by reference and the location or webpage address where the spreadsheet or database can be reviewed.	Rationale: Removed database requirement because this program plan element is duplicative of BMP Warehouse reporting. Impact: Reduces permittee program plan update burden.
Part I E 5 i (1)	Part I E 5 e (1)	If the permittee implements a Virginia Stormwater Management Program in accordance with Part I E 5 a (1) and (2):	If the traditional permittee implements a VSMP in accordance with Part I E 5 a (1), (2), and (3): Rationale: Changed for clarity. No impact.
Part I E 5 i (4)	Part I E 5 e (4)	A confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part I E 5 f or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities; and	For traditional permittees as specified in Part I E 5 a (1), a confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with Part III B 1 or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities; Rationale: Changed recognizing nontraditional permittees do not have access to the Virginia

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			Construction Stormwater General Permit database. No impact.
Part I E 5 i (5)	Part I E 5 e (5)	A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part I E 5 g and the date on which the information was submitted.	A confirmation statement that the permittee electronically reported stormwater management facilities using the DEQ BMP Warehouse in accordance with Part III B 1 and 2; and Rationale: Changed for clarity. No impact.
N/A	Part I E 5 e (6)	None.	A confirmation statement that the permittee electronically reported stormwater management facilities inspected using BMP Warehouse in accordance with Part III B 5. Rationale: Annual reporting element for providing most recent inspection dates to BMP Warehouse. No impact.
Part I E 6 a		The permittee shall maintain and implement written procedures for those activities at facilities owned or operated by the permittee, such as road, street, and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers designed to:	The permittee shall maintain and implement written good housekeeping procedures for those activities listed in Part I E 6 b at facilities owned or operated by the permittee designed to meet the following objectives: Rationale: Reformatted to clarify objectives of written good housekeeping procedures. No impact.
Part I E 6 a (2)		Ensure the proper disposal of waste materials, including landscape wastes	Ensure permittee staff or contractors properly dispose of waste materials, including landscape wastes and prevent waste materials from entering the MS4; Rationale: Changed for clarity.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			No impact.
Part I E 6 a (3)		Prevent the discharge of wastewater or permittee vehicle wash water or both into the MS4 without authorization under a separate VPDES permit;	Prevent the discharge of wastewater or wash water not authorized in accordance with 9VAC25-890-20 D 3 t, or both into the MS4 without authorization under a separate VPDES permit; and Rationale: Changed for clarification. No impact.
N/A	Part I E 6 a (4)	None.	Minimize the pollutants in stormwater runoff. Rationale: Reformatted this section to reduce redundancy since this objective is in multiple conditions for activities requiring written procedures. No impact.
Part I E 6 a	Part I 6 b	The permittee shall maintain and implement written procedures for those activities at facilities owned or operated by the permittee, such as road, street, and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers designed to:	The permittee shall develop and implement written good housekeeping procedures that meet the objectives established in Part I E 6 a for the following activities: Rationale: Reformatted to clarify activities requiring written good housekeeping procedures. No impact.
Part I E 6 a	Part I E 6 b (1)-(4)	The permittee shall maintain and implement written procedures for those activities at facilities owned or operated by the permittee, such as road, street, and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers designed to:	(1) Road, street, sidewalk, and parking lot maintenance and cleaning; (a) Within 24 months of permit issuance, permittees that apply anti-icing and deicing agents shall update and implement procedures in accordance with this subsection to include implementation of best management practices for anti-icing

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			and deicing agent application, transport, and storage. (b) Procedures developed in accordance with this subsection shall prohibit the application of any anti-icing or deicing agent containing urea or other forms of nitrogen or phosphorus; (2) Renovation and significant exterior maintenance activities (e.g., painting, building power-washing, roof resealing, and HVAC coil cleaning) not covered under a separate VSMP construction general permit. The permittee shall develop and implement procedures no later than 36 months of permit issuance; (3) Discharging water pumped from construction and maintenance activities; (4) Temporary storage of landscaping materials; Rationale: Reformatted to clarify activities requiring written good housekeeping procedures. Added (a) good housekeeping procedures for Road, street, sidewalk, and parking lot maintenance and cleaning anti-icing and deicing agent application update to ensure proper management of anti-icing and deicing activities. Integrated Part I E 6 k into (b). Added (2) since renovation and significant exterior maintenance activities have historically caused compliance issues in the MS4 program. Added (4) to distinguish landscaping temporary storage considerations from long-term bulk storage that meets the definition of a high-priority facility.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			Impact: Objectives of procedures and activities requiring procedures are clarified for permittees.
Part I E 6 a (5)	Removed	Minimize the pollutants in stormwater runoff from bulk storage areas (e.g., salt storage, topsoil stockpiles) through the use of best management practices;	Rationale: Removed as this provision is redundant and overlaps provisions on high-priority facilities. Impact: Eliminated overlapping permit conditions.
Part I E 6 a (6)	Part I E 6 a (5)	Prevent pollutant discharge into the MS4 from leaking municipal automobiles and equipment; and	Maintenance of permittee owned or operated vehicles and equipment (i.e., prevent pollutant discharges from leaking permittee vehicles and equipment); Rationale: Reformatted to fit activity list format. No impact.
Part I E 6 a	Part I E 6 b (6)	The permittee shall maintain and implement written procedures for those activities at facilities owned or operated by the permittee, such as road, street, and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers designed to:	Application of materials, including pesticides, and herbicides shall not exceed manufacturer's recommendations; and Rationale: Reformatted to clearly identify activity requiring a procedure. No impact.
Part I E 6 a	Part I E 6 b (7)	The permittee shall maintain and implement written procedures for those activities at facilities owned or operated by the permittee, such as road, street, and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers designed to:	Application of fertilizer shall not exceed maximum application rates established by applicable nutrient management plans. For areas not covered under nutrient management plans where fertilizer is applied, application rates shall not exceed manufacturer’s recommendations. Rationale: Reformatted to clearly identify activity requiring a procedure with nutrient management plan considerations.
Part I E 6 l	Part I E 6 c	The permittee shall require through the use of contract language, training, standard	Rationale: Moved to proceed procedure requirements. No change.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		operating procedures, or other measures within the permittee's legal authority that contractors employed by the permittee and engaging in activities with the potential to discharge pollutants use appropriate control measures to minimize the discharge of pollutants to the MS4.	No impact.
Part I E 6 m-o	Part I E 6 d-f	m. The permittee shall develop a training plan in writing for applicable staff that ensures the following: (1) Field personnel receive training in the recognition and reporting of illicit discharges no less than once per 24 months; (2) Employees performing road, street, and parking lot maintenance receive training in pollution prevention and good housekeeping associated with those activities no less than once per 24 months; (3) Employees working in and around maintenance, public works, or recreational facilities receive training in good housekeeping and pollution prevention practices associated with those facilities no less than once per 24 months; (4) Employees and contractors hired by the permittee who apply pesticides and herbicides are trained or certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia). Certification by the Virginia Department of Agriculture and Consumer Services (VCACS) Pesticide and Herbicide Applicator program shall	d. The written procedures established in accordance with Part I E 6 a and b shall be utilized as part of the employee training program at Part I E 6 m. and the permittee shall develop a written training plan for applicable field personnel that ensures the following: (1) Applicable field personnel shall receive training in the prevention, recognition, and elimination of illicit discharges no less than once per 24 months; (2) Employees performing road, street, sidewalk, and parking lot maintenance shall receive training in good housekeeping procedures required under Part I E 6 b 1 no less than once per 24 months; (3) Employees working in and around facility maintenance, public works, or recreational facilities shall receive training in applicable Part I E 6 a and b good housekeeping procedures required no less than once per 24 months; (4) Employees working in and around high-priority facilities with a stormwater pollution prevention plan (SWPPP) shall receive training in applicable site specific SWPPP procedures no less than once per 24 months;

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		constitute compliance with this requirement; (5) Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations; (6) Employees and contractors implementing the stormwater program obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations; and (7) Employees whose duties include emergency response have been trained in spill response. Training of emergency responders such as firefighters and law-enforcement officers on the handling of spill releases as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan. n. The permittee shall maintain documentation of each training event conducted by the permittee to fulfill the requirements of Part I E 6 m for a minimum of three years after the training event. The documentation shall include the following information: (1) The date of the training event; (2) The number of employees attending the training event; and (3) The objective of the training event.	(5) Employees whose duties include emergency spill control and response shall be trained in spill control and response. Emergency responders such as firefighters and law-enforcement officers trained on the handling of spill control and response as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan. (6) Employees and contractors hired by the permittee who apply pesticides and herbicides shall be trained and certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia). Certification by the Virginia Department of Agriculture and Consumer Services (VDACS) Pesticide and Herbicide Applicator program shall constitute compliance with this requirement. Contracts for the application of pesticide and herbicides executed after the effective date of this permit shall require contractor certification. e. The permittee shall maintain documentation of each training activity conducted by the permittee to fulfill the requirements of Part I E 6 d for a minimum of three years after training activity completion. The documentation shall include the following information: (1) The date when applicable employees have completed the training activity; (2) The number of employees that have completed the training activity; and (3) The training objectives and good housekeeping procedures required under Part I E 6 a covered by training activity.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		o. The permittee may fulfill the training requirements in Part I E 6 m, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements.	f. The permittee may fulfill the training requirements in Part I E 6 d, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements. Rationale: Moved to proceed procedure and contract requirements. Added language for clarification on pesticide management, SWPPP training, and training activities. No impact.
Part I E 6 c	Part I E 6 g	Within 12 months of state permit coverage, the permittee shall identify which of the high-priority facilities have a high potential of discharging pollutants. The permittee shall maintain and implement a site specific stormwater pollution prevention plan (SWPPP) for each facility identified. High priority facilities that have a high potential for discharging pollutants are those facilities that are not covered under a separate VPDES permit and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt or runoff:	The permittee shall maintain and implement a site specific stormwater pollution prevention plan (SWPPP) for each high-priority facility identified. High priority facilities that have a high potential for discharging pollutants are those facilities that are not covered under a as defined in 9VAC25-890-1 that does not have or require separate VPDES permit coverage, and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt or runoff: Rationale: Reformatted and revised to reduce subjectivity of permit condition. Impact: More objective permit condition.
N/A	Part I E 6 h (4)	Written procedures designed to reduce and prevent pollutant discharge;	A description of all structural control measures such as stormwater management facilities and other pollutant source controls applicable to SWPPP implementation (e.g., permeable pavement or oil-water separators that discharge to sanitary sewer are not applicable to

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			the SWPPP) such as oil-water separators, and inlet protection designed to address potential pollutants and pollutant sources at risk of being discharged to the MS4; Rationale: Added (4) to include source control description in SWPPP. Impact: Adds crucial information to SWPPPs.
N/A	Part I E 6 h (5)	None.	A maintenance schedule of all structural stormwater management facilities and other pollutant source controls applicable to SWPPP implementation described in Part I E 6 h (4). Rationale: Added (5) to include source control maintenance schedule in SWPPP. Impact: Adds crucial information to SWPPPs.
N/A	Part I E 6 h (6)	None.	Site specific written procedures designed to reduce and prevent pollutant discharge that incorporate by reference applicable good housekeeping procedures required under Part I E 6 a and b; Rationale: Adds crucial information to SWPPPs that may utilize written good housekeeping procedures. Impact: Integrates SWPPPs with good housekeeping procedures.
Part I E 6 d (6)	Removed	Procedures to conduct an annual comprehensive site compliance evaluation	Rationale: Duplicative of other permit conditions. Impact: Reduces duplicative efforts.

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N/A	Part I E 6 h (9) and (10)	None.	(10) A log of modifications to the SWPPP made as the result of any unauthorized discharge, release, or spill in accordance Part I E 6 j or changes in facility activities and operation requiring SWPPP modification; and (11) The point of contact for SWPPP implementation. Rationale: Condition for documenting issues or changes in facility activities requiring SWPPP modification. Added SWPPP point of contact in order for the Department to know whose responsible for SWPPP implementation. Impact: Keeps record of vital changes for SWPPP implementation and promotes transparency.
Part I E 6 e	Part I E 6 i	No later than June 30 of each year, the permittee shall annually review any high-priority facility owned or operated by the permittee for which a SWPPP has not been developed to determine if the facility has a high potential to discharge pollutants as described in Part I E 6 c. If the facility is determined to be a high-priority facility with a high potential to discharge pollutants, the permittee shall develop a SWPPP meeting the requirements of Part I E 6 d no later than December 31 of that same year.	No later than June 30 of each year, the permittee shall annually review any high-priority facility owned or operated by the permittee for which a SWPPP has not been developed to determine if the facility meets any of the conditions described in Part I E 6 g. If the facility is determined to need a SWPPP, the permittee shall develop a SWPPP meeting the requirements of Part I E 6 h no later than December 31 of that same year. The permittee shall maintain a list of all high-priority facilities owned or operated by the permittee not required to maintain a SWPPP in accordance with Part I E 6 g and this list shall be available upon request. Rationale: Revised to reduce subjectivity and add requirement to maintain a list of high-priority facilities not required to maintain a SWPPP as this information is

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			necessary to track for annual reviews. Impact: Reduces condition subjectivity and enhances high-priority facility tracking.
Part I E 6 g-h	Part I E 6 k-m	g. The SWPPP shall be kept at the high-priority facility with a high potential to discharge and utilized as part of staff training required in Part I E 6 m. The SWPPP and associated documents may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site. h. If activities change at a facility such that the facility no longer meets the criteria of a high-priority facility with a high potential to discharge pollutants as described in Part I E 6 c, the permittee may remove the facility from the list of high-priority facilities with a high potential to discharge pollutants.	k. The SWPPP shall be kept at the high-priority facility and utilized as part of employee SWPPP training required in Part I E 6 m Part I E 6 d (4). The SWPPP and associated documents may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site. l. If activities change at a facility such that the facility no longer meets the definition of a high-priority facility, the permittee may remove the facility from the list of high-priority facilities with a high potential to discharge pollutants. m. If activities change at a facility such that the facility no longer meets the criteria requiring SWPPP coverage as described in Part I E 6 g, the permittee may remove the facility from the list of high-priority facilities that require SWPPP coverage. Rationale: Removed “with a high potential to discharge pollutants” to reduce subjectivity. Added (m) to distinguish between facility changes in activities that no longer the meet the definition of a high-priority facility and changes in activities that no longer require SWPPP coverage. Impact: Clarifies classification of high-priority facilities and SWPPP applicability.

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
Part I E 6 i	Part I 6 n	The permittee shall maintain and implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations.	The permittee shall maintain and implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than one acre. Rationale: Moved last sentence to following section. No impact.
N/A	Part I E 6 o-r	None.	o. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations. For newly established turf where nutrients are applied to a contiguous area greater than one acre, the permittee shall implement a nutrient management plan no later than six months after the site achieves final stabilization. p. Nutrient management plans developed in accordance with Part I E 6 n shall be submitted to the Department of Conservation and Recreation (DCR) for approval. q. Nutrient management plans that are expired as of the effective date of this permit shall be submitted to DCR for renewal no later than six months after the effective date of this permit. Thereafter, all nutrient management plans shall be submitted to DCR at least 30 days prior to nutrient management plan expiration. Within 36 months of permit coverage, no nutrient management plans maintained by

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			the permittee in accordance with Part I E 6 n shall be expired due to DCR documented noncompliance with 4VAC50-85-130 provided to the permittee. r. Nutrient management plans may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site. Rationale: Establish timeframe developing and renewing nutrient management plans and clarify DCR's role in plan review and approval. Impact: Requires renewal of expired nutrient management plans in established timeframe and DCR review.
Part I E 6 j	Part I E 6 s	Permittees with lands regulated under § 10.1-104.4 of the Code of Virginia, including state agencies, state colleges and universities, and other state government entities, shall continue to implement turf and landscape nutrient management plans in accordance with this statutory requirement.	Nontraditional permittees with lands regulated under § 10.1-104.4 of the Code of Virginia, including state agencies, state colleges and universities, and other state government entities, shall continue to implement turf and landscape nutrient management plans in accordance with this statutory requirement. Rationale: Added nontraditional qualifier for clarification. No impact.
Part I E 6 p (1)-(3)	Part I E 6 t (1)-(3)	(1) The written procedures for the operations and maintenance activities as required by Part I E 6 a; (2) A list of all high-priority facilities owned or operated by the permittee required in accordance with Part I E 6 c, and	(1) A list of written good housekeeping procedures for the operations and maintenance activities as required by Part I E 6 a and b; (2) A list of all high-priority facilities owned or operated by the permittee required to maintain a SWPPP in accordance Part I E 6 g that

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		whether or not the facility has a high potential to discharge; (3) A list of lands for which turf and landscape nutrient management plans are required in accordance with Part I E 6 i and j, including the following information: (a) The total acreage on which nutrients are applied; (b) The date of the most recently approved nutrient management plan for the property; and (c) The location in which the individual turf and landscape nutrient management plan is located;	includes the facility name, facility location, and the location of the SWPPP hardcopy or electronic document being maintained. The SWPPP for each high-priority facility shall be incorporated by reference; (3) A list of locations for which turf and landscape nutrient management plans are required in accordance with Part I E 6 n and s, including the following information: (a) The total acreage covered by each nutrient management plan; (b) The DCR approval date and expiration date for each nutrient management plan; (c) The location of the nutrient management plan hardcopy or electronic document being maintained. Rationale: Require a list of procedures instead of each procedure in its entirety and provided clarification on program plan requirements. Impact: Reduces the need for program plan updates every time a procedure is updated.
Part I E 6 q	Part I E 6 u	(1) A summary of any operational procedures developed or modified in accordance with Part I E 6 a during the reporting period; (2) A summary of any new SWPPPs developed in accordance Part I E 6 c during the reporting period; (3) A summary of any SWPPPs modified in accordance with Part I E 6 f or the rationale of any high priority facilities delisted in	(1) A summary of any written procedures developed or modified in accordance with Part I E 6 a and b during the reporting period; (2) A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period; (3) A list of any new SWPPPs developed in accordance Part I E 6 i during the reporting period;

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		accordance with Part I E 6 h during the reporting period; (4) A summary of any new turf and landscape nutrient management plans developed that includes: (a) Location and the total acreage of each land area; and (b) The date of the approved nutrient management plan; and (5) A list of the training events conducted in accordance with Part I E 6 m, including the following information: (a) The date of the training event; (b) The number of employees who attended the training event; and (c) The objective of the training event.	(4) A summary of any SWPPPs modified in accordance with Part I E 6 j, l, or m; (5) The rationale of any high-priority facilities delisted in accordance with Part I E 6 l or m during the reporting period; (6) The status of each nutrient management plan as of June 30 of the reporting year (e.g., approved, submitted and pending approval, and expired); (7) A list of the training activities conducted in accordance with Part I E 6 d, including the following information: (a) The completion date for the training activity; (b) The number of employees who completed the training activity; and (c) The objectives and good housekeeping procedures covered by the training activity. Rationale: Updated to provide clearer and more useful reporting information.
Part II A 1 and 3		1. The Commonwealth in its Phase I and Phase II Chesapeake Bay TMDL Watershed Implementation Plans (WIPs) committed to a phased approach for MS4s, affording MS4 permittees up to three full five-year permit cycles to implement necessary reductions. This permit is consistent with the Chesapeake Bay TMDL and the Virginia Phase I and Phase II WIPs to meet the Level 2 (L2) scoping run for existing developed lands as it represents an implementation of an	1. The Commonwealth in its Phase I, Phase II, and Phase III Chesapeake Bay TMDL Watershed Implementation Plans (WIPs) committed to a phased approach for MS4s, affording MS4 permittees up to three full five-year permit cycles to implement necessary reductions. This permit is consistent with the Chesapeake Bay TMDL and the Virginia Phase I, Phase II, and Phase III WIP to meet the Level 2 (L2) scoping run for existing developed lands as it represents an implementation of an additional 60% of L2 as specified in

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		additional 35% of L2 as specified in the 2010 Phase I and Phase II WIPs. In combination with the 5.0% reduction of L2 that has already been achieved, a total reduction at the end of this permit term of 40% of L2 will be achieved. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance. 3. Reduction requirements. No later than the expiration date of this permit, the permittee shall reduce the load of total nitrogen, total phosphorus, and total suspended solids from existing developed lands served by the MS4 as of June 30, 2009, within the 2010 Census urbanized areas by at least 40% of the Level 2 (L2) Scoping Run Reductions. The 40% reduction is the sum of (i) the first phase reduction of 5.0% of the L2 Scoping Run Reductions based on the lands located within the 2000 Census urbanized areas required by June 30, 2018; (ii) the second phase reduction of at least 35% of the L2 Scoping Run based on lands within the 2000 Census urbanized areas required by June 30, 2023; and (iii) the reduction of at least 40% of the L2 Scoping Run , which shall only apply to the additional lands that were added by the 2010 expanded Census urbanized areas required by June 30, 2023. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d below as applicable:	the 2010 Phase I, Phase II, and Phase III WIPs. In combination with the 40% reduction of L2 that has already been achieved, a total reduction no later than October 31, 2028 of 100% of L2 will be achieved. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance. 3. Reduction requirements for permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018. No later than October 31, 2028, the permittee shall reduce the load of total nitrogen, total phosphorus, and total suspended solids from existing developed lands served by the MS4 as of June 30, 2009, within the 2010 Census urbanized areas by at least 100% of the Level 2 (L2) Scoping Run Reductions. The 100% reduction is the sum of (i) the first phase reduction of 5.0% of the L2 Scoping Run Reductions based on the lands located within the 2000 Census urbanized areas required by June 30, 2018; (ii) the second phase reduction of at least 35% of the L2 Scoping Run based on lands within the 2000 Census urbanized areas required by June 30, 2023; (iii) the second phase reduction of at least 40% of the L2 Scoping Run, which shall only apply to the additional lands that were added by the 2010 expanded Census urbanized areas required by June 30, 2023; and (iv) the third phase reduction of least 60% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas required by October 31, 2028. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d below as applicable:

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			Rationale: Updated to include Phase III WIP and requirements for achieving 100% of L2. No impact.
Part II A Table 3 a, b, c, and d		Calculation Sheets for Estimating Existing Source Loads and Reduction Requirements James, Potomac, Rappahannock, and York River Basins.	Rationale: Updated each table for calculating 100% cumulative reductions. No impact.
Part II A 4 and 5		4. No later than the expiration date of this permit, the permittee shall offset 40% of the increased loads from new sources initiating construction between July 1, 2009, and June 30, 2019, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.) if the following conditions apply: 5. No later than the expiration date of this permit, the permittee shall offset the increased loads from projects grandfathered in accordance with 9VAC25-870-48 that begin construction after July 1, 2014, if the following conditions apply:	4. No later than October 31, 2028, the permittee shall offset 100% of the increased loads from new sources initiating construction between July 1, 2009, and October 31, 2023, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.) if the following conditions apply: 5. No later than October 31, 2028, the permittee shall offset the increased loads from projects grandfathered in accordance with 9VAC25-870-48 that begin construction after July 1, 2014, if the following conditions apply: Rationale: Updated to 100% reductions. No impact.
N/A	Part II A 7	None.	Forty percent (40%) of L2 reductions for total nitrogen, total phosphorus, and total suspended solids shall at a minimum, be maintained by the permittee during the permit term.
Part II A 11	Part II A 12	No later than 12 months after the permit effective date, the permittee shall submit an updated Phase III Chesapeake Bay TMDL action plan for the reductions required in Part II A 3, A 4, and A 5 that includes the following information:	12. Chesapeake Bay TMDL action plan requirements. a. Permittees applying for initial coverage under this general permit shall submit a draft first phase Chesapeake Bay TMDL action plan to the department no later than

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		c. The total reductions achieved as of July 1, 2018, for each pollutant of concern in each river basin. d. A list of BMPs implemented prior to July 1, 2018, to achieve reductions associated with the Chesapeake Bay TMDL including: e. The BMPs to be implemented by the permittee prior to the expiration of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable:	October 31, 2028, unless the department grants a later date. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable. The first phase action plan shall achieve a minimum reduction of least 40% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas no later than October 31, 2033. The action plan shall include the following information: (1) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5. (2) The BMPs to be implemented by the permittee to achieve 40% of the reductions calculated in Part II A 13 a: (a) Type of BMP; (b) Project name; (c) Location; (d) Percent removal efficiency for each pollutant of concern; and (e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern; and b. For permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018, no later than 12 months after the permit effective date, the permittee shall submit a Phase III Chesapeake Bay TMDL action plan for the reductions required in Part II A 3, A 4, and A 5

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			that includes the following information: (3) The total reductions achieved as of November 1, 2023, for each pollutant of concern in each river basin. (4) A list of BMPs implemented prior to November 1, 2023, to achieve reductions associated with the Chesapeake Bay TMDL including: (5) The BMPs to be implemented by the permittee within 60 months of the effective date of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable: Rationale: Establish expectation for new permittees to complete a draft action plan for 40% by the end of the permit term. Updated for existing permittees to achieve 100% reductions. No impact.
Part II A 12	Part II A 13	Prior to submittal of the action plan required in Part II A 11, the permittee shall provide an opportunity for public comment on the additional BMPs proposed to meet the reductions not previously approved by the department in the first phase Chesapeake Bay TMDL action plan for no less than 15 days.	Prior to submittal of the action plan required in Part II A 12 b, the permittee shall provide an opportunity for public comment on the additional BMPs proposed in the phase III Chesapeake Bay TMDL action plan for no less than 15 days. Rationale: Revised for clarity. No impact.
Part II A 13	Part II A 14	For each reporting period, the corresponding annual report shall include the following information:	Chesapeake Bay TMDL implementation annual status report a. Permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1,

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		a. A list of BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I E 5 g and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year; b. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired; c. The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids; and d. A list of BMPs that are planned to be implemented during the next reporting period.	2018 shall submit a Chesapeake Bay TMDL implementation annual status report in a method, (i.e. how the permittee must submit) and format (i.e. how the report shall be laid out) as specified by the department no later than October 1 of each year. The report shall cover the previous year from July 1 to June 30. b. Following notification from the department of the start date for the required electronic submission of Chesapeake Bay TMDL implementation annual status 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically. c. The year two Chesapeake Bay TMDL implementation annual status report shall contain a summary of any public comments on the Chesapeake Bay TMDL Action Plan received and how the permittee responded. d. Each Chesapeake Bay TMDL implementation annual status report shall include the following information: (1) A list of Chesapeake Bay TMDL action plan BMPs (not including annual practices) implemented prior to the reporting period that includes the following information for reported BMP; (a) The number of BMPs for each BMP type;

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			(b) The estimated reduction of pollutants of concern achieved by each BMP type and reported in pounds of pollutant reduction per year; and (c) A confirmation statement that the permittee electronically reported Chesapeake Bay TMDL action plan BMPs inspected using BMP Warehouse in accordance with Part III B 5. (2) A list of newly implemented BMPs including annual practices implemented during the reporting period that includes the following information for each reported BMP or a statement that no BMPs were implemented during the reporting period: (a) The BMP type and a description of the location for each BMP; (b) The estimated reduction of pollutants of concern achieved by each BMP and reported in pounds of pollutant reduction per year; and (c) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part III B 3. e. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5. a statement that credits were acquired; f. Pollutant load reductions generated by annual practices such as street and storm drain cleaning shall only be applied to the compliance year in which the annual practice was implemented. g. The progress, using the final design efficiency of the BMPs, toward meeting the required

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			cumulative reductions for total nitrogen, total phosphorus, and total suspended solids.h. Any revisions made to the Chesapeake Bay TMDL action plan. h. A list of BMPs that are planned to be implemented during the next reporting period. Rational: Revised to provide more consistent and useful reporting for Chesapeake Bay TMDL progress tracking.
Part II B 1	Part II B 1 and 2	1. The permittee shall develop a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) as described in Part II B 1 a and 1 b:	1. Permittees applying for initial coverage under this general permit shall develop a draft local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee. The permittee shall develop action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8 as applicable. Each local TMDL action plan shall be provided to the department no later than October 31, 2028, unless the department grants a later date. 2. Permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018 shall develop and maintain a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			(EPA) as described in Part II B 2 a and 2 b: Rationale: Establish new permittee expectation to draft local action plans.
Part II B 1 a and b	Part II B 2 a and b	a. For TMDLs approved by the EPA prior to July 1, 2013, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall update the previously approved local TMDL action plans to meet the conditions of Part II B 3, B 4, B 5, B 6, and B 7 as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan; and b. For TMDLs approved by EPA on or after July 1, 2013, and prior to June 30, 2018, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate implementation of action plans to meet the conditions of Part II B 3, B 4, B 5, B 6, and B 7 as applicable for each pollutant for which wasteloads have been allocated to the permittee's MS4 no later than 30 months after the permit effective date.	a. For TMDLs approved by the EPA prior to July 1, 2018, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate or update as applicable the local TMDL action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8 as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan. Updated action plans shall include: (1) An evaluation of the results achieved by the previous action plan; and (2) Any adaptive management strategies incorporated into updated action plans based on action plan evaluation. b. For TMDLs approved by EPA on or after July 1, 2018, and prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate implementation of action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8 as applicable no later than 30 months after the permit effective date. Rationale: Clarification on revised action plan expectations. No impact.
Part II B 4 a and b	Part II B 5 a and b	a. If the permittee is an approved VSMP authority, the permittee shall select and implement at	a. Traditional permittees shall select and implement at least three of the strategies listed in Table 5

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		least three of the strategies listed in Table 5 below designed to reduce the load of bacteria to the MS4. Selection of the strategies shall correspond to sources identified in Part II B 3 d. b. If the permittee is not an approved VSMP authority, the permittee shall select at least one strategy listed in Table 5 below designed to reduce the load of bacteria to the MS4 relevant to sources of bacteria applicable within the MS4 regulated service area. Selection of the strategies shall correspond to sources identified in Part II B 3 d.	below designed to reduce the load of bacteria to the MS4. Selection of the strategies shall correspond to sources identified in Part II B 4 d. b. Nontraditional permittees shall select at least one strategy listed in Table 5 below designed to reduce the load of bacteria to the MS4 relevant to sources of bacteria applicable within the MS4 regulated service area. Selection of the strategies shall correspond to sources identified in Part II B 4 d. Rationale: Revised to pertain to traditional and nontraditional permittees. Impact: Traditional permittees that are not VSMP Authorities will have to implement three strategies for action plan.
Part II B 5 a (2)	Part II B 6 a (2)	One or more BMPs approved by the Chesapeake Bay Program; or	(2) One or more BMPs approved by the Chesapeake Bay Program. Pollutant load reductions generated by annual practices such as street and storm drain cleaning shall only be applied to the compliance year in which the annual practice was implemented; or Rational: Provide clarification on annual practices. No impact.
Part II B 5 b-d	Part II B 6 b-d	b. The permittee may meet the local TMDL requirements for sediment, phosphorus, or nitrogen through BMPs implemented to meet the requirements of the Chesapeake Bay TMDL in Part II A as long as the BMPs are implemented in the watershed for which local water quality is impaired. c. The permittee shall calculate the anticipated load reduction	b. The permittee may meet the local TMDL requirements for sediment, phosphorus, or nitrogen through BMPs implemented or sediment, phosphorus, or nitrogen credits acquired. BMPs implemented and nutrient and sediment credits acquired to meet the requirements of the Chesapeake Bay TMDL in Part II A may also be utilized to meet local TMDL requirements as long as the BMPs are implemented or the

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		achieved from each BMP and include the calculations in the action plan required in Part II B 3 f. d. No later than 36 months after the effective date of this permit, the permittee shall submit to the department the anticipated end dates by which the permittee will meet each WLA for sediment, phosphorus, or nitrogen. The proposed end date may be developed in accordance with Part II B 2.	credits are generated in the watershed for which local water quality is impaired. c. The permittee shall calculate the anticipated load reduction achieved from each BMP and include the calculations in the action plan required in Part II B 43 f. d. No later than 36 months after the effective date of this permit, the permittee shall submit to the department an update on the progress made toward achieving action plan goals and the anticipated end dates by which the permittee will meet each WLA for sediment, phosphorus, or nitrogen. The proposed end date may be developed in accordance with Part II B 3. Rationale: Provide clarification on credit use and update on action plan goals. No impact.
N/A	Part II B 7 c	None.	Results of any action plan PCB monitoring or product testing conducted and any adaptive management strategies that have been incorporated into the updated action plan based upon monitoring or product testing results if the permittee has elected to perform monitoring or product testing or both. Rationale: To make the results of any voluntary PCB monitoring or testing available to the Department or other permittees. No impact.
N/A	Part II B 8	None.	8. Chloride TMDLs a. Traditional permittees shall develop an anti-icing and deicing agent education and outreach

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			strategy that identifies target audiences for increasing awareness of anti-icing and deicing agent application impacts on receiving waters and encourages implementation of enhanced BMPs for application, handling, and storage of anti-icing and de-icing agents used for snow and ice management. b. Traditional permittee anti-icing and deicing agent education and outreach strategies shall contain a schedule to implement two or more of the strategies listed in Part I E 1 d Table 1 per year to communicate to target audiences the importance of responsible anti-icing and deicing agent application, transport, and storage. c. No later than 36 months after permit issuance, the permittee shall review good housekeeping procedures for anti-icing and deicing agent application, handling, storage, and transport activities required under Part I E 6 b (1) (a) and identify a minimum of two strategies for implementing enhanced BMPs that promote efficient management and application of anti-icing and deicing agents while maintaining public safety. Rationale: Added chloride TMDL action plan requirements to address approved chloride TMDLs. Impact: Permittees with an MS4 in chloride TMDL watersheds must develop an action plan.
N/A	Part II C	None.	C. Inspection and Maintenance of Ecosystem Restoration Projects Used for TMDL Compliance 1. Within 36 months of permit issuance the permittee shall

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of ecosystem restoration projects as defined in 9VAC25-890-1 and implemented as part of a TMDL action plan developed in accordance with Part II A, B, or both. The permittee may utilize inspection and maintenance protocols developed by the Chesapeake Bay Program or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines. 2. The permittee shall inspect ecosystem restoration projects owned or operated by the permittee and implemented as part of a current TMDL action plan developed in accordance with Part II A or B no less than once every 60 months. Rationale: To establish ecosystem restoration project inspection and maintenance requirements for projects implemented for TMDL action plans. Impact: Require ecosystem restoration project inspection and maintenance in order to maintain action plan reductions achieved.
Part I E 5 d-g	Part III	d. The permittee shall maintain an electronic database or spreadsheet of all known permittee-owned or permittee-operated and privately owned stormwater management facilities that discharge into the MS4. The database shall also include all BMPs implemented by the permittee to meet the Chesapeake Bay TMDL load reduction as required in Part II A. A database shall include the	Part III DEQ BMP Warehouse Reporting A. For the purpose of Part III of this permit, best management practice or BMP means a practice that achieves quantifiable nitrogen, phosphorus, or total suspended solids reductions including stormwater management facilities, ecosystem restoration projects, annual practices, and other

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		following information as applicable: (1) The stormwater management facility or BMP type; (2) The stormwater management facility or BMPs location as latitude and longitude; (3) The acres treated by the stormwater management facility or BMP, including total acres, pervious acres, and impervious acres; (4) The date the facility was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use June 30, 2005; (5) The 6th Order Hydrologic Unit Code in which the stormwater management facility is located; (6) Whether the stormwater management facility or BMP is owned or operated by the permittee or privately owned; (7) Whether or not the stormwater management facility or BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both; (8) If the stormwater management facility or BMP is privately owned, whether a maintenance agreement exists; and (9) The date of the permittee's most recent inspection of the BMP. e. The electronic database or spreadsheet shall be updated no later than 30 days after a new	practices approved by the department for reducing nitrogen, phosphorus, and total suspended solids pollutants. B. No later than October 1 of each year the permittee shall electronically report BMPs implemented and inspected as applicable between July 1 and June 30 of each year using the DEQ BMP Warehouse. 1. Traditional permittees specified in Part I E 5 a (1) shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities. 2. The permittee shall use the associated reporting template for stormwater management facilities not reported in accordance with Part III B 1 including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) if applicable and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required. 3. The permittee shall use the BMP Warehouse to report BMPs that were not reported in accordance with Part III B 1 or 2 and were implemented as part of a TMDL action plan to achieve nitrogen,

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		stormwater management facility is brought online, a new BMP is implemented to meet a TMDL load reduction as required in Part II, or discovered if it is an existing stormwater management facility. f. The permittee shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities. g. No later than October 1 of each year, the permittee shall electronically report the stormwater management facilities and BMPs implemented between July 1 and June 30 of each year using the DEQ BMP Warehouse and associated reporting template for any practices not reported in accordance with Part I E 5 f including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.	phosphorus, and total suspended solids reductions in accordance with Part II A or B. 4. The permittee shall use the BMP Warehouse to report any BMPs that were not reported in accordance with Part III B 1, 2, or 3. 5. The permittee shall use the BMP Warehouse to report the most recent inspection date for BMPs in accordance with Part I E 5 b or c, or in accordance with Part II C and the most recent associated TMDL action plan. C. The following information for each BMP reported in accordance with Part III B 1, 2, 3, or 4 shall be reported to the BMP Warehouse as applicable: 1. The BMP type; 2. The BMP location as decimal degree latitude and longitude; 3. The acres treated by the BMP, including total acres and impervious acres; 4. The date the BMP was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use 06/2005; 5. The 6th Order Hydrologic Unit Code in which the BMP is located; 6. Whether the BMP is owned or operated by the permittee or privately owned; 7. Whether or not the BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both;

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			8. If the BMP is privately owned, whether a maintenance agreement exists; 9. The date of the permittee's most recent inspection of the BMP; and 10. Any other information specific to the BMP type required by the BMP warehouse (e.g. linear feet of stream restoration). D. No later than October 1 of each year the BMP Warehouse shall be updated if an existing BMP is discovered between July 1 and June 30 that was not previously reported to the BMP warehouse. Rationale: Move BMP Warehouse reporting to new section of the permit to define BMP as an umbrella term for stormwater management facilities, ecosystem restoration projects, and annual practices. Provide clarification on BMPs to be reported to the BMP Warehouse. No impact.
Part III C 2	Part IV C 2	Monitoring results shall be reported on a discharge monitoring report (DMR); on forms provided, approved or specified by the department; or in any format provided that the date, location, parameter, method, and result of the monitoring activity are included.	Monitoring results shall be reported on a discharge monitoring report (DMR); on forms provided, approved or specified by the department; or in any format provided that the date, location, parameter, method, and result of the monitoring activity are included. 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 three months' notice provided

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
			between the notification from the department and the date after which such forms and reports must be submitted electronically. Rationale: Establishes e-reporting requirements once the Department has given permittees three months' notice. Impact: Allows the Department to comply with EPA e-reporting rule.
Part III D	Part IV D	Duty to provide information. The operator shall furnish within a reasonable time, any information that the board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this state permit or to determine compliance with this state permit. The board, department, or EPA may require the operator to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from his discharge on the quality of surface waters, or such other information as may be necessary to accomplish the purposes of the CWA and Virginia Stormwater Management Act. The operator shall also furnish to the board, department, or EPA upon request, copies of records required to be kept by this state permit.	Duty to provide information. The operator shall furnish within a reasonable time, any information that the department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this state permit or to determine compliance with this state permit. The department, or EPA may require the operator to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from the permittee's discharge on the quality of surface waters, or such other information as may be necessary to accomplish the purposes of the CWA and Virginia Stormwater Management Act. The operator shall also furnish to the department, or EPA upon request, copies of records required to be kept by this state permit. Rationale: Replaced "his discharge" with "the permittee's discharge." No impact
Part III H	Part IV H	Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a "bypass" (Part III U) or "upset," (Part III V), should occur from a facility and the discharge enters or could be expected to enter surface waters,	Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge, including a "bypass" (Part IV U) or "upset," (Part IV V), should occur from a facility and the discharge enters or could be expected to enter surface waters, the operator shall promptly

Current section number	New section number, if applicable	Current requirement	Change, intent, rationale, and likely impact of new requirements
		the operator shall promptly notify, in no case later than within 24 hours, the department by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The operator shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part III I 2. Unusual and extraordinary discharges include any discharge resulting from:	notify (see Part IV I 4), in no case later than within 24 hours, the department after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The operator shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with Part IV I 2. Unusual and extraordinary discharges include any discharge resulting from: Rationale: The Department no longer require contact by telephone for this requirement. No impact.
Part III I 3	Part IV I 2 and 3	3. The operator shall report all instances of noncompliance not reported under Part III I 1 or 2, in writing, as part of the annual reports that are submitted. The reports shall contain the information listed in Part III I 2. NOTE: The reports required in Part III G, H, and I shall be made to the department. Reports may be made by telephone, email, or fax. For reports outside normal working hours, leaving a recorded message 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.	2. The operator shall report all instances of noncompliance not reported under Part IV I 1 b, in writing, as part of the annual reports that are submitted. The reports shall contain the information listed in Part IV I 2. 3. The immediate (within 24 hours) reports required in Part IV G, H, and I shall be made to the department. Reports may be made by telephone, email, fax, 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. Rationale: Reformatting and updating department contact information. No impact.

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 is not expected to have a direct impact on the institution of the family or family stability.

Project 6940 - Proposed

State Water Control Board

9VAC25-890 - Amend and Reissue the Small MS4 General Permit

Chapter 890

~~General~~ Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (~~formerly Part XV, 4VAC50-60~~ MS4s)

9VAC25-890-1. Definitions.

The words and terms used in this chapter shall have the meanings defined in the ~~Virginia~~ Stormwater Management Act (Article 2.3 (§ 62.1-44.15:24 et seq.) of Chapter 3.1 of Title 62.1 of the Code of Virginia) and the Virginia Stormwater Management Program (VSMP) Regulation 9VAC25-870 unless the context clearly indicates otherwise, except that for the purposes of this chapter:

"Annual practice" means a nonstructural best management practice such as street or storm drain cleaning that reduces pollution for one compliance year upon implementation.

"Board" means the State Water Control Board. When used outside the context of the promulgation of regulations, including regulations to establish general permits, "board" means the Department of Environmental Quality.

"Date brought online" means the date when the permittee determines that a new stormwater management facility is properly functioning.

"Department" or "DEQ" means the Department of Environmental Quality.

"Ecosystem restoration projects" means practices implemented to reestablish and maintain natural systems that prevent, reduce, or remediate pollutant loadings. Examples of ecosystem restoration projects include stream restoration, shoreline restoration, land-use conversion, and reforestation.

"High-priority facilities" means facilities owned or operated by the permittee with drainage to any permitted MS4 that actively engage in one or more of the following activities: (i) composting, (ii) equipment storage , cleaning, and maintenance, (iii) long-term bulk materials storage, (iv) pesticide ,herbicide, and fertilizer storage, (v) ~~storage for public works~~ recycling, (vi) ~~recycling~~ anti-icing and deicing agent storage, handling, and transfer, (vii) ~~salt storage~~ solid waste handling and transfer, and (viii) ~~solid waste handling and transfer, and (ix) vehicle storage and maintenance~~ permittee owned or operated vehicle washing, maintenance, and salvage.

"MS4 regulated service area" or "service area" means for Phase II permittees, the drainage area served by the permittee's MS4 that is located within an urbanized area as determined by the 2010 decennial census performed by the Bureau of the Census. MS4 regulated service area may also be referred to as "served by the MS4" as it pertains to the tables in Part II A of this permit.

"Nontraditional MS4 permittee" or “nontraditional permittee” means a government entity that operates a regulated MS4 that is not under the authority of a county board of supervisors, a city council, or a town council.

"Physically interconnected" means that one MS4 is connected to a second MS4 in such a manner that it allows for direct discharges to the second system.

"Pollutants of concern" or "POC" means pollutants specifically identified in a U.S. Environmental Protection Agency approved total maximum daily load (TMDL) report as causing a water quality impairment.

"Traditional MS4 permittee" or “traditional permittee” means a local government that operates a regulated MS4 under the authority of a county board of supervisors, a city council, or a town council.

9VAC25-890-10. Purpose; effective date of the state permit.

A. This general permit regulation governs point source stormwater discharges from regulated small municipal separate storm sewer systems (~~small~~ MS4s) to surface waters of the Commonwealth of Virginia. Nonmunicipal stormwater or wastewater discharges are not authorized by this permit except in accordance with 9VAC25-890-20 D.

B. This general permit will become effective on November 1, ~~2018~~ 2023 and will expire October 31, ~~2023~~ 2028.

9VAC25-890-15. Applicability of incorporated references based on the dates that they became effective.

Except as noted, when a regulation of the U.S. Environmental Protection Agency set forth in Title 40 of the Code of Federal Regulations (CFR) is referenced and incorporated in this chapter, that regulation shall be as it exists and has been published in the July 1, ~~2017~~ 2022, update. ~~The final rule published in the Federal Register on August 28, 2017 (82 FR 40836), which amends 40 CFR Part 136, is also incorporated by reference in this chapter.~~

9VAC25-890-20. Authorization to discharge.

A. Any operator covered by this general permit is authorized to discharge stormwater from the ~~small municipal separate storm sewer system (~~MS4~~)~~ to surface waters of the Commonwealth of Virginia provided that:

1. The operator submits a complete and accurate registration statement in accordance with 9VAC25-890-30 and that registration statement is accepted by the ~~board~~ department;

2. The operator submits any permit fees required by 9VAC25-870-700 et seq. (Part XIII);

3. The operator complies with the requirements of 9VAC25-890-40; and

4. The ~~board~~ department has not notified the operator that the discharge is ineligible for coverage in accordance with subsection C of this section.

B. The operator is not authorized by this general permit to discharge to surface waters specifically named in other board regulations that prohibit such discharges.

C. The ~~board~~ department will notify an operator that the discharge is not eligible for coverage under this general permit in the event of any of the following:

1. The operator is required to obtain an individual permit in accordance with 9VAC25-870-410 B;

2. The operator is proposing discharges to surface waters specifically named in other board regulations that prohibit such discharges; or

3. The operator fails to implement BMPs to reduce pollutants to the maximum extent practicable (MEP) standard in order to demonstrate progress toward meeting the water quality requirements as listed in 9VAC25-31-220 D 1 a in accordance with 9VAC25-31-220 K 2.

D. Nonstormwater discharges or flows into the ~~small~~ MS4 are authorized by this state permit and do not need to be addressed in the MS4 program required under 9VAC25-890-40 Part I E 3 if:

1. The nonstormwater discharges or flows are covered by a separate individual or general VPDES or state permit for nonstormwater discharges;

2. The individual nonstormwater discharges or flows have been identified by the department as de minimis discharges that are not significant sources of pollutants to surface waters and do not require a separate VPDES permit;

3. The nonstormwater discharges or flows are identified in this subdivision D 3 and have not been identified by the operator or by the ~~board~~ department as significant contributors of pollutants to the ~~small~~ MS4:

a. Water line flushing, managed in a manner to avoid an instream impact;

b. Landscape irrigation;

c. Diverted stream flows;

d. Rising groundwaters;

e. Uncontaminated groundwater infiltration, as defined at 40 CFR 35.2005(20);

f. Uncontaminated pumped groundwater;

g. Discharges from potable water sources managed in a manner to avoid instream impact;

h. Foundation drains;

i. Air conditioning condensation;

j. Irrigation water;

k. Springs;

l. Water from crawl space pumps;

m. Footing drains;

n. Lawn watering;

o. Individual residential car washing;

p. Flows from riparian habitats and wetlands;

q. Dechlorinated freshwater swimming pool discharges managed in a manner to avoid instream impact;

r. Street and pavement wash ~~water~~ waters that do not contain cleaning additives or are otherwise managed in a manner to avoid instream impact;

s. Discharges or flows from emergency firefighting activities;

t. ~~Discharges from noncommercial fundraising car washes if the washing uses only biodegradable, phosphate-free, water-based cleaners; or~~ Discharges or flows of water for fire prevention or firefighting training activities managed in a manner to avoid instream impact in accordance with § 9.1-207.1 of the Code of Virginia;

u. ~~Other activities generating discharges identified by the department as not requiring VPDES authorization.~~ Discharges from noncommercial fundraising car washes if the washing uses only biodegradable, phosphate-free, water-based cleaners in accordance with § 15.2-2114.1 of the Code of Virginia; or

v. Other activities generating discharges identified by the department as not requiring VPDES authorization.

4. The immediate discharge of materials is necessary to protect life or property as determined by fire department personnel or emergency management officials or any discharge in accordance with 9VAC25-31-40. The operator shall take, or ensure that the responsible party takes, all reasonable steps to minimize or prevent any adverse effect on human health or the environment. This state permit does not transfer liability for a spill

itself from the party responsible for the spill to the operator nor relieve the party responsible for a spill from the reporting requirements of 40 CFR Part 117 and 40 CFR Part 302.

E. In the event the operator is unable to meet certain conditions of this permit due to circumstances beyond the operator's control, the operator shall submit a written explanation of the circumstances that prevented state permit compliance to the department in the annual report. Circumstances beyond the control of the operator include abnormal climatic conditions; weather conditions that make certain requirements unsafe or impracticable; or unavoidable equipment failures caused by weather conditions or other conditions beyond the reasonable control of the operator (operator error is not a condition beyond the control of the operator). The failure to provide adequate program funding, staffing or equipment maintenance shall not be an acceptable explanation for failure to meet state permit conditions. The ~~board~~ department will determine, at its sole discretion, whether the reported information will result in an enforcement action.

F. Discharges that are excluded from permitting requirements pursuant to 9VAC25-870-300 are exempted from the regulatory requirements of this state permit.

G. For those portions of the ~~small~~ MS4 engaging in activities that are covered under a separate VPDES permit for discharges associated with industrial activities, the permittee shall follow the conditions established by the separate VPDES permit.

H. Upon termination of permit coverage for those activities addressed in subsection G of this section, the discharges from the outfalls previously authorized under the VPDES permit for stormwater discharges associated with industrial activities shall meet the conditions of this state permit provided it has been determined by the ~~board~~ department that an individual MS4 permit is not required.

I. Stormwater discharges from specific MS4 permittee activities that have been granted conditional exclusion for "no exposure" of industrial activities and materials to stormwater under the separate VPDES permitting program shall comply with this state permit unless a separate VPDES permit is obtained. The department is responsible for determining compliance with the conditional exclusion under the State Water Control Law (Chapter 3.1 (§ 62.1-44.2 et seq.) of Title 62.1 of the Code of Virginia) and attendant regulations.

J. Receipt of this general permit does not relieve any permittee of the responsibility to comply with any other applicable federal, state or local statute, ordinance or regulation.

K. Continuation of permit coverage.

1. Any permittee that was authorized to discharge under the state permit effective ~~July 1, 2013~~ November 1, 2018, and that submits a complete registration statement on or before ~~June 1, 2018~~ October 1, 2023, is authorized to continue to discharge under the terms of the ~~July 1, 2013~~ November 1, 2018, state permit until such time as the ~~board~~ department either:

a. Issues coverage to the permittee under this state permit; or

b. Notifies the permittee that the discharge is not eligible for coverage under this state permit.

2. When the permittee is not in compliance with the conditions of the expiring or expired general permit, the ~~board~~ department may choose to do any or all of the following:

a. Initiate enforcement action based upon the ~~2013~~ 2018 general permit;

b. Issue a notice of intent to deny coverage under the new general permit. If coverage under the general permit is denied, the permittee would then be required to cease the activities authorized by the continued general permit or be subject to enforcement action for operating without a state permit;

c. Issue a new state permit with appropriate conditions; or

d. Take other actions authorized by the State Water Control Law, VPDES (9VAC25-31) and VSMP (9VAC25-870) regulations.

9VAC25-890-30. Registration statement.

A. Deadline for submitting a registration statement.

1. Operators of ~~small~~ MS4s described under 9VAC25-870-400 B that are applying for initial coverage under this general permit must submit a complete registration statement to the department within 180 days of notice of designation, unless the ~~board~~ department grants a later date.

2. In order to continue uninterrupted coverage under the general permit, operators of ~~small~~ MS4s shall submit a new registration statement no later than ~~June 1, 2018~~ October 1, 2023, unless permission for a later date has been granted by the ~~board~~ department. The board shall not grant permission for registration statements to be submitted later than the expiration date of the existing state permit.

B. The registration statement shall include the following information:

1. The name and location of the ~~small~~ MS4;

2. The name of the owner or operator of the ~~small~~ MS4;

3. The mailing address of the owner or operator of the ~~small~~ MS4;

4. The type of ~~small~~ MS4 (e.g., city, county, incorporated town, unincorporated town, college or university, local school board, military installation, transportation system, federal or state facility, or other);

5. If the MS4 is operated under the authority of a city council or a county board of supervisors, indicate if public school facilities are included in the application.

~~5.~~ 6. The name, title, mailing address, telephone number, and email address for the following individuals:

a. The responsible official who meets the criteria established in 9VAC-25-870-370 A 3;

b. The MS4 permit contact; and

c. The annual permit maintenance fee contact;

~~6.~~ 7. The following receiving waters information:

a. The names of the receiving surface waters to which the MS4 system discharges; and

b. Whether or not the receiving waters are listed as impaired in the Virginia 2016 305(b)/303(d) Water Quality Assessment Integrated Report;

~~7.~~ 8. The names of any physically interconnected MS4s to which the ~~small~~ MS4 discharges;

~~8.~~ 9. A list of all existing signed agreements between the operator and any applicable third parties where the operator has entered into an agreement in order to implement minimum control measures or portions of minimum control measures;

~~9.~~ 10. For ~~those~~ permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018 whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, a draft ~~second~~ third phase Chesapeake Bay TMDL action plan; and

~~10.~~ 11. The following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or

those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

C. The registration statement shall be signed in accordance with 9VAC25-890-40 Part III K 4.

D. An operator may file its own registration statement, or the operator and other operators of ~~small~~ MS4s may jointly submit a registration statement. If responsibilities for meeting the stormwater minimum control measures will be shared with other municipalities or governmental entities, the registration statement must describe which stormwater minimum control measures the operator will implement and identify the entities that will implement the other stormwater minimum control measures within the area served by the ~~small~~ MS4.

E. The registration statement may be delivered to the DEQ Central Office, Office of VPDES Permits or by electronic mail to an electronic mailbox specified by the department.

9VAC25-890-40. General permit.

Any MS4 operator whose registration statement is accepted by the ~~board~~ department will receive coverage under the following general permit and shall comply with the requirements in this general permit and be subject to all applicable requirements of the Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870) and the Virginia Pollutant Discharge Elimination System (VPDES) Permit Regulations (9VAC25-31).

General Permit No.: VAR04

Effective Date: November 1, ~~2018~~ 2023

Expiration Date: October 31, ~~2023~~ 2028

GENERAL VPDES PERMIT FOR DISCHARGES OF STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS

AUTHORIZATION TO DISCHARGE UNDER THE VIRGINIA STORMWATER MANAGEMENT PROGRAM REGULATIONS, VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM REGULATIONS, AND THE VIRGINIA STATE WATER CONTROL LAW

In compliance with the provisions of the Clean Water Act, as amended and pursuant to the State Water Control Law and regulations adopted pursuant thereto, permittees of small municipal separate storm sewer systems are authorized to discharge to surface waters within the boundaries of the Commonwealth of Virginia, except those waters specifically named in State Water Control Board regulations which prohibit such discharges.

The authorized discharge shall be in accordance with the registration statement filed with the department, this cover page, Part I - Discharge Authorization and Special Conditions, Part II - TMDL Special Conditions, ~~and~~ Part III - ~~Conditions Applicable to All State and VPDES Permits~~ DEQ BMP Warehouse Reporting, and Part IV - Conditions Applicable to All State and VPDES Permits, as set forth in this general permit.

Part I

Discharge Authorization and Special Conditions

A. Coverage under this state permit. During the period beginning with the date of coverage under this general permit and lasting until the expiration and reissuance of this state permit, the permittee is authorized to discharge stormwater and those authorized nonstormwater discharges described in 9VAC25-890-20 D in accordance with this state permit from the small municipal separate storm sewer system identified in the registration statement into surface waters within the boundaries of the Commonwealth of Virginia and consistent with 9VAC25-890-30.

B. The permittee shall develop, implement, and enforce a MS4 program designed to reduce the discharge of pollutants from the ~~small~~ MS4 to the ~~maximum extent practicable (~~MEP~~)~~ in accordance with this permit, to protect water quality, and to satisfy the appropriate water quality requirements of the State Water Control Law and its attendant regulations. The permittee shall utilize the legal authority provided by the laws and regulations of the Commonwealth of Virginia to control discharges to and from the MS4. This legal authority may be a combination of statute, ordinance, permit, policy, specific contract language, order, or interjurisdictional agreements. The MS4 program shall include the minimum control measures (MCM) described in Part I E. For the purposes of this permit term, implementation of MCMs in Part I E and the Chesapeake Bay and local TMDL requirements in Part II (as applicable) consistent with the provisions of an iterative MS4 program required pursuant to this general permit constitutes compliance with the standard of reducing pollutants to the ~~"maximum extent practicable,"~~ MEP, provides adequate progress in meeting water quality standards, and satisfies the appropriate water quality requirements of the State Water Control Law and its attendant regulations.

C. The MS4 program plan.

1. The MS4 program plan shall include, at a minimum, the following written items:

a. The roles and responsibilities of each of the permittee's divisions and departments in the implementation of the requirements of the permit tasked with ensuring that the permit requirements are met;

b. If the permittee utilizes another entity to implement portions of the MS4 program, a copy of the written agreement. The description of each party's roles and responsibilities, including any written agreements with third parties, shall be updated as necessary;

c. For each MCM in Part I E, the following information shall be included:

(1) Each specific requirement as listed in Part I E for each MCM;

(2) A description of the BMPs or strategies that the permittee anticipates will be implemented to demonstrate compliance with the permit conditions in Part I E;

(3) All standard operating procedures or policies necessary to implement the BMPs;

(4) The measurable goal by which each BMP or strategy will be evaluated; and

(5) The persons, positions, or departments responsible for implementing each BMP or strategy; and

d. A list of documents incorporated by reference including the version and date of the document being incorporated.

2. If the permittee is receiving initial coverage under this general VPDES permit for the discharge of stormwater, the permittee shall:

a. No later than six months following the date of permit coverage, submit to the department a schedule for the development of each component of the MS4 program plan in accordance with Part I C 1 that does not exceed t~~he expiration date of this permit~~ October 31, 2028, unless the department grants a later date; and

b. Provide to the department a copy of the MS4 program plan upon completion of development.

3. If the permittee was previously covered under the General VPDES Permit for ~~the Discharge~~ Discharges of Stormwater from MS4 effective ~~July 1, 2013~~ November 1, 2018, the permittee shall update the MS4 program plan to meet the requirements of this permit no later than six months after the effective date of this permit unless otherwise specified in another permit condition and shall post the most up-to-date version of MS4 program plan on the permittee's website or location where the MS4 program plan can be obtained as required by Part I E 2 within 30 days of updating the MS4 program plan. Until such time that the MS4 program plan is updated in accordance with Part I E, the permittee shall continue to implement the MS4 program plan in effect at the time that coverage is issued under this general permit.

4. Revisions to the MS4 program plan are expected throughout the life of this permit as part of the iterative process to reduce pollutant loading and protect water quality to the MEP. As such, revisions made in accordance with this permit as a result of the iterative process do not require modification of this permit. The permittee shall summarize revisions to the MS4 program plan as part of the annual report as described in Part I D 2.

5. The permittee may demonstrate compliance with one or more MCM in Part I E through implementation of separate statutory or regulatory programs provided that the permittee's MS4 program plan identifies and fully describes any program that will be used to satisfy one or more of the minimum control measures of Part I E. If the program that the permittee is using requires the approval of a third party, the program shall be fully approved by the third party, or the permittee shall be working toward getting full approval. Documentation of the program's approval status, or the progress toward achieving full approval, shall be included in the annual report required by Part I D. The permittee shall remain responsible for compliance with the permit requirements if the other entity fails to implement one or more components of the control measures.

6. The permittee may rely on another entity to satisfy the permit requirements to implement a minimum control measure if:

a. The other entity, in fact, implements the control measure;

b. The particular control measure, or component thereof, is at least as stringent as the corresponding permit requirement;

c. The other entity agrees to implement the control measure on behalf of the permittee; and

d. The agreement between the parties is documented in writing and retained by the permittee with the MS4 program plan for as long as the agreement is active.

The permittee shall remain responsible for compliance with requirements of the permit and shall document in the annual reports required in accordance with Part I D that another entity is being relied on to satisfy all or part of the state permit requirements. The permittee shall provide the information required in Part I D.

7. If the permittee relies on another governmental entity regulated under 9VAC25-870-380 to satisfy all of the state permit obligations, including the obligation to file periodic reports required by Part I D, the permittee must note that fact in the registration statement, but is not required to file the periodic reports. The permittee remains responsible for compliance with the state permit requirements if the other entity fails to implement the control measures or components thereof.

D. Annual reporting requirements.

1. The permittee shall submit an annual report to the department no later than October 1 of each year in a method, (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department; the required content of the annual

report is specified in Part I E and Part II B. The report shall cover the previous year from July 1 to June 30.

2. Following notification from the department of the start date for the required electronic submission of annual 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

~~2.~~ 3. The annual report shall include the following general information:

a. The permittee, system name, and permit number;

b. The reporting period for which the annual report is being submitted;

c. A signed certification as per Part III K;

d. Each annual reporting item as specified in an MCM in Part I E; and

e. An evaluation of the MS4 program implementation, including a review of each MCM, to determine the MS4 program's effectiveness and whether or not changes to the MS4 program plan are necessary.

~~3.~~ 4. For permittees receiving initial coverage under this general VPDES permit for the discharge of stormwater, the annual report shall include a status update on each component of the MS4 program plan being developed. Once the MS4 program plan has been updated to include implementation of a specific MCM in Part I E, the permittee shall follow the reporting requirements established in Part I D 2.

~~4. For those permittees with requirements established under Part II A, the annual report shall include a status report on the implementation of the Chesapeake Bay TMDL action plan in accordance with Part II A of this permit including any revisions to the plan.~~

5. For those permittees with requirements established under Part II B, the annual report shall include a status report on the implementation of the local TMDL action plans in accordance with Part II B including any revisions to the plan.

6. For the purposes of this permit, the MS4 program plan ~~and~~ , annual ~~report~~ reports, the Chesapeake Bay TMDL action plan, and Chesapeake Bay TMDL implementation annual status reports, shall be maintained as ~~separately~~ separate documents and submitted to the department as required by this permit as ~~two~~ separate documents.

E. Minimum control measures.

1. Public education and outreach.

a. The permittee shall implement a public education and outreach program designed to:

(1) Increase the public's knowledge of how to reduce stormwater pollution, placing priority on reducing impacts to impaired waters and other local water pollution concerns;

(2) Increase the public's knowledge of hazards associated with illegal discharges and improper disposal of waste, including pertinent legal implications; and

(3) Implement a diverse program with strategies that are targeted toward individuals or groups most likely to have significant stormwater impacts.

b. The permittee shall identify no less than three high-priority stormwater issues to meet the goal of educating the public in accordance with Part I E 1 a. High-priority issues may include the following examples: Chesapeake Bay nutrients, pet wastes, local receiving water impairments, TMDLs, high-quality receiving waters, litter control,

BMP maintenance, anti-icing and deicing agent application, planned green infrastructure redevelopment, planned ecosystem restoration projects, and illicit discharges from commercial sites.

c. The high-priority public education and outreach program, as a whole, shall:

(1) Clearly identify the high-priority stormwater issues;

(2) Explain the importance of the high-priority stormwater issues;

(3) Include measures or actions the public can take to minimize the impact of the high-priority stormwater issues; and

(4) Provide a contact and telephone number, website, or location where the public can find out more information.

d. The permittee shall use two or more of the strategies listed in Table 1 below per year to communicate to the ~~public~~ target audience the high-priority stormwater issues identified in accordance with Part I E 1 b including how to reduce stormwater pollution.

Table 1
Strategies for Public Education and Outreach

Strategies	Examples (provided as examples and are not meant to be all inclusive or limiting)
Traditional written materials	Informational brochures, newsletters, fact sheets, utility bill inserts, or recreational guides for targeted groups of citizens
Alternative materials	Bumper stickers, refrigerator magnets, t-shirts, or drink koozies
Signage	Temporary or permanent signage in public places or facilities, vehicle signage, bill boards, or storm drain stenciling
Media materials	Information disseminated through electronic media, radio, televisions, movie theater, ~~or~~ newspaper , or GIS story maps
Speaking engagements	Presentations to school, church, industry, trade, special interest, or community groups
Curriculum materials	Materials developed for school-aged children, students at local colleges or universities, or extension classes offered to local citizens
Training materials	Materials developed to disseminate during workshops offered to local citizens, trade organization, or industrial officials
Public Education Activities	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks
Public Meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration projects, TMDL development, voluntary residential low impact development, or other stormwater issues

e. The permittee may coordinate its public education and outreach efforts with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of its state permit requirements.

f. The MS4 program plan shall include:

(1) A list of the high-priority stormwater issues the permittee will communicate to the public as part of the public education and outreach program;

(2) The rationale for selection of each high-priority stormwater issue and an explanation of how each education or outreach strategy is intended to have a positive impact on stormwater discharges;

(3) Identification of the ~~public~~ target audience to receive each high-priority stormwater message;

(4) Nontraditional permittees may identify staff, students, and other users of facilities operated by the permittee as the target audience for education and outreach strategies.

(5) Traditional permittees may identify staff and students as part of the target audience for education and outreach strategies; however, staff shall not be the majority of the target audience.

(6) Staff training required in accordance with Part I E 6 d does not qualify as a strategy for public education and outreach.

~~(4)~~ (7) The strategies from Table 1 of Part I E 1 d to be used to communicate each high-priority stormwater message; and

~~(5)~~ (8) The anticipated time periods the messages will be communicated or made available to the public.

g. The annual report shall include the following information:

(1) A list of the high-priority stormwater issues the permittee addressed in the public education and outreach program; ~~and~~

(2) A summary of the public education and outreach activities conducted for the report year, including the strategies used to communicate the identified high-priority issues; and

~~(2)~~ (3) A ~~list of the~~ description of any changes in high-priority stormwater issues including, strategies used to communicate ~~each~~ high-priority stormwater ~~issue~~ issues, or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of the above changes.

2. Public involvement and participation.

a. The permittee shall develop and implement procedures for the following:

(1) The public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns;

(2) The public to provide ~~input~~ comments on the permittee's MS4 program plan;

~~(3) Receiving public input or complaints;~~

~~(4)~~ (3) Responding to public ~~input~~ comments received on the MS4 program plan ~~or complaints~~; and

~~(5)~~ (4) Maintaining documentation of public ~~input~~ comments received on the MS4 program and associated MS4 program plan and the permittee's response.

b. No later than three months after this permit's effective date, the permittee shall ~~develop and maintain a~~ update and maintain the webpage dedicated to the MS4 program and stormwater pollution prevention. The following information shall be posted on this webpage:

(1) The effective MS4 permit and coverage letter;

(2) The most current MS4 program plan or location where the MS4 program plan can be obtained;

(3) The annual report for each year of the term covered by this permit no later than 30 days after submittal to the department;

(4) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the most current Chesapeake Bay TMDL action plan or location where the Chesapeake Bay TMDL action plan can be obtained;

(5) For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the Chesapeake Bay TMDL implementation annual status reports for each year of the term covered by this permit no later than 30 days after submittal to the department;

~~(4)~~ (6) A mechanism for the public to report potential illicit discharges, improper disposal, or spills to the MS4, complaints regarding land disturbing activities, or other potential stormwater pollution concerns in accordance with Part I E 2 a (1); and

~~(5)~~ (7) Methods for how the public can provide ~~input~~ comments on the permittee's MS4 program plan in accordance with Part I E 2 a (2) and if applicable, the Chesapeake Bay TMDL action plan in accordance with Part II A 13.

(8) Federal and state nontraditional permittees with security policies preventing a MS4 program and stormwater pollution prevention webpage from being publicly accessible may utilize an internal staff accessible webpage such as an intranet webpage to meet the requirements of Part 1 E 2 b.

c. ~~The permittee~~ Traditional permittees shall implement no less than four activities per year from two or more of the categories listed in Table 2 below to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

d. Nontraditional permittees shall implement, promote, participate in, or coordinate on no less than four activities per year from two or more of the categories listed in Table 2 below to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects.

Table 2
Public Involvement Opportunities

Public involvement opportunities	Examples (provided as example and are not meant to be all inclusive or limiting)
Monitoring	Establish or support citizen monitoring group
Restoration	Stream, ~~or~~ watershed, shoreline, beach, or park clean-up day, ~~adopt-a-water way~~ adopt-a-waterway program, tree plantings, and riparian buffer plantings
~~Educational events~~ Public Education Activities	Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials to schools to meet applicable education Standards of Learning or curriculum requirements, or watershed walks~~, participation on environmental advisory committees~~
Public Meetings	Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecosystem restoration

	projects, TMDL development, voluntary residential low impact development, or other stormwater issues
Disposal or collection events	Household hazardous chemicals collection, vehicle fluids collection
Pollution prevention	Adopt-a-storm drain program, implement a storm drain marking program, promote use of residential stormwater BMPs, implement pet waste stations in public areas, adopt-a-street program.

~~d.~~ e. The permittee may coordinate the public involvement opportunities listed in Table 2 with other MS4 permittees; however, each permittee shall be individually responsible for meeting all of the permit requirements.

f. The Permittee may include staff and students in public participation events; however, the activity cannot solely include or be limited to staff participants with stormwater, groundskeeping, and maintenance duties in order for an event to qualify as a public participation event.

g. Staff training required in accordance with Part I E 6 d does not qualify as a public participation event unless the training activity solicits participation from target audiences beyond staff or contractors with stormwater, groundskeeping, and maintenance duties.

~~e.~~ h. The MS4 program plan shall include:

(1) The webpage address where mechanisms for the public to report (i) potential illicit discharges, improper disposal, or spills to the MS4, (ii) complaints regarding land disturbing activities, or (iii) other potential stormwater pollution concerns;

(2) The webpage address that contains the methods for how the public can provide input on the permittee's MS4 program; and

(3) A description of the public involvement activities to be implemented by the permittee, the anticipated time period the activities will occur, and a metric for each activity to determine if the activity is beneficial to water quality. An example of metrics may include the weight of trash collected from a stream cleanup, the number of participants in a hazardous waste collection event, etc.

~~f.~~ i. The annual report shall include the following information:

(1) A summary of any public ~~input~~ comments on the MS4 program received ~~(including stormwater complaints)~~ and how the permittee responded;

(2) A summary of stormwater pollution complaints received under the procedures established in Part I E 2 a (1) (excluding flooding complaints) and how the permittee responded;

~~(2)~~ (3) A webpage address to the permittee's MS4 program and stormwater website;

(4) Federal and state nontraditional permittees with security policies preventing the MS4 program and stormwater pollution prevention webpage from being publicly accessible utilizing an internal staff accessible website such as intranet shall provide evidence of the current internal MS4 program and stormwater pollution prevention webpage.

~~(3)~~ (5) A description of the public involvement activities implemented by the permittee;

~~(4)~~ (6) A report of the metric as defined for each activity and an evaluation as to whether or not the activity is beneficial to improving water quality; and

~~(5)~~ (7) The name of other MS4 permittees with whom the permittee collaborated in the public involvement opportunities.

3. Illicit discharge detection and elimination.

a. The permittee shall develop and maintain an accurate MS4 map and information table as follows:

(1) ~~A~~ An updated map of the ~~storm sewer system~~ MS4 owned or operated by the permittee within the census urbanized area identified by the 2010 decennial census no later than 12 months after the permit effective date that includes, at a minimum:

(a) MS4 outfalls discharging to surface waters, except as follows:

(i) In cases where the outfall is located outside of the MS4 permittee's legal responsibility, the permittee may elect to map the known point of discharge location closest to the actual outfall; and

(ii) In cases where the MS4 outfall discharges to receiving water channelized underground, the permittee may elect to map the point downstream at which the receiving water emerges above ground as an outfall discharge location. If there are multiple outfalls discharging to an underground channelized receiving water, the map shall identify that an outfall discharge location represents more than one outfall. This is an option a permittee may choose to use and recognizes the difficulties in accessing outfalls to underground channelized stream conveyances for purposes of mapping, screening, or monitoring.

(b) A unique identifier for each mapped item required in Part I E 3;

(c) The name and location of receiving waters to which the MS4 outfall or point of discharge discharges;

(d) MS4 regulated service area; and

(e) stormwater management facilities owned or operated by the permittee.

(2) The permittee shall maintain an outfall information table associated with the ~~storm sewer system~~ MS4 map that includes the following information for each outfall or point of discharge for those cases in which the permittee elects to map the known point of discharge in accordance with Part I E 3 a (1) (a)~~:~~ The outfall information table may be maintained as a shapefile attribute table. The outfall information table shall contain the following:

(a) A unique identifier as specified on the ~~storm sewer system~~ MS4 map;

(b) The latitude and longitude of the outfall or point of discharge;

(c) The estimated regulated acreage draining to the outfall or point of discharge;

(d) The name of the receiving water;

(e) The 6th Order Hydrologic Unit Code of the receiving water;

(f) An indication as to whether the receiving water is listed as impaired in the Virginia ~~2016~~ 2020 305(b)/303(d) Water Quality Assessment Integrated Report; and

(g) ~~The predominant land use for each outfall discharging to an impaired water; and~~ The name of any EPA approved TMDLs for which the permittee is assigned a wasteload allocation.

~~(h) The name of any EPA approved TMDLs for which the permittee is assigned a wasteload allocation.~~

(3) No later than ~~July 1, 2019~~ 12 months after permit issuance, the permittee shall submit to DEQ, a ~~GIS-compatible shapefile of the permittee's MS4 map as described in Part I E 3 a. If the permittee does not have an MS4 map in a GIS format, the permittee shall provide the map as a PDF document.~~ format file geodatabase or two shapefiles that contain at a minimum:

(a) A point feature class or shapefile for outfalls with an attribute table containing outfall data elements required in accordance with Part I E 3 a (2); and

(b) A polygon feature class or shapefile for the MS4 service area as required in accordance with Part I E 3 a (1) (d) with an attribute table containing the following information:

(i) MS4 operator name;

(ii) MS4 permit number (VAR04); and

(iii) MS4 service area pervious, impervious, and total acreage rounded to the nearest hundredth.

(4) ~~No later than October 1 of each year, the permittee shall update the storm sewer system map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate preceding reporting period.~~ All file geodatabase feature classes or shapefiles shall be submitted in the following data format standards:

(a) Point data in NAD83 or WGS84 decimal degrees global positional system coordinates;

(b) Data projected in Virginia Lambert Conformal Conic format;

(c) Outfall location accuracy shall be represented in decimal degrees rounded to at least the fifth decimal place for latitude and longitude to ensure point location accuracy (e.g., 37.61741, -78.15279); and

(d) Metadata shall provide a description of each feature class or shapefile dataset, units of measure as applicable, coordinate system, and projection.

(5) ~~The permittee shall provide written notification to any downstream adjacent MS4 of any known physical interconnection established or discovered after the effective date of this permit.~~ No later than October 1 of each year, the permittee shall update the MS4 map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate preceding reporting period.

(6) The permittee shall provide written notification to any downstream adjacent MS4 of any known physical interconnection established or discovered after the effective date of this permit.

b. The permittee shall prohibit, through ordinance, policy, standard operating procedures, or other legal mechanism, to the extent allowable under federal, state, or local law, regulations~~,~~ or ordinances, unauthorized nonstormwater discharges into the ~~storm sewer system~~ MS4. Nonstormwater discharges or flows identified in 9VAC25-890-20 D 3 shall only be addressed if they are identified by the permittee as a significant contributor of pollutants discharging to the MS4. Flows that have been identified by the department as de minimis discharges are not significant sources of pollutants to surface water.

c. The permittee shall maintain, implement, and enforce illicit discharge detection and elimination (IDDE) written procedures designed to detect, identify, and address unauthorized nonstormwater discharges, including illegal dumping, to the ~~small~~ MS4 to effectively eliminate the unauthorized discharge. Written procedures shall include:

(1) A description of the legal authorities, policies, standard operating procedures or other legal mechanisms available to the permittee to eliminate identified sources of ongoing illicit discharges including procedures for using legal enforcement authorities.

(2) Dry weather field screening protocols to detect, identify, and eliminate illicit discharges to the MS4. The protocol shall include:

(a) A prioritized schedule of field screening activities and rationale for prioritization determined by the permittee based on such criteria as age of the infrastructure, land use, historical illegal discharges, dumping or cross connections;

(b) If the total number of MS4 outfalls is equal to or less than 50, a schedule to screen all outfalls annually;

(c) If the total number of MS4 outfalls is greater than 50, a schedule to screen a minimum of 50 outfalls annually such that no more than 50% are screened in the previous 12-month period. The 50% criteria is not applicable if all outfalls have been screened in the previous three years; ~~and~~

(d) ~~A mechanism to track the following information:~~ The permittee may adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Observation points may include points of interconnection, manholes, points of discharge, conveyances, or inlets suspected to have a high likelihood of receiving illicit discharges;

(e) Each observation point screened may be counted as one outfall screening activity equivalent and counted towards the requirements of Part I E 3 c (2) (b) or (2) (c); however, at least 50% of the minimum annual screening events must include outfall screening;

(f) Illicit discharges reported by the public and subsequent investigations may not be counted as screening events; however once the resolution of the investigation and the date the investigation was closed has been documented, an observation point may be established for future screening events; and

(g) A checklist or mechanism to track the following information for dry weather screening events:

(i) The unique ~~outfall~~ identifier for the outfall or observation point;

(ii) Time since the last precipitation event;

(iii) The estimated quantity of the last precipitation event;

(iv) Site descriptions (e.g., conveyance type and dominant watershed land uses);

(v) ~~Whether or not a discharge was observed; and~~ Observed indicators of possible illicit discharge events such as, floatables, deposits, stains, and vegetative conditions (e.g., dying or dead vegetation, excessive vegetative growth, etc.);

(vi) ~~If a discharge was observed, the estimated discharge rate (e.g., width and depth of discharge flow rate) and visual characteristics of the discharge (e.g., odor, color, clarity, floatables, deposits or stains, vegetation condition, structural condition, and biology).~~ Whether or not a discharge was observed;

(vii) If a discharge was observed, the estimated discharge rate and visual characteristics of the discharge (e.g., odor, color, clarity) and the physical condition of the outfall; and

(viii) For observation points, the location, downstream outfall unique identifier, and risk factors or rationale for establishing the observation point.

(3) A timeframe upon which to conduct an investigation to identify and locate the source of any observed unauthorized nonstormwater discharge. Priority of investigations shall be given to discharges of sanitary sewage and those believed to be a risk to human health and public safety. Discharges authorized under a separate VPDES or state permit require no further action under this permit.

(4) Methodologies to determine the source of all illicit discharges. If the permittee is unable to identify the source of an illicit discharge within six months of beginning the

investigation then the permittee shall document that the source remains unidentified. If the observed discharge is intermittent, the permittee shall document that attempts to observe the discharge flowing were unsuccessful.

(5) Methodologies for conducting a follow-up investigation for illicit discharges that are continuous or that permittees expect to occur more frequently than a one-time discharge to verify that the discharge has been eliminated except as provided for in Part I E 3 c (4);

(6) A mechanism to track all illicit discharge investigations to document the following:

(a) The dates that the illicit discharge was initially observed, reported, or both;

(b) The results of the investigation, including the source, if identified;

(c) Any follow-up to the investigation;

(d) Resolution of the investigation; and

(e) The date that the investigation was closed.

d. The MS4 program plan shall include:

(1) The MS4 map and outfall information table required by Part I E 3 a. The map and outfall information table may be incorporated into the MS4 program plan by reference. The map shall be made available to the department within 14 days upon request;

(2) Copies of written notifications of ~~new~~ physical interconnections given by the permittee to other MS4s; and

(3) The IDDE procedures described in Part I E 3 c.

e. The annual report shall include:

(1) A confirmation statement that the MS4 map and outfall information table have been updated to reflect any changes to the MS4 occurring on or before June 30 of the reporting year;

(2) The total number of outfalls and observation points screened during the reporting period as part of the dry weather screening program; and

(3) A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:

(a) The location and source of illicit discharge;

(b) The dates that the discharge was observed, reported, or both;

(c) Whether the discharge was discovered by the permittee during dry weather screening, reported by the public, or other method (describe);

(d) How the investigation was resolved;

(e) A description of any follow-up activities; and

(f) The date the investigation was closed.

4. Construction site stormwater runoff and erosion and sediment control.

a. The permittee shall utilize its legal authority, such as ordinances, permits, orders, specific contract language, and interjurisdictional agreements, to address discharges entering the MS4 from regulated construction site stormwater runoff. The permittee shall control construction site stormwater runoff as follows:

(1) If the traditional permittee is a city, county, or town that has adopted a Virginia Erosion and Sediment Control Program (VESCP), the permittee shall implement the VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840);

(2) If the traditional permittee is a town that has not adopted a VESCP, implementation of a VESCP consistent with the Virginia Erosion and Sediment Control Law (§ 62.1-44:15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840) by the surrounding county shall constitute compliance with Part I E 4 a; such town shall notify the surrounding county of erosion, sedimentation or other construction stormwater runoff problems;

(3) If the nontraditional permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall implement the most recent department approved standards and specifications; or

(4) If the nontraditional permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51 et seq. of the Code of Virginia) and Virginia Erosion and Sediment Control Regulations (9VAC25-840), the permittee shall inspect all land disturbing activities as defined in § 62.1-44.15:51 of the Code of Virginia that result in the disturbance activities of 10,000 square feet or greater, or 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, as follows:

(a) During or immediately following initial installation of erosion and sediment controls;

(b) At least once per every two-week period;

(c) Within 48 hours following any runoff producing storm event; and

(d) At the completion of the project prior to the release of any performance bond.

(5) If the nontraditional permittee is a ~~subdivision of a local government such as a~~ school board or other local government body, the permittee shall inspect those projects resulting in a land disturbance as defined in § 62.1-44.15.51 of the Code of Virginia occurring on lands owned or operated by the permittee that result in the disturbance of 10,000 square feet or greater, 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation Act, or in accordance with more stringent thresholds established by the local government, as follows:

(a) During or immediately following initial installation of erosion and sediment controls;

(b) At least once per every two-week period;

(c) Within 48 hours following any runoff producing storm event; and

(d) At the completion of the project prior to the release of any performance bond.

b. The permittee shall require implementation of appropriate controls to prevent nonstormwater discharges to the MS4, such as wastewater, concrete washout, fuels and oils, and other illicit discharges identified during land disturbing activity inspections ~~of the MS4~~. The discharge of nonstormwater discharges other than those identified in 9VAC25-890-20 D through the MS4 is not authorized by this state permit.

c. ~~The permittee's MS4 program plan shall include:~~ Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators shall obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;

d. The permittee's MS4 program plan shall include:

(1) If the permittee implements ~~a~~ an erosion and sediment control program for construction site stormwater runoff ~~control program~~ in accordance with Part I E 4 a (1), the local ordinance citations for the VESCP program;

(2) ~~If the permittee implements a construction site stormwater runoff control program in accordance with Part I E 4 a (3):~~ If the permittee is a town that does not implement an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (2), the county ordinance citations for the VESCP program the town is subject to;

(3) If the permittee implements annual standards and specifications for erosion and sediment control and construction site stormwater runoff in accordance with Part I E 4 a (3):

(a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and

(b) A copy of the most recent standards and specifications approval letter from the department;

~~(3)~~ (4) A description of the legal authorities utilized to ensure compliance with Part I E 4 a ~~to~~ for erosion and sediment control and construction site stormwater runoff control such as ordinances, permits, orders, specific contract language, policies, and interjurisdictional agreements;

~~(4) Written~~ (5) For traditional permittees, written inspection procedures to ensure ~~the~~ VESCP requirements are maintained in accordance with 9VAC25-840-90 A and onsite erosion and sediment controls are properly implemented ~~and all associated documents utilized during inspection including the inspection schedule~~ in accordance with 9VAC25-840-60 B;

~~(5) Written procedures for requiring compliance through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and~~

(6) For nontraditional permittees, erosion and sediment control plans or annual standards and specifications shall be approved by the department in accordance with § 62.1-44.15:55. Compliance with approved erosion and sediment control plans or annual standards and specifications shall be ensured by the permittee with written inspection procedures that at minimum include the following:

(a) An inspection checklist for documenting onsite erosion and sediment control structures and systems are properly maintained and repaired as needed to insure continued performance of their intended function; and

(b) A list of all associated documents utilized for inspections including checklists, department approved erosion and sediment control plans, or the most recently department approved annual standards and specifications, and any other documents utilized.

(7) Traditional permittees shall maintain written procedures for requiring VESCP compliance through corrective action or enforcement action in accordance with § 62.1-44.15:58 of the Code of Virginia.

(8) Nontraditional permittees shall maintain written procedures for requiring compliance with department approved erosion and sediment control plans and annual standards and specifications through corrective action or enforcement action to the extent allowable under federal, state, or local law, regulation, ordinance, or other legal mechanisms; and

~~(6)~~ (9) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing ~~the~~ erosion and sediment control and construction site stormwater runoff control requirements in Part I E 4.

~~d.~~ e. The annual report shall include the following:

(1) ~~If the permittee implements a construction site stormwater runoff program in accordance with Part I E 4 a (3)~~ For nontraditional permittees:

(a) A confirmation statement that land disturbing projects that occurred during the reporting period have been conducted in accordance with the current department approved annual standards and specifications for erosion and sediment control; and

(b) If ~~one or more of the~~ any land disturbing projects were ~~not~~ conducted ~~with the~~ without department approved annual standards and specifications, ~~an explanation as to why the projects did not conform to the approved standards and specifications~~ a list of all land disturbing projects that occurred during the reporting period with erosion and sediment control plan approval dates for each project.

(2) Total number of erosion and sediment control inspections conducted; and

(3) ~~The total~~ Total number ~~and~~ of each type of compliance action and enforcement ~~actions~~ action implemented ~~and the type of enforcement actions~~.

5. Post-construction stormwater management for new development and development on prior developed lands.

a. The permittee shall address post-construction stormwater runoff that enters the MS4 from the following land disturbing activities by implementing a post-construction stormwater runoff management program as follows:

(1) If the traditional permittee is a city, county, or town, with an approved Virginia Stormwater Management Program (VSMP), the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Parts I E 5 b and c;

(2) If the traditional permittee is a town that has not adopted a VSMP, implementation of a VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) by the surrounding county shall constitute compliance with Part I E 5 a; such town shall notify the surrounding county of erosion, sedimentation, or other post-construction stormwater runoff problems and develop an inspection and maintenance program in accordance with Part I E 5 ~~b and~~ c and d;

(3) ~~If the permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870), the permittee shall implement the most recent department approved standards and specifications and develop an inspection and maintenance program in accordance with Part I E 5 b;~~ If the traditional permittee is a city, county, or town receiving initial permit coverage during the permit term and must obtain VSMP approval from the department, the permittee shall implement the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Parts I E 5 b and c no later than 60 months after receiving permit coverage;

(4) ~~If the permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and Virginia Stormwater Management Regulations (9VAC25-870) the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 and with the implementation of a maintenance and inspection program consistent with Part I E 5 b; or~~ If the nontraditional permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870), the permittee shall implement the most recent department approved standards and specifications and develop an inspection and maintenance program in accordance with Part I E 5 b;

(5) ~~If the permittee is a subdivision of a local government such as a school board or other local government body, the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 or in accordance with more stringent local requirements, if applicable, and with the implementation of a maintenance and inspection program consistent with Part I E 5 b.~~ If the nontraditional permittee is a state agency; public institution of higher education including community colleges, colleges, and universities; or federal entity and has not developed standards and specifications in accordance with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and Virginia Stormwater Management Regulations (9VAC25-870) the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 and with the implementation of a maintenance and inspection program consistent with Part I E 5 b; or

(6) If the nontraditional permittee is a school board or other local government body, the permittee shall implement a post-construction stormwater runoff control program through compliance with 9VAC25-870 or in accordance with more stringent local requirements, if applicable, and with the implementation of a maintenance and inspection program consistent with Part I E 5 b.

b. The permittee shall implement an inspection and maintenance program for those stormwater management facilities owned or operated by the permittee ~~that discharges to the MS4~~ as follows:

(1) The permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of its stormwater management facilities~~;~~. The permittee may use inspection and maintenance specifications available from the Virginia Stormwater BMP Clearinghouse or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines.

(2) ~~The permittee shall inspect stormwater management facilities owned or operated by the permittee no less than once per year. The permittee may choose to implement an alternative schedule to inspect these stormwater management facilities based on facility type and expected maintenance needs provided that the alternative schedule and rationale is included in the MS4 program plan. The alternative inspection frequency shall be no less than once per five years; and~~ Employees and contractors implementing the stormwater program shall obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations.

(3) ~~If during the inspection of the stormwater management facility conducted in accordance with Part I E 5 b (2), it is determined that maintenance is required, the permittee shall conduct the maintenance in accordance with the written procedures developed under Part I E 5 b (1).~~ The permittee shall inspect stormwater management facilities owned or operated by the permittee no less than once per year. The permittee may choose to implement an alternative schedule to inspect these stormwater management facilities based on facility type and expected maintenance needs provided that the alternative schedule and rationale is included in the MS4 program plan. The alternative inspection frequency shall be no less than once per five years; and

(4) If during the inspection of the stormwater management facility conducted in accordance with Part I E 5 b (2), it is determined that maintenance is required, the permittee shall conduct the maintenance in accordance with the written procedures developed under Part I E 5 b (1).

c. For ~~those~~ traditional permittees described in Part I E 5 a (1), ~~or~~ (2), or (3), the permittee shall:

(1) Implement an inspection and enforcement program for stormwater management facilities not owned by the permittee (i.e., privately owned) that includes:

(a) An inspection frequency of no less than once per five years for all privately owned stormwater management facilities that discharge into the MS4; and

(b) ~~Adequate~~ Require adequate long-term operation and maintenance by the owner of the stormwater management facility by requiring the owner to develop and record a maintenance agreement, including an inspection schedule to the extent allowable under state or local law or other legal mechanism;

(2) Utilize its legal authority for enforcement of the maintenance responsibilities in accordance with 9VAC25-870-112 if maintenance is neglected by the owner; and

(3) The permittee may develop and implement a progressive compliance and enforcement strategy provided that the strategy is included in the MS4 program plan.

(4) The permittee may utilize the inspection reports provided by the owner of a stormwater management facility as part of an inspection and enforcement program in accordance with 9VAC25-870-114 C.

~~d. The permittee shall maintain an electronic database or spreadsheet of all known permittee-owned or permittee-operated and privately owned stormwater management facilities that discharge into the MS4. The database shall also include all BMPs implemented by the permittee to meet the Chesapeake Bay TMDL load reduction as required in Part II A. A database shall include the following information as applicable:~~

~~(1) The stormwater management facility or BMP type;~~

~~(2) The stormwater management facility or BMPs location as latitude and longitude;~~

~~(3) The acres treated by the stormwater management facility or BMP, including total acres, pervious acres, and impervious acres;~~

~~(4) The date the facility was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use June 30, 2005;~~

~~(5) The 6th Order Hydrologic Unit Code in which the stormwater management facility is located;~~

~~(6) Whether the stormwater management facility or BMP is owned or operated by the permittee or privately owned;~~

~~(7) Whether or not the stormwater management facility or BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both;~~

~~(8) If the stormwater management facility or BMP is privately owned, whether a maintenance agreement exists; and~~

~~(9) The date of the permittee's most recent inspection of the stormwater management facility or BMP.~~

~~e. The electronic database or spreadsheet shall be updated no later than 30 days after a new stormwater management facility is brought online, a new BMP is implemented to meet a TMDL load reduction as required in Part II, or discovered if it is an existing stormwater management facility.~~

~~f. The permittee shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities.~~

~~g. No later than October 1 of each year, the permittee shall electronically report the stormwater management facilities and BMPs implemented between July 1 and June 30 of each year using the DEQ BMP Warehouse and associated reporting template for any practices not reported in accordance with Part I E 5 f including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.~~

~~h.~~ d. The MS4 program plan shall include:

(1) If the permittee implements a VSMP in accordance with Part I E 5 a (1), ~~and~~ (2) , or (3):

(a) A copy of the VSMP approval letter issued by the department;

(b) Written inspection procedures and all associated documents utilized in the inspection of privately owned stormwater management facilities; and

(c) Written procedures for compliance and enforcement of inspection and maintenance requirements for privately owned ~~BMPs~~ stormwater management facilities.

(2) If the permittee implements a post-development stormwater runoff control program in accordance with Part I E 5 a ~~(3)~~ (4):

(a) The most recently approved standards and specifications or if incorporated by reference, the location where the standards and specifications can be viewed; and

(b) A copy of the most recent standards and specifications approval letter from the department.

(3) A description of the legal authorities utilized to ensure compliance with Part I E 5 a for post-construction stormwater runoff control such as ordinances (provide citation as appropriate), permits, orders, specific contract language, and interjurisdictional agreements;

(4) Written inspection and maintenance procedures and ~~all~~ other associated template documents utilized during inspection and maintenance of stormwater management facilities owned or operated by the permittee; and

(5) The roles and responsibilities of each of the permittee's departments, divisions, or subdivisions in implementing the post-construction stormwater runoff control program~~;~~ ~~and~~.

~~(6) The stormwater management facility spreadsheet or database incorporated by reference and the location or webpage address where the spreadsheet or database can be reviewed.~~

~~i.~~ e. The annual report shall include the following information:

(1) If the traditional permittee implements a ~~Virginia Stormwater Management Program~~ VSMP in accordance with Part I E 5 a (1)~~,~~ ~~and~~ (2)~~,~~ or (3):

(a) The number of privately owned stormwater management facility inspections conducted; and

(b) The number of enforcement actions initiated by the permittee to ensure long-term maintenance of privately owned stormwater management facilities including the type of enforcement action;

(2) Total number of inspections conducted on stormwater management facilities owned or operated by the permittee;

(3) A description of the significant maintenance, repair, or retrofit activities performed on the stormwater management facilities owned or operated by the permittee to ensure it continues to perform as designed. This does not include routine activities such as grass mowing or trash collection;

(4) ~~A~~ For traditional permittees as specified in Part I E 5 a (1), a confirmation statement that the permittee submitted stormwater management facility information through the Virginia Construction Stormwater General Permit database for those land disturbing activities for which the permittee was required to obtain coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities in accordance with ~~Part I E 5 f~~ Part III B 1 or a statement that the permittee did not complete any projects requiring coverage under the General VPDES Permit for Discharges of Stormwater from Construction Activities~~;~~ ~~and~~

(5) A confirmation statement that the permittee electronically reported ~~BMPs~~ stormwater management facilities using the DEQ BMP Warehouse in accordance with ~~Part I E 5 g~~ Part III B 1 and 2 ~~and the date on which the information was submitted.~~;~~;~~ and

(6) A confirmation statement that the permittee electronically reported stormwater management facilities inspected using the DEQ BMP Warehouse in accordance with Part III B 5.

6. Pollution prevention and good housekeeping for facilities owned or operated by the permittee within the MS4 service area.

a. The permittee shall maintain and implement written good housekeeping procedures for those activities listed in Part I E 6 b at facilities owned or operated by the permittee~~,~~ ~~such as road, street, and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers~~ designed to meet the following objectives:

(1) Prevent illicit discharges;

(2) Ensure ~~the proper disposal~~ permittee staff or contractors properly dispose of waste materials, including landscape wastes and prevent waste materials from entering the MS4;

(3) Prevent the discharge of wastewater or ~~permittee vehicle~~ wash water not authorized in accordance with 9VAC25-890-20 D 3 u, ~~or both~~ into the MS4 without authorization under a separate VPDES permit; and

(4) ~~Require implementation of best management practices when discharging water pumped from utility construction and maintenance activities;~~ Minimize the pollutants in stormwater runoff.

b. The permittee shall develop and implement written good housekeeping procedures that meet the objectives established in Part I E 6 a for the following activities:

(1) Road, street, sidewalk, and parking lot maintenance and cleaning;

(a) Within 24 months of permit issuance, permittees that apply anti-icing and deicing agents shall update and implement procedures in accordance with this subsection to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage.

(b) Procedures developed in accordance with this subsection shall prohibit the application of any anti-icing or deicing agent containing urea or other forms of nitrogen or phosphorus;

(2) Renovation and significant exterior maintenance activities (e.g., painting, building power-washing, roof resealing, and HVAC coil cleaning) not covered under a separate VSMP construction general permit. The permittee shall develop and implement procedures no later than 36 months of permit issuance;

(3) Discharging water pumped from construction and maintenance activities;

(4) Temporary storage of landscaping materials;

(5) ~~Minimize the pollutants in stormwater runoff from bulk storage areas (e.g., salt storage, topsoil stockpiles) through the use of best management practices;~~ Maintenance of permittee owned or operated vehicles and equipment (i.e., prevent pollutant discharges from leaking permittee vehicles and equipment);

(6) ~~Prevent pollutant discharge into the MS4 from leaking municipal automobiles and equipment; and~~ Application of materials, including pesticides, and herbicides shall not exceed manufacturer's recommendations; and

(7) ~~Ensure that the application of materials, including fertilizers and pesticides, is conducted in accordance with the manufacturer's recommendations.~~ Application of fertilizer shall not exceed maximum application rates established by applicable nutrient management plans. For areas not covered under nutrient management plans where fertilizer is applied, application rates shall not exceed manufacturer's recommendations.

c.The permittee shall require through the use of contract language, training, written procedures, or other measures within the permittee's legal authority that contractors employed by the permittee and engaging in activities described in Part I E 6 b follow established good housekeeping procedures and use appropriate control measures to minimize the discharge of pollutants to the MS4.

~~b.~~ d. The written procedures established in accordance with Part I E 6 a and b shall be utilized as part of the employee training program ~~at Part I E 6 m.~~ and the permittee shall develop a written training plan for applicable field personnel that ensures the following:

(1) Applicable field personnel shall receive training in the prevention, recognition, and elimination of illicit discharges no less than once per 24 months;

(2) Employees performing road, street, sidewalk, and parking lot maintenance shall receive training in good housekeeping procedures required under Part I E 6 b 1 no less than once per 24 months;

(3) Employees working in and around facility maintenance, public works, or recreational facilities shall receive training in applicable Part I E 6 a and b good housekeeping procedures required no less than once per 24 months;

(4) Employees working in and around high-priority facilities with a stormwater pollution prevention plan (SWPPP) shall receive training in applicable site specific SWPPP procedures no less than once per 24 months;

(5) Employees whose duties include emergency spill control and response shall be trained in spill control and response. Emergency responders such as firefighters and law-enforcement officers trained on the handling of spill control and response as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan.

(6) Employees and contractors hired by the permittee who apply pesticides and herbicides shall be trained and certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia). Certification by the Virginia Department of Agriculture and Consumer Services (VDACS) Pesticide and Herbicide Applicator program shall constitute compliance with this requirement. Contracts for the application of pesticide and herbicides executed after the effective date of this permit shall require contractor certification.

e. The permittee shall maintain documentation of each training activity conducted by the permittee to fulfill the requirements of Part I E 6 d for a minimum of three years after training activity completion. The documentation shall include the following information:

(1) The date when applicable employees have completed the training activity;

(2) The number of employees that have completed the training activity; and

(3) The training objectives and good housekeeping procedures required under Part I E 6 a covered by training activity.

f. The permittee may fulfill the training requirements in Part I E 6 d, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements.

~~c. Within 12 months of state permit coverage, the permittee shall identify which of the high-priority facilities have a high potential of discharging pollutants.~~ g. The permittee shall maintain and implement a site specific ~~stormwater pollution prevention plan (~~SWPPP~~)~~ for each high-priority facility ~~identified. High priority facilities that have a high potential for discharging pollutants are those facilities that are not covered under a~~ as defined in 9VAC25-890-1 that does not have or require separate VPDES permit coverage, and which any of the following materials or activities occur and are expected to have exposure to stormwater resulting from rain, snow, snowmelt or runoff:

(1) Areas where residuals from using, storing or cleaning machinery or equipment remain and are exposed to stormwater;

(2) Materials or residuals on the ground or in stormwater inlets from spills or leaks;

(3) Material handling equipment;

(4) Materials or products that would be expected to be mobilized in stormwater runoff during loading or unloading or transporting activities (e.g., rock, salt, fill dirt);

(5) Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);

(6) Materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;

(7) Waste material except waste in covered, nonleaking containers (e.g., dumpsters);

(8) Application or disposal of process wastewater (unless otherwise permitted); or

(9) Particulate matter or visible deposits of residuals from roof stacks, vents or both not otherwise regulated (i.e., under an air quality control permit) and evident in the stormwater runoff.

~~d.~~ h. Each SWPPP as required in ~~Part I E 6 c~~ Part I E 6 g shall include the following:

(1) A site description that includes a site map identifying all outfalls, direction of stormwater flows, existing source controls, and receiving water bodies;

(2) A description and checklist of the potential pollutants and pollutant sources;

(3) A description of all potential nonstormwater discharges;

(4) ~~Written procedures designed to reduce and prevent pollutant discharge~~ A description of all structural control measures such as stormwater management facilities and other pollutant source controls applicable to SWPPP implementation (e.g., permeable pavement or oil-water separators that discharge to sanitary sewer are not applicable to the SWPPP) such as oil-water separators, and inlet protection designed to address potential pollutants and pollutant sources at risk of being discharged to the MS4;

(5) ~~A description of the applicable training as required in Part I E 6 m~~ A maintenance schedule of all stormwater management facilities and other pollutant source controls applicable to SWPPP implementation described in Part I E 6 h (4);

(6) ~~Procedures to conduct an annual comprehensive site compliance evaluation~~ Site specific written procedures designed to reduce and prevent pollutant discharge that incorporate by reference applicable good housekeeping procedures required under Part I E 6 a and b;

(7) ~~An inspection frequency of no less than once per year and maintenance requirements for site specific source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP~~ A description of the applicable training as required in Part I E 6 d (4); ~~and~~

(8) ~~A log of each unauthorized discharge, release, or spill incident reported in accordance with Part III G including the following information:~~ An inspection frequency of no less than once per year and maintenance requirements for site specific pollutant source controls. The date of each inspection and associated findings and follow-up shall be logged in each SWPPP; and

(9) A log of each unauthorized discharge, release, or spill incident reported in accordance with Part IV G including the following information:

(a) Date of incident;

(b) Material discharged, released, or spilled; and

(c) Estimated quantity discharged, released or spilled~~.~~; and

(10) A log of modifications to the SWPPP made as the result of any unauthorized discharge, release, or spill in accordance Part I E 6 j or changes in facility activities and operation requiring SWPPP modification; and

(11) The point of contact for SWPPP implementation.

~~e.~~ i. No later than June 30 of each year, the permittee shall annually review any high-priority facility owned or operated by the permittee for which a SWPPP has not been developed to determine if the facility ~~has a high potential to discharge pollutants as~~ meets any of the conditions described in ~~Part I E 6 c~~ Part I E 6 g. If the facility is determined to ~~be a high-priority facility with a high potential to discharge pollutants~~ need a SWPPP, the permittee shall develop a SWPPP meeting the requirements of ~~Part I E 6 d~~ Part I E 6 h no later than December 31 of that same year. The permittee shall maintain a list of all high-priority facilities owned or operated by the permittee not required to maintain a SWPPP in accordance with Part I E 6 g and this list shall be available upon request.

~~f.~~ j. The permittee shall review the contents of any site specific SWPPP no later than 30 days after any unauthorized discharge, release, or spill reported in accordance with ~~Part III G~~ Part IV G to determine if additional measures are necessary to prevent future unauthorized discharges, releases, or spills. If necessary, the SWPPP shall be updated no later than 90 days after the unauthorized discharge.

~~g.~~ k. The SWPPP shall be kept at the high-priority facility ~~with a high potential to discharge~~ and utilized as part of ~~staff~~ employee SWPPP training required in ~~Part I E 6 m~~ Part I E 6 d (4). The SWPPP and associated documents may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

~~h.~~ l. If activities change at a facility such that the facility no longer meets the ~~criteria~~ definition of a high-priority facility ~~with a high potential to discharge pollutants as described in Part I E 6 c~~, the permittee may remove the facility from the list of high-priority facilities with a high potential to discharge pollutants.

m. If activities change at a facility such that the facility no longer meets the criteria requiring SWPPP coverage as described in Part I E 6 g, the permittee may remove the facility from the list of high-priority facilities that require SWPPP coverage.

~~i.~~ n. T~~he permittee shall maintain and implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations.~~ The permittee shall maintain and implement turf and landscape nutrient management plans that have been developed by a certified turf and landscape nutrient management planner in accordance with § 10.1-104.2 of the Code of Virginia on all lands owned or operated by the permittee where nutrients are applied to a contiguous area greater than one acre. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations.

o. If nutrients are being applied to achieve final stabilization of a land disturbance project, application shall follow the manufacturer's recommendations. For newly established turf where nutrients are applied to a contiguous area greater than one acre, the permittee shall implement a nutrient management plan no later than six months after the site achieves final stabilization.

p. Nutrient management plans developed in accordance with Part I E 6 n shall be submitted to the Department of Conservation and Recreation (DCR) for approval.

q. Nutrient management plans that are expired as of the effective date of this permit shall be submitted to DCR for renewal no later than six months after the effective date of this permit. Thereafter, all nutrient management plans shall be submitted to DCR at least 30 days prior to nutrient management plan expiration. Within 36 months of permit coverage, no nutrient management plans maintained by the permittee in accordance with Part I E 6 n shall be expired due to DCR documented noncompliance with 4VAC50-85-130 provided to the permittee.

r. Nutrient management plans may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site.

~~j. Permittees~~ s. Nontraditional permittees with lands regulated under § 10.1-104.4 of the Code of Virginia, including state agencies, state colleges and universities, and other state government entities, shall continue to implement turf and landscape nutrient management plans in accordance with this statutory requirement.

~~k. The permittee shall not apply any deicing agent containing urea or other forms of nitrogen or phosphorus to parking lots, roadways, and sidewalks, or other paved surfaces.~~

~~l. The permittee shall require through the use of contract language, training, standard operating procedures, or other measures within the permittee's legal authority that contractors employed by the permittee and engaging in activities with the potential to discharge pollutants use appropriate control measures to minimize the discharge of pollutants to the MS4.~~

~~m. The permittee shall develop a training plan in writing for applicable staff that ensures the following:~~

~~(1) Field personnel receive training in the recognition and reporting of illicit discharges no less than once per 24 months;~~

~~(2) Employees performing road, street, and parking lot maintenance receive training in pollution prevention and good housekeeping associated with those activities no less than once per 24 months;~~

~~(3) Employees working in and around maintenance, public works, or recreational facilities receive training in good housekeeping and pollution prevention practices associated with those facilities no less than once per 24 months;~~

~~(4) Employees and contractors hired by the permittee who apply pesticides and herbicides are trained or certified in accordance with the Virginia Pesticide Control Act (§ 3.2-3900 et seq. of the Code of Virginia). Certification by the Virginia Department of Agriculture and Consumer Services (VCACS) Pesticide and Herbicide Applicator program shall constitute compliance with this requirement;~~

~~(5) Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations;~~

~~(6) Employees and contractors implementing the stormwater program obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations; and~~

~~(7) Employees whose duties include emergency response have been trained in spill response. Training of emergency responders such as firefighters and law enforcement officers on the handling of spill releases as part of a larger emergency response training shall satisfy this training requirement and be documented in the training plan.~~

~~n. The permittee shall maintain documentation of each training event conducted by the permittee to fulfill the requirements of Part I E 6 m for a minimum of three years after the training event. The documentation shall include the following information:~~

~~(1) The date of the training event;~~

~~(2) The number of employees attending the training event; and~~

~~(3) The objective of the training event.~~

~~o. The permittee may fulfill the training requirements in Part I E 6 m, in total or in part, through regional training programs involving two or more MS4 permittees; however, the permittee shall remain responsible for ensuring compliance with the training requirements.~~

~~p.~~ t. The MS4 program plan shall include:

(1) ~~The~~ A list of written good housekeeping procedures for the operations and maintenance activities as required by Part I E 6 a and b;

(2) A list of all high-priority facilities owned or operated by the permittee required to maintain a SWPPP in accordance with ~~Part I E 6 c~~ Part I E 6 g that includes the facility name, facility location, and the location of the SWPPP hardcopy or electronic document being maintained. The SWPPP for each high-priority facility shall be incorporated by reference~~, and whether or not the facility has a high potential to discharge~~;

(3) A list of ~~lands~~ locations for which turf and landscape nutrient management plans are required in accordance with ~~Part I E 6 i and j~~ Part I E 6 n and s, including the following information:

(a) The total acreage ~~on which nutrients are applied~~ covered by each nutrient management plan;

(b) ~~The date of the most recently approved nutrient management plan for the property; and~~ The DCR approval date and expiration date for each nutrient management plan;

(c) ~~The location in which the individual turf and landscape nutrient management plan is located;~~ The location of the nutrient management plan hardcopy or electronic document being maintained.

(4) A summary of mechanisms the permittee uses to ensure contractors working on behalf of the permittees implement the necessary good housekeeping and pollution prevention procedures, and stormwater pollution plans as appropriate; and

(5) The written training plan as required in ~~Part I E 6 m~~ Part I E 6 d.

~~q.~~ u. The annual report shall include the following:

(1) A summary of any ~~operational~~ written procedures developed or modified in accordance with Part I E 6 a and b during the reporting period;

(2) ~~A summary of any new SWPPPs developed in accordance Part I E 6 c during the reporting period~~ A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period;

(3) ~~A summary of any SWPPPs modified in accordance with Part I E 6 f or the rationale of any high priority facilities delisted in accordance with Part I E 6 h during the reporting period~~ A list of any new SWPPPs developed in accordance Part I E 6 i during the reporting period;

(4) ~~A summary of any new turf and landscape nutrient management plans developed that includes:~~ A summary of any SWPPPs modified in accordance with Part I E 6 j, l, or m;

~~(a) Location and the total acreage of each land area; and~~

~~(b) The date of the approved nutrient management plan; and~~

(5) ~~A list of the training events conducted in accordance with Part I E 6 m, including the following information:~~ The rationale of any high-priority facilities delisted in accordance with Part I E 6 l or m during the reporting period;

~~(a) The date of the training event;~~

~~(b) The number of employees who attended the training event; and~~

~~(c) The objective of the training event.~~

(6) The status of each nutrient management plan as of June 30 of the reporting year (e.g., approved, submitted and pending approval, and expired);

(7) A list of the training activities conducted in accordance with Part I E 6 d, including the following information:

(a) The completion date for the training activity;

(b) The number of employees who completed the training activity; and

(c) The objectives and good housekeeping procedures covered by the training activity.

Part II

TMDL Special Conditions

A. Chesapeake Bay TMDL special condition.

1. The Commonwealth in its Phase I, ~~and~~ Phase II, and Phase III Chesapeake Bay TMDL Watershed Implementation Plans (WIPs) committed to a phased approach for MS4s, affording MS4 permittees up to three full five-year permit cycles to implement necessary reductions. This permit is consistent with the Chesapeake Bay TMDL and the Virginia Phase I, ~~and~~ Phase II, and Phase III ~~WIPs~~ WIP to meet the Level 2 (L2) scoping run for existing developed lands as it represents an implementation of an additional ~~35%~~ 60% of L2 as specified in the ~~2010~~ Phase I, ~~and~~ Phase II, and Phase III WIPs. In combination with the ~~5.0%~~ 40% reduction of L2 that has already been achieved, a total reduction ~~at the end of this permit term~~ no later than October 31, 2028 of ~~40%~~ 100% of L2 will be achieved. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance.

2. The following definitions apply to Part II of this state permit for the purpose of the Chesapeake Bay TMDL special condition for discharges in the Chesapeake Bay Watershed:

"Existing sources" means pervious and impervious urban land uses served by the MS4 as of June 30, 2009.

"New sources" means pervious and impervious urban land uses served by the MS4 developed or redeveloped on or after July 1, 2009.

"Pollutants of concern" or "POC" means total nitrogen, total phosphorus, and total suspended solids.

"Transitional sources" means regulated land disturbing activities that are temporary in nature and discharge through the MS4.

3. Reduction requirements for permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018. No later than ~~the expiration date of this permit~~ October 31, 2028, the permittee shall reduce the load of total nitrogen, total phosphorus, and total suspended solids from existing developed lands served by the MS4 as of June 30, 2009, within the 2010 Census urbanized areas by at least ~~40%~~ 100% of the Level 2 (L2) Scoping Run Reductions. The ~~40%~~ 100% reduction

is the sum of (i) the first phase reduction of 5.0% of the L2 Scoping Run Reductions based on the lands located within the 2000 Census urbanized areas required by June 30, 2018; (ii) the second phase reduction of at least 35% of the L2 Scoping Run based on lands within the 2000 Census urbanized areas required by June 30, 2023; ~~and~~ (iii) the second phase reduction of at least 40% of the L2 Scoping Run , which shall only apply to the additional lands that were added by the 2010 expanded Census urbanized areas required by June 30, 2023; and (iv) the third phase reduction of least 60% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas required by October 31, 2028. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d below as applicable:

Table 3a
Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the James River, Lynnhaven, and Little Creek Basins

		A	B	C	D	~~E~~	~~F~~ E	~~G~~ F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within the 2010 CUA (acres)[2]	Load(lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	~~Percentage of L2 required reduction by 6/30/2023~~	~~40%~~ 100% cumulative reduction Required by ~~6/30/2023~~ 10/31/2028 (lbs/yr)[4]	Sum of ~~40%~~ 100% cumulative reduction (lb/yr)[5]
Nitrogen	Regulated urban impervious	9.39			9%	~~40%~~		
	Regulated urban pervious	6.99			6%	~~40%~~		
Phosphorus	Regulated urban impervious	1.76			16%	~~40%~~		
	Regulated urban	0.5			7.25%	~~40%~~		

	pervious							
Total suspended solids	Regulated urban impervious	676.94			20%	~~40%~~		
	Regulated urban pervious	101.08			8.75%	~~40%~~		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column ~~F~~ E = Column C x Column D ~~x Column E~~.

[5]Column ~~G~~ F = The sum of the subsource cumulative reduction required by ~~6/30/23~~ 10/31/2028 (lbs/yr) as calculated in Column ~~F~~ E.

Table 3b

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Potomac River Basin

		A	B	C	D	~~E~~	~~F~~ E	~~G~~ F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within the 2010 CUA (acres)[2]	Load (lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	~~Percentage of L2 required reduction by 6/30/2023~~	~~40%~~ 100% cumulative reduction required by ~~6/30/2023~~ 10/31/2028 (lbs/yr)[4]	Sum of ~~40%~~ 100% cumulative reduction (lb/yr)[5]
Nitrogen	Regulated urban impervious	16.86			9%	~~40%~~		

	Regulated urban pervious	10.07			6%	~~40%~~		
Phosphorus	Regulated Urban Impervious	1.62			16%	~~40%~~		
	Regulated urban pervious	0.41			7.25%	~~40%~~		
Total suspended solids	Regulated urban impervious	1171.32			20%	~~40%~~		
	Regulated urban pervious	175.8			8.75%	~~40%~~		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column ~~F~~ E = Column C x Column D ~~x Column E~~.

[5]Column ~~G~~ F = The sum of the subsource cumulative reduction required by ~~6/30/23~~ 10/31/2028 (lbs/yr) as calculated in Column ~~F~~ E.

Table 3c

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Rappahannock River Basin

		A	B	C	D	~~E~~	~~F~~ E	~~G~~ F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within the	Load (lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	~~Percentage of L2 required reduction by 6/30/2023~~	~~40%~~ 100% cumulative reduction Required by ~~6/30/2023~~ 10/31/20	Sum of ~~40%~~ 100% cumulative reduction (lb/yr)[5]

			2010 CUA (acres)[2]				28 (lbs/yr)[4]	
Nitrogen	Regulated urban impervious	9.38			9%	~~40%~~		
	Regulated urban pervious	5.34			6%	~~40%~~		
Phosphorus	Regulated urban impervious	1.41			16%	~~40%~~		
	Regulated urban pervious	0.38			7.25%	~~40%~~		
Total suspended solids	Regulated urban impervious	423.97			20%	~~40%~~		
	Regulated urban pervious	56.01			8.75%	~~40%~~		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column ~~F~~ E = Column C x Column D ~~x Column E~~.

[5]Column ~~G~~ F = The sum of the subsource cumulative reduction required by ~~6/30/23~~ 10/31/2028 (lbs/yr) as calculated in Column ~~F~~ E.

Table 3d

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the York River and Poquoson Coastal Basin								
		A	B	C	D	~~E~~	~~F~~ E	~~G~~ F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within the 2010 CUA (acres)[2]	Load (lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	~~Percentage of L2 required reduction by 6/30/2023~~	~~40%~~ 100% cumulative reduction required by ~~6/30/2023~~ 10/31/2028 (lbs/yr)[4]	Sum of ~~40%~~ 100% cumulative reduction (lb/yr)[5]
Nitrogen	Regulated urban impervious	7.31			9%	~~40%~~		
	Regulated urban pervious	7.65			6%	~~40%~~		
Phosphorus	Regulated urban impervious	1.51			16%	~~40%~~		
	Regulated urban pervious	0.51			7.25%	~~40%~~		
Total suspended solids	Regulated urban impervious	456.68			20%	~~40%~~		
	Regulated urban pervious	72.78			8.75%	~~40%~~		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column ~~F~~ E = Column C x Column D ~~x Column E~~.

[5]Column ~~G~~ F = The sum of the subsource cumulative reduction required by ~~6/30/23~~ 10/31/2028 (lbs/yr) as calculated in Column ~~F~~ E.

4. No later than ~~the expiration date of this permit~~ October 31, 2028, the permittee shall offset ~~40%~~ 100% of the increased loads from new sources initiating construction between July 1, 2009, and ~~June 30, 2019~~ October 31, 2023, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.) if the following conditions apply:

a. The activity disturbed one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 5 to develop the equivalent pollutant load for nitrogen and total suspended solids for new sources meeting the requirements of this condition.

5. No later than ~~the expiration date of this permit~~ October 31, 2028, the permittee shall offset the increased loads from projects grandfathered in accordance with 9VAC25-870-48 that begin construction after July 1, 2014, if the following conditions apply:

a. The activity disturbs one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 below to develop the equivalent pollutant load for nitrogen and total suspended solids for grandfathered sources meeting the requirements of this condition.

Table 4

Ratio of Phosphorus Loading Rate to Nitrogen and Total Suspended Solids Loading Rates for Chesapeake Bay Basins

Ratio of Phosphorus to Other POCs (Based on All Land Uses 2009 Progress Run)	Phosphorus Loading Rate (lbs/acre)	Nitrogen Loading Rate (lbs/acre)	Total Suspended Solids Loading Rate (lbs/acre)
James River Basin, Lynnhaven, and Little Creek Basins	1.0	5.2	420.9
Potomac River Basin	1.0	6.9	469.2
Rappahannock River Basin	1.0	6.7	320.9
York River Basin (including Poquoson Coastal Basin)	1.0	9.5	531.6

6. Reductions achieved in accordance with the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems effective July 1, 2013, and November 1, 2018, shall be applied toward the total reduction requirements to demonstrate compliance with Part II A 3, A 4, and A 5.

7. ~~Reductions shall be achieved in each river basin as calculated in Part II A 3 or for reductions in accordance with Part II A 4 and A 5 in the basin in which the new source or grandfathered project occurred.~~ Forty percent (40%) of L2 reductions for total nitrogen, total phosphorus, and total suspended solids shall at a minimum, be maintained by the permittee during the permit term.

8. ~~Loading and reduction values greater than or equal to 10 pounds calculated in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to the nearest pound without regard to mathematical rules of precision. Loading and reduction values of less than 10 pounds reported in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to two significant digits.~~ Reductions shall be achieved in each river basin as calculated in Part II A 3 or for reductions in accordance with Part II A 4 and A 5 in the basin in which the new source or grandfathered project occurred.

9. ~~Reductions required in Part II A 3, A 4, and A 5 shall be achieved through one or more of the following:~~ Loading and reduction values greater than or equal to 10 pounds calculated in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to the nearest pound without regard to mathematical rules of precision. Loading and reduction values of less than 10 pounds reported in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to two significant digits.

~~a. BMPs approved by the Chesapeake Bay Program;~~

~~b. BMPs approved by the department; or~~

~~c. A trading program described in Part II A 10.~~

10. ~~The permittee may acquire and use total nitrogen and total phosphorus credits in accordance with § 62.1-44.19:21 of the Code of Virginia and total suspended solids in accordance with § 62.1-44.19:21.1 of the Code of Virginia for purposes of compliance with the required reductions in Table 3a, Table 3b, Table 3c, Table 3d of Part II A 3; Part II A 4; and Part II A 5, provided the use of credits has been approved by the department. The exchange of credits is subject to the following requirements:~~ Reductions required in Part II A 3, A 4, and A 5 shall be achieved through one or more of the following:

a. ~~The credits are generated and applied to a compliance obligation in the same calendar year;~~ BMPs approved by the Chesapeake Bay Program;

b. ~~The credits are generated and applied to a compliance obligation in the same tributary;~~ BMPs approved by the department; or

c. ~~The credits are acquired no later than June 1 immediately following the calendar year in which the credits are applied;~~ A trading program described in Part II A 11.

~~d. No later than June 1 immediately following the calendar year in which the credits are applied, the permittee certifies on an MS4 Nutrient Credit Acquisition Form that the permittee has acquired the credits;~~

~~e. Total nitrogen and total phosphorus credits shall be either point source credits generated by point sources covered by the Watershed Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed general permit issued pursuant to § 62.1-44.19:14 of the Code of Virginia, or nonpoint source credits certified pursuant to § 62.1-44.19:20 of the Code of Virginia;~~

~~f. Sediment credits shall be derived from one of the following:~~

~~(1) Implementation of BMP in a defined area outside of an MS4 service area, in which case the necessary baseline sediment reduction for such defined area shall be achieved prior to the permittee's use of additional reductions as credit; or~~

~~(2) A point source wasteload allocation established by the Chesapeake Bay total maximum daily load, in which case the credit is the difference between the wasteload allocation specified as an annual mass load and any lower monitored annual mass load that is discharged as certified on an MS4 Sediment Credit Acquisition Form.~~

~~g. Sediment credits shall not be associated with phosphorus credits used for compliance with the stormwater nonpoint nutrient runoff water quality criteria established pursuant to § 62.1-44.15:28 of the Code of Virginia.~~

11. ~~No later than 12 months after the permit effective date, the permittee shall submit an updated Chesapeake Bay TMDL action plan for the reductions required in Part II A 3, A 4, and A 5 that includes the following information:~~ The permittee may acquire and use total nitrogen and total phosphorus credits in accordance with § 62.1-44.19:21 of the Code of Virginia and total suspended solids in accordance with § 62.1-44.19:21.1 of the Code of Virginia for purposes of compliance with the required reductions in Table 3a, Table 3b, Table 3c, Table 3d of Part II A 3; Part II A 4; and Part II A 5, provided the use of credits has been approved by the department. The exchange of credits is subject to the following requirements:

a. ~~Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders, and interjurisdictional agreements, implemented or needing to be implemented to meet the requirements of Part II A 3, A 4, and A 5.~~ The credits are generated and applied to a compliance obligation in the same calendar year;

b. ~~The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.~~ The credits are generated and applied to a compliance obligation in the same tributary;

c. ~~The total reductions achieved as of July 1, 2018, for each pollutant of concern in each river basin.~~ The credits are acquired no later than June 1 immediately following the calendar year in which the credits are applied;

d. ~~A list of BMPs implemented prior to July 1, 2018, to achieve reductions associated with the Chesapeake Bay TMDL including:~~ No later than June 1 immediately following the calendar year in which the credits are applied, the permittee certifies on an MS4 Nutrient Credit Acquisition Form that the permittee has acquired the credits;

~~(1) The date of implementation; and~~

~~(2) The reductions achieved.~~

e. ~~The BMPs to be implemented by the permittee prior to the expiration of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable:~~ Total nitrogen and total phosphorus credits shall be either point source credits generated by point sources covered by the Watershed Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed general permit issued pursuant to § 62.1-44.19:14 of the Code of Virginia, or nonpoint source credits certified pursuant to § 62.1-44.19:20 of the Code of Virginia;

~~(1) Type of BMP;~~

~~(2) Project name;~~

~~(3) Location;~~

~~(4) Percent removal efficiency for each pollutant of concern; and~~

~~(5) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 8 for each pollutant of concern; and~~

f. ~~A summary of any comments received as a result of public participation required in Part II A 12, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.~~ Sediment credits shall be derived from one of the following:

(1) Implementation of a BMP in a defined area outside of an MS4 service area, in which case the necessary baseline sediment reduction for such defined area shall be achieved prior to the permittee's use of additional reductions as credit; or

(2) A point source wasteload allocation established by the Chesapeake Bay total maximum daily load, in which case the credit is the difference between the wasteload allocation specified as an annual mass load and any lower monitored annual mass load that is discharged as certified on an MS4 Sediment Credit Acquisition Form.

g. Sediment credits shall not be associated with phosphorus credits used for compliance with the stormwater nonpoint nutrient runoff water quality criteria established pursuant to § 62.1-44.15:28 of the Code of Virginia.

12. ~~Prior to submittal of the action plan required in Part II A 11, the permittee shall provide an opportunity for public comment on the additional BMPs proposed to meet the reductions not previously approved by the department in the first phase Chesapeake Bay TMDL action plan for no less than 15 days.~~ Chesapeake Bay TMDL action plan requirements.

a. Permittees applying for initial coverage under this general permit shall submit a draft first phase Chesapeake Bay TMDL action plan to the department no later than October 31, 2028, unless the department grants a later date. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable. The first phase action plan shall achieve a minimum reduction of least 40% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas no later than October 31, 2033. The action plan shall include the following information:

(1) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.

(2) The BMPs to be implemented by the permittee to achieve 40% of the reductions calculated in Part II A 13 a:

(a) Type of BMP;

(b) Project name;

(c) Location;

(d) Percent removal efficiency for each pollutant of concern; and

(e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern; and

b. For permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018, no later than 12 months after the permit effective date, the permittee shall submit a third phase Chesapeake Bay TMDL action plan for the reductions required in Part II A 3, A 4, and A 5 that includes the following information:

(1) Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders, and interjurisdictional agreements, implemented or needing to be implemented to meet the requirements of Part II A 3, A 4, and A 5.

(2) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.

(3) The total reductions achieved as of November 1, 2023, for each pollutant of concern in each river basin.

(4) A list of BMPs implemented prior to November 1, 2023, to achieve reductions associated with the Chesapeake Bay TMDL including:

(a) The date of implementation; and

(b) The reductions achieved.

(5) The BMPs to be implemented by the permittee within 60 months of the effective date of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable:

(a)Type of BMP;

(b) Project name;

(c) Location;

(d) Percent removal efficiency for each pollutant of concern; and

(e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern; and

(6) A summary of any comments received as a result of public participation required in Part II A 14, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.

13. ~~For each reporting period, the corresponding annual report shall include the following information:~~ Prior to submittal of the action plan required in Part II A 12 b, the permittee shall provide an opportunity for public comment for no less than 15 days on the additional BMPs proposed in the third phase Chesapeake Bay TMDL action plan.

a. ~~A list of BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I E 5 g and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year;~~ Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018 shall submit a Chesapeake Bay TMDL implementation annual status report in a method, (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department no later than October 1 of each year. The report shall cover the previous year from July 1 to June 30.

b. ~~If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired;~~ Following notification from the department of the start date for the required electronic submission of Chesapeake Bay TMDL implementation annual status 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

c. ~~The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids; and~~ The year two Chesapeake Bay TMDL implementation annual status report shall contain a summary of any public comments on the Chesapeake Bay TMDL action plan received and how the permittee responded.

d. ~~A list of BMPs that are planned to be implemented during the next reporting period.~~ Each Chesapeake Bay TMDL implementation annual status report shall include the following information:

(1) A list of Chesapeake Bay TMDL action plan BMPs (not including annual practices) implemented prior to the reporting period that includes the following information for reported BMP;

(a) The number of BMPs for each BMP type;

(b) The estimated reduction of pollutants of concern achieved by each BMP type and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported Chesapeake Bay TMDL action plan BMPs inspected using the DEQ BMP Warehouse in accordance with Part III B 5.

(2) A list of newly implemented BMPs including annual practices implemented during the reporting period that includes the following information for each reported BMP or a statement that no BMPs were implemented during the reporting period:

(a) The BMP type and a description of the location for each BMP;

(b) The estimated reduction of pollutants of concern achieved by each BMP and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part III B 3.

e. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired; f. Pollutant load reductions generated by annual practices such as street and storm drain cleaning shall only be applied to the compliance year in which the annual practice was implemented.

f. The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids. Any revisions made to the Chesapeake Bay TMDL action plan.

g. Any revisions made to the Chesapeake Bay TMDL action plan

h. A list of BMPs that are planned to be implemented during the next reporting period.

B. Local TMDL special condition.

1. ~~The permittee shall develop a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) as described in Part II B 1 a and 1 b:~~ Permittees applying for initial coverage under this general permit shall develop a draft local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee. The permittee shall develop action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8 as applicable.

Each local TMDL action plan shall be provided to the department no later than October 31, 2028, unless the department grants a later date.

2. Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018 shall develop and maintain a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) as described in Part II B 2 a and 2 b:

a. For TMDLs approved by the EPA prior to July 1, ~~2013~~ 2018, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate or update as applicable the ~~previously approved~~ local TMDL action plans to meet the conditions of ~~Part II B 3, B 4, B 5, B 6, and B 7~~ Part II B 4, B 6, B 7, and B8 as applicable, no later than 18 months after the permit effective date and continue implementation of the action plan~~; and~~ . Updated action plans shall include:

(1) An evaluation of the results achieved by the previous action plan; and

(2) Any adaptive management strategies incorporated into updated action plans based on action plan evaluation.

b. For TMDLs approved by EPA on or after July 1, ~~2013~~ 2018, and prior to ~~June 30, 2018~~ October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee, the permittee shall develop and initiate implementation of action plans to meet the conditions of ~~Part II B 3, B 4, B 5, B 6, and B 7~~ Part II B 4, B 5, B 6, B 7, and B 8 as applicable ~~for each pollutant for which wasteloads have been allocated to the permittee's MS4~~ no later than 30 months after the permit effective date.

~~2.~~ 3. The permittee shall complete implementation of the TMDL action plans as soon as practicable. TMDL action plans may be implemented in multiple phases over more than one permit cycle using the adaptive iterative approach provided adequate progress is achieved in the implementation of BMPs designed to reduce pollutant discharges in a manner that is consistent with the assumptions and requirements of the applicable TMDL.

~~3.~~ 4. Each local TMDL action plan developed by the permittee shall include the following:

a. The TMDL project name;

b. The EPA approval date of the TMDL;

c. The wasteload allocated to the permittee (individually or in aggregate), and the corresponding percent reduction, if applicable;

d. Identification of the significant sources of the pollutants of concern discharging to the permittee's MS4 and that are not covered under a separate VPDES permit. For the purposes of this requirement, a significant source of pollutants of concern means a discharge where the expected pollutant loading is greater than the average pollutant loading for the land use identified in the TMDL;

e. The BMPs designed to reduce the pollutants of concern in accordance with ~~Parts II B 4, B 5, and B 6~~ Parts II B 5, B 6, B 7, and B 8;

f. Any calculations required in accordance with ~~Part II B 4, B 5, or B 6~~ Parts II B 5, B 6, B 7, or B 8;

g. For action plans developed in accordance with ~~Part II B 4 and B 5~~ Part II B 5, B 6, and B 8, an outreach strategy to enhance the public's education (including employees) on methods to eliminate and reduce discharges of the pollutants; and

h. A schedule of anticipated actions planned for implementation during this permit term.

~~4.~~ 5. Bacterial TMDLs.

a. ~~If the permittee is an approved VSMP authority, the permittee~~ Traditional permittees shall select and implement at least three of the strategies listed in Table 5 below designed to reduce the load of bacteria to the MS4. Selection of the strategies shall correspond to sources identified in ~~Part II B 3 d~~ Part II B 4 d.

b. ~~If the permittee is not an approved VSMP authority, the permittee~~ Nontraditional permittees shall select at least one strategy listed in Table 5 below designed to reduce the load of bacteria to the MS4 relevant to sources of bacteria applicable within the MS4 regulated service area. Selection of the strategies shall correspond to sources identified in ~~Part II B 3 d~~ Part II B 4 d.

Table 5

Strategies for Bacteria Reduction Stormwater Control/Management Strategy

Source	Strategies (provided as an example and not meant to be all inclusive or limiting)
Domestic pets (dogs and cats)	Provide signage to pick up dog waste, providing pet waste bags and disposal containers. Adopt and enforce pet waste ordinances or policies, or leash laws or policies. Place dog parks away from environmentally sensitive areas. Maintain dog parks by removing disposed of pet waste bags and cleaning up other sources of bacteria. Protect riparian buffers and provide unmanicured vegetative buffers along streams to dissuade stream access.
Urban wildlife	Educate the public on how to reduce food sources accessible to urban wildlife (e.g., manage restaurant dumpsters and grease traps, residential garbage, feed pets indoors). Install storm drain inlet or outlet controls. Clean out storm drains to remove waste from wildlife. Implement and enforce urban trash management practices. Implement rooftop disconnection programs or site designs that minimize connections to reduce bacteria from rooftops Implement a program for removing animal carcasses from roadways and properly disposing of the same (either through proper storage or through transport to a licensed facility).
Illicit connections or illicit discharges to the MS4	Implement an enhanced dry weather screening and illicit discharge, detection, and elimination program beyond the requirements of Part I E 3 to identify and remove illicit connections and identify leaking sanitary sewer lines infiltrating to the MS4 and implement repairs. Implement a program to identify potentially failing septic systems. Educate the public on how to determine whether their septic system is failing.

	Implement septic tank inspection and maintenance program. Implement an educational program beyond any requirements in Part I E 1 though E 6 to explain to citizens why they should not dump materials into the MS4.
Dry weather urban flows (irrigations, ~~carwashing~~ car washing, powerwashing, etc.)	Implement public education programs to reduce dry weather flows from storm sewers related to lawn and park irrigation practices, ~~carwashing~~ car washing, powerwashing and other nonstormwater flows. Provide irrigation controller rebates. Implement and enforce ordinances or policies related to outdoor water waste. Inspect commercial trash areas, grease traps, washdown practices, and enforce corresponding ordinances or policies.
Birds (Canadian geese, gulls, pigeons, etc.)	Identify areas with high bird populations and evaluate deterrents, population controls, habitat modifications and other measures that may reduce bird-associated bacteria loading. Prohibit feeding of birds.
Other sources	Enhance maintenance of stormwater management facilities owned or operated by the permittee. Enhance requirements for third parties to maintain stormwater management facilities. Develop BMPs for locating, transporting, and maintaining portable toilets used on permittee-owned sites. Educate third parties that use portable toilets on BMPs for use. Provide public education on appropriate recreational vehicle dumping practices.

~~5.~~ 6. Local sediment, phosphorus, and nitrogen TMDLs.

a. The permittee shall reduce the loads associated with sediment, phosphorus, or nitrogen through implementation of one or more of the following:

(1) One or more of the BMPs from the Virginia Stormwater BMP Clearinghouse listed in 9VAC25-870-65 or other approved BMPs found on the Virginia Stormwater BMP Clearinghouse website;

(2) One or more BMPs approved by the Chesapeake Bay Program. Pollutant load reductions generated by annual practices such as street and storm drain cleaning shall only be applied to the compliance year in which the annual practice was implemented; or

(3) Land disturbance thresholds lower than Virginia's regulatory requirements for erosion and sediment control and post development stormwater management.

b. The permittee may meet the local TMDL requirements for sediment, phosphorus, or nitrogen through BMPs implemented or sediment, phosphorus, or nitrogen credits acquired. BMPs implemented and nutrient and sediment credits acquired to meet the requirements of the Chesapeake Bay TMDL in Part II A may also be utilized to meet local TMDL requirements as long as the BMPs are implemented or the credits are generated in the watershed for which local water quality is impaired.

c. The permittee shall calculate the anticipated load reduction achieved from each BMP and include the calculations in the action plan required in ~~Part II B 3 f~~ Part II B 4 f.

d. No later than 36 months after the effective date of this permit, the permittee shall submit to the department an update on the progress made toward achieving action plan goals and the anticipated end dates by which the permittee will meet each ~~WLA~~ wasteload allocation for sediment, phosphorus, or nitrogen. The proposed end date may be developed in accordance with ~~Part II B 2~~ Part II B 3.

~~6.~~ 7. Polychlorinated biphenyl (PCB) TMDLs.

a. For each PCB TMDL action plan, the permittee shall include an inventory of potentially significant sources of PCBs owned or operated by the permittee that drains to the MS4 that includes the following information:

(1) Location of the potential source;

(2) Whether or not the potential source is from current site activities or activities previously conducted at the site that have been terminated (i.e., legacy activities); and

(3) A description of any measures being implemented or to be implemented to prevent exposure to stormwater and the discharge of PCBs from the site.

b. If at any time during the term of this permit, the permittee discovers a previously unidentified significant source of PCBs within the permittee's MS4 regulated service area, the permittee shall notify DEQ in writing within 30 days of discovery.

c. As part of its annual reporting requirements, the permittee shall submit results of any action plan PCB monitoring or product testing conducted and any adaptive management strategies that have been incorporated into the updated action plan based upon monitoring or product testing results if the permittee has elected to perform monitoring or product testing or both.

8. Chloride TMDLs

a. Traditional permittees shall develop an anti-icing and deicing agent education and outreach strategy that identifies target audiences for increasing awareness of anti-icing and deicing agent application impacts on receiving waters and encourages implementation of enhanced BMPs for application, handling, and storage of anti-icing and de-icing agents used for snow and ice management.

b. Traditional permittee anti-icing and deicing agent education and outreach strategies shall contain a schedule to implement two or more of the strategies listed in Part I E 1 d Table 1 per year to communicate to target audiences the importance of responsible anti-icing and deicing agent application, transport, and storage.

c. No later than 36 months after permit issuance, the permittee shall review good housekeeping procedures for anti-icing and deicing agent application, handling, storage, and transport activities required under Part I E 6 b (1) (a) and identify a minimum of two strategies for implementing enhanced BMPs that promote efficient management and application of anti-icing and deicing agents while maintaining public safety.

~~7.~~ 9. Prior to submittal of the action plan required in ~~Part II B 1~~ Part II B 2, the permittee shall provide an opportunity for public comment for no less than 15 days on the ~~proposed~~ proposal to meet the local TMDL action plan requirements ~~for no less than 15 days~~.

~~8.~~ 10. The MS4 program plan as required by Part I B of this permit shall incorporate each local TMDL action plan. Local TMDL action plans may be incorporated by reference into the MS4 program plan provided that the program plan includes the date of the most recent

local TMDL action plan and identification of the location where a copy of the local TMDL action plan may be obtained.

~~9.~~ 11. For each reporting period, each annual report shall include a summary of actions conducted to implement each local TMDL action plan.

C. Inspection and maintenance of ecosystem restoration projects used for TMDL compliance.

1. Within 36 months of permit issuance the permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of ecosystem restoration projects as defined in 9VAC25-890-1 and implemented as part of a TMDL action plan developed in accordance with Part II A, B, or both. The permittee may utilize inspection and maintenance protocols developed by the Chesapeake Bay Program or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines.

2. The permittee shall inspect ecosystem restoration projects owned or operated by the permittee and implemented as part of a current TMDL action plan developed in accordance with Part II A or B no less than once every 60 months.

Part III

~~Conditions Applicable to All State and VPDES Permits~~ DEQ BMP Warehouse Reporting

A. For the purpose of Part III of this permit, best management practice or BMP means a practice that achieves quantifiable nitrogen, phosphorus, or total suspended solids reductions including stormwater management facilities, ecosystem restoration projects, annual practices, and other practices approved by the department for reducing nitrogen, phosphorus, and total suspended solids pollutants.

B. No later than October 1 of each year the permittee shall electronically report BMPs implemented and inspected as applicable between July 1 and June 30 of each year using the DEQ BMP Warehouse.

1. Traditional permittees specified in Part I E 5 a (1) shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities.

2. The permittee shall use the associated reporting template for stormwater management facilities not reported in accordance with Part III B 1 including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) if applicable and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.

3. The permittee shall use the DEQ BMP Warehouse to report BMPs that were not reported in accordance with Part III B 1 or 2 and were implemented as part of a TMDL action plan to achieve nitrogen, phosphorus, and total suspended solids reductions in accordance with Part II A or B.

4. The permittee shall use the DEQ BMP Warehouse to report any BMPs that were not reported in accordance with Part III B 1, 2, or 3.

5. The permittee shall use the DEQ BMP Warehouse to report the most recent inspection date for BMPs in accordance with Part I E 5 b or c, or in accordance with Part II C and the most recent associated TMDL action plan.

C. The following information for each BMP reported in accordance with Part III B 1, 2, 3, or 4 shall be reported to the DEQ BMP Warehouse as applicable:

1. The BMP type;

2. The BMP location as decimal degree latitude and longitude;

3. The acres treated by the BMP, including total acres and impervious acres;

4. The date the BMP was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use 06/2005;

5. The 6th Order Hydrologic Unit Code in which the BMP is located;

6. Whether the BMP is owned or operated by the permittee or privately owned;

7. Whether or not the BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both;

8. If the BMP is privately owned, whether a maintenance agreement exists;

9. The date of the permittee's most recent inspection of the BMP; and

10. Any other information specific to the BMP type required by the DEQ BMP Warehouse (e.g., linear feet of stream restoration).

D. No later than October 1 of each year the DEQ BMP Warehouse shall be updated if an existing BMP is discovered between July 1 and June 30 that was not previously reported to the DEQ BMP Warehouse.

Part IV

Conditions Applicable to All State and VPDES Permits

NOTE: Discharge monitoring is not required for compliance purposes by this general permit. If the operator chooses to monitor stormwater discharges for informational or screening purposes, the operator does not need to comply with the requirements of ~~Parts III A, B, or C~~ Parts IV A, B, or C.

A. Monitoring.

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitoring activity.

2. Monitoring shall be conducted according to procedures approved under 40 CFR Part 136 or alternative methods approved by the U.S. Environmental Protection Agency, unless other procedures have been specified in this state permit. Analyses performed according to test procedures approved under 40 CFR Part 136 shall be performed by an environmental laboratory certified under regulations adopted by the Department of General Services (1VAC30-45 or 1VAC30-46).

3. The operator shall periodically calibrate and perform maintenance procedures on all monitoring and analytical instrumentation at intervals that will ensure accuracy of measurements.

B. Records.

1. Monitoring records and reports shall include:

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

b. The individuals who performed the sampling or measurements;

c. The dates and times analyses were performed;

d. The individuals who performed the analyses;

e. The analytical techniques or methods used; and

f. The results of such analyses.

2. The operator shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this state permit, and records of all data used to complete the registration statement for this state permit, for a period of at least three years from the date of the sample, measurement, report or request for coverage. This period of retention shall be extended automatically during the course of any unresolved litigation regarding the regulated activity or regarding control standards applicable to the operator, or as requested by the ~~board~~ department.

C. Reporting monitoring results.

1. The operator shall submit the results of the monitoring as may be performed in accordance with this state permit with the annual report unless another reporting schedule is specified elsewhere in this state permit.

2. Monitoring results shall be reported on a discharge monitoring report (DMR); on forms provided, approved or specified by the department; or in any format provided that the date, location, parameter, method, and result of the monitoring activity are included. 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

3. If the operator monitors any pollutant specifically addressed by this state permit more frequently than required by this state permit using test procedures approved under 40 CFR Part 136 or using other test procedures approved by the U.S. Environmental Protection Agency or using procedures specified in this state permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or reporting form specified by the department.

4. Calculations for all limitations that require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this state permit.

D. Duty to provide information. The operator shall furnish within a reasonable time, any information that the ~~board~~ department may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this state permit or to determine compliance with this state permit. The ~~board,~~ department, or EPA may require the operator to furnish, upon request, such plans, specifications, and other pertinent information as may be necessary to determine the effect of the wastes from ~~his~~ the permittee's discharge on the quality of surface waters, or such other information as may be necessary to accomplish the purposes of the CWA and Virginia Stormwater Management Act. The operator shall also furnish to the ~~board,~~ department, or EPA upon request, copies of records required to be kept by this state permit.

E. Compliance schedule reports. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this state permit shall be submitted no later than 14 days following each schedule date.

F. Unauthorized stormwater discharges. Pursuant to § 62.1-44.5 of the Code of Virginia, except in compliance with a state permit issued by the department, it shall be unlawful to cause a stormwater discharge from a MS4.

G. Reports of unauthorized discharges. Any operator of a ~~small~~ MS4 who discharges or causes or allows a discharge of sewage, industrial waste, other wastes or any noxious or deleterious substance or a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, 40 CFR Part 302, or § 62.1-44.34:19 of the Code of Virginia that occurs during a 24-hour period into or upon

surface waters or who discharges or causes or allows a discharge that may reasonably be expected to enter surface waters shall notify the department of the discharge immediately (see Part IV I 4) upon discovery of the discharge, but in no case later than within 24 hours after said discovery. A written report of the unauthorized discharge shall be submitted to the department within five days of discovery of the discharge. The written report shall contain:

1. A description of the nature and location of the discharge;

2. The cause of the discharge;

3. The date on which the discharge occurred;

4. The length of time that the discharge continued;

5. The volume of the discharge;

6. If the discharge is continuing, how long it is expected to continue;

7. If the discharge is continuing, what the expected total volume of the discharge will be; and

8. Any steps planned or taken to reduce, eliminate and prevent a recurrence of the present discharge or any future discharges not authorized by this state permit.

Discharges reportable to the department under the immediate reporting requirements of other regulations are exempted from this requirement.

H. Reports of unusual or extraordinary discharges. If any unusual or extraordinary discharge including a "bypass" (~~Part III U~~ Part IV U) or "upset," (~~Part III V~~ Part IV V), should occur from a facility and the discharge enters or could be expected to enter surface waters, the operator shall promptly notify (see Part IV I 4), in no case later than within 24 hours, the department ~~by telephone~~ after the discovery of the discharge. This notification shall provide all available details of the incident, including any adverse effects on aquatic life and the known number of fish killed. The operator shall reduce the report to writing and shall submit it to the department within five days of discovery of the discharge in accordance with ~~Part III I 2~~ Part IV I 2. Unusual and extraordinary discharges include any discharge resulting from:

1. Unusual spillage of materials resulting directly or indirectly from processing operations;

2. Breakdown of processing or accessory equipment;

3. Failure or taking out of service some or all of the facilities; and

4. Flooding or other acts of nature.

I. Reports of noncompliance. ~~The operator shall report any noncompliance which may adversely affect surface waters or may endanger public health.~~

1. ~~An oral report to the department shall be provided within 24 hours from the time the operator becomes aware of the circumstances. The following shall be included as information that shall be reported within 24 hours under this subdivision:~~ The operator shall report any noncompliance that may adversely affect surface waters or may endanger public health.

a. ~~Any unanticipated bypass; and~~ An oral report to the department shall be provided within 24 hours from the time the operator becomes aware of the circumstances. The following shall be included as information that shall be reported within 24 hours under this subsection:

(1). Any unanticipated bypass; and

(2). Any upset that causes a discharge to surface waters.

b. ~~Any upset that causes a discharge to surface waters.~~ A written report shall be submitted within five days and shall contain:

(1). A description of the noncompliance and its cause;

(2). The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and

(3). Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The department may waive the written report on a case-by-case basis for reports of noncompliance under Part IV I if the oral report has been received within 24 hours and no adverse impact on surface waters has been reported.

2. ~~A written report shall be submitted within five days and shall contain:~~ The operator shall report all instances of noncompliance not reported under Part IV I 1 b, in writing, as part of the annual reports that are submitted. The reports shall contain the information listed in Part IV I 2.

~~a. A description of the noncompliance and its cause;~~

~~b. The period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and~~

~~c. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The department may waive the written report on a case-by-case basis for reports of noncompliance under Part III I if the oral report has been received within 24 hours and no adverse impact on surface waters has been reported.~~

3. ~~The operator shall report all instances of noncompliance not reported under Part III I 1 or 2, in writing, as part of the annual reports that are submitted. The reports shall contain the information listed in Part III I 2.~~ The immediate (within 24 hours) reports required in Part IV G, H, and I shall be made to the department. Reports may be made by telephone, email, fax, 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.

~~NOTE: The reports required in Part III G, H, and I shall be made to the department. Reports may be made by telephone, email, or fax. For reports outside normal working hours, leaving a recorded message 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.~~

4. Where the operator becomes aware of a failure to submit any relevant facts, or submittal of incorrect information in any report, including a registrations statement, to the department, the operator shall promptly submit such facts or correct information.

J. Notice of planned changes.

1. The operator shall give notice to the department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

a. The operator plans an alteration or addition to any building, structure, facility, or installation that may meet one of the criteria for determining whether a facility is a new source in 9VAC25-870-420:

b. The operator plans an alteration or addition that would significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this state permit; or

2. The operator shall give advance notice to the department of any planned changes in the permitted facility or activity that may result in noncompliance with state permit requirements.

K. Signatory requirements.

1. Registration statement. All registration statements shall be signed as follows:

a. For a corporation: by a responsible corporate officer. For the purpose of this chapter, a responsible corporate officer means: (i) a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy-making or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for state permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

b. For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

c. For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official. For purposes of this chapter, a principal executive officer of a public agency includes:

(1) The chief executive officer of the agency, or

(2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.

2. Reports and other information. All reports required by state permits, including annual reports, and other information requested by the ~~board or~~ department shall be signed by a person described in ~~Part III K 1~~ Part IV K 1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in ~~Part III K 1~~ Part IV K 1;

b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the operator. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and

c. The signed and dated written authorization is submitted to the department.

3. Changes to authorization. If an authorization under ~~Part III K 2~~ Part IV K 2 is no longer accurate because a different individual or position has responsibility for the overall operation of the MS4, a new authorization satisfying the requirements of ~~Part III K 2~~ Part IV K 2 shall be submitted to the department prior to or together with any reports, or information to be signed by an authorized representative.

4. Certification. Any person signing a document under ~~Part III K 1 or 2~~ Part IV K 1 or 2 shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and

belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

L. Duty to comply. The operator shall comply with all conditions of this state permit. Any state permit noncompliance constitutes a violation of the Virginia Stormwater Management Act and the Clean Water Act, except that noncompliance with certain provisions of this state permit may constitute a violation of the Virginia Stormwater Management Act but not the Clean Water Act. Permit noncompliance is grounds for enforcement action; for state permit termination, revocation and reissuance, or modification; or denial of a state permit renewal application.

The operator shall comply with effluent standards or prohibitions established under § 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if this state permit has not yet been modified to incorporate the requirement.

M. Duty to reapply. If the operator wishes to continue an activity regulated by this state permit after the expiration date of this state permit, the operator shall submit a new registration statement at least 90 days before the expiration date of the existing state permit, unless permission for a later date has been granted by the ~~board~~ department. The ~~board~~ department shall not grant permission for registration statements to be submitted later than the expiration date of the existing state permit.

N. Effect of a state permit. This state permit does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorize any injury to private property or invasion of personal rights, or any infringement of federal, state or local law or regulations.

O. State law. Nothing in this state permit shall be construed to preclude the institution of any legal action under, or relieve the operator from any responsibilities, liabilities, or penalties established pursuant to any other state law or regulation or under authority preserved by § 510 of the Clean Water Act. Except as provided in state permit conditions on "bypassing" (~~Part III U~~ Part IV U), and "upset" (~~Part III V~~ Part IV V) nothing in this state permit shall be construed to relieve the operator from civil and criminal penalties for noncompliance.

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

Q. Proper operation and maintenance. The operator shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances), which are installed or used by the operator to achieve compliance with the conditions of this state permit. Proper operation and maintenance also includes effective plant performance, adequate funding, adequate staffing, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems, which are installed by the operator only when the operation is necessary to achieve compliance with the conditions of this state permit.

R. Disposal of solids or sludges. Solids, sludges or other pollutants removed in the course of treatment or management of pollutants shall be disposed of in a manner so as to prevent any pollutant from such materials from entering surface waters and in compliance with all applicable state and federal laws and regulations.

S. Duty to mitigate. The operator shall take all reasonable steps to minimize or prevent any discharge in violation of this state permit that has a reasonable likelihood of adversely affecting human health or the environment.

T. Need to halt or reduce activity not a defense. It shall not be a defense for an operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this state permit.

U. Bypass.

1. "Bypass," as defined in 9VAC25-870-10, means the intentional diversion of waste streams from any portion of a treatment facility. The operator may allow any bypass to occur that does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to ensure efficient operation. These bypasses are not subject to the provisions of ~~Part III U 2 and U 3~~ Part IV U 2 and U 3.

2. Notice.

a. Anticipated bypass. If the operator knows in advance of the need for a bypass, the operator shall submit prior notice to the department, if possible at least 10 days before the date of the bypass.

b. Unanticipated bypass. The operator shall submit notice of an unanticipated bypass as required in ~~Part III I~~ Part IV I.

3. Prohibition of bypass.

a. Except as provided in ~~Part III U 1~~ Part IV U 1, bypass is prohibited, and the ~~board or~~ department may take enforcement action against an operator for bypass, unless:

(1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

(3) The operator submitted notices as required under ~~Part III U 2~~ Part IV U 2.

b. The department may approve an anticipated bypass, after considering its adverse effects, if the department determines that it will meet the three conditions listed in ~~Part III U 3 a~~ Part IV U 3 a.

V. Upset.

1. An "upset," as defined in 9VAC25-870-10, means an exceptional incident in which there is unintentional and temporary noncompliance with technology based state permit effluent limitations because of factors beyond the reasonable control of the operator. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

2. An upset constitutes an affirmative defense to an action brought for noncompliance with technology-based state permit effluent limitations if the requirements of ~~Part III V 4~~ Part IV V 4 are met. A determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is not a final administrative action subject to judicial review.

3. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

4. An operator who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the operator can identify the causes of the upset;

b. The permitted facility was at the time being properly operated;

c. The operator submitted notice of the upset as required in ~~Part III I~~ Part IV I; and

d. The operator complied with any remedial measures required under ~~Part III S~~ Part IV S.

5. In any enforcement proceeding the operator seeking to establish the occurrence of an upset has the burden of proof.

W. Inspection and entry. The operator shall allow the department ~~as the board's designee~~, EPA, or an authorized representative (including an authorized contractor), upon presentation of credentials and other documents as may be required by law, to:

1. Enter upon the operator's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this state permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this state permit;

3. Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this state permit; and

4. Sample or monitor at reasonable times, for the purposes of ensuring permit compliance or as otherwise authorized by the Clean Water Act and the Virginia Stormwater Management Act, any substances or parameters at any location.

For purposes of this subsection, the time for inspection shall be deemed reasonable during regular business hours, and whenever the facility is discharging. Nothing contained herein shall make an inspection unreasonable during an emergency.

X. State permit actions. State permits may be modified, revoked and reissued, or terminated for cause. The filing of a request by the operator for a state permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any state permit condition.

Y. Transfer of state permits.

1. State permits are not transferable to any person except after notice to the department. Except as provided in ~~Part III Y 2~~ Part IV Y 2, a state permit may be transferred by the operator to a new operator only if the state permit has been modified or revoked and reissued, or a minor modification made, to identify the new operator and incorporate such other requirements as may be necessary under the Virginia Stormwater Management Act and the Clean Water Act.

2. As an alternative to transfers under ~~Part III Y 1~~ Part IV Y 1, this state permit may be automatically transferred to a new operator if:

a. The current operator notifies the department at least 30 days in advance of the proposed transfer of the title to the facility or property;

b. The notice includes a written agreement between the existing and new operators containing a specific date for transfer of state permit responsibility, coverage, and liability between them; and

c. The department does not notify the existing operator and the proposed new operator of its intent to modify or revoke and reissue the state permit. If this notice is not

received, the transfer is effective on the date specified in the agreement mentioned in ~~Part III Y 2 b~~ Part IV Y 2 b.

Z. Severability. The provisions of this state permit are severable, and if any provision of this state permit or the application of any provision of this state permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this state permit, shall not be affected thereby.

Part II

TMDL Special Conditions

A. Chesapeake Bay TMDL special condition.

1. The Commonwealth in its Phase I, ~~and~~ Phase II, and Phase III Chesapeake Bay TMDL Watershed Implementation Plans (WIPs) committed to a phased approach for MS4s, affording MS4 permittees up to three full five-year permit cycles to implement necessary reductions. This permit is consistent with the Chesapeake Bay TMDL and the Virginia Phase I, ~~and~~ Phase II, and Phase III ~~WIPs~~ WIP to meet the Level 2 (L2) scoping run for existing developed lands as it represents an implementation of an additional ~~35%~~ 60% of L2 as specified in the ~~2010~~ Phase I, ~~and~~ Phase II, and Phase III WIPs. In combination with the ~~5.0%~~ 40% reduction of L2 that has already been achieved, a total reduction ~~at the end of this permit term~~ no later than October 31, 2028 of ~~40%~~ 100% of L2 will be achieved. Conditions of future permits will be consistent with the TMDL or WIP conditions in place at the time of permit issuance.

2. The following definitions apply to Part II of this state permit for the purpose of the Chesapeake Bay TMDL special condition for discharges in the Chesapeake Bay Watershed:

"Existing sources" means pervious and impervious urban land uses served by the MS4 as of June 30, 2009.

"New sources" means pervious and impervious urban land uses served by the MS4 developed or redeveloped on or after July 1, 2009.

"Pollutants of concern" or "POC" means total nitrogen~~,~~ and total phosphorus~~, and total suspended solids~~.

"Transitional sources" means regulated land disturbing activities that are temporary in nature and discharge through the MS4.

3. Reduction requirements for permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018. No later than ~~the expiration date of this permit~~ October 31, 2028, the permittee shall reduce the load of total nitrogen~~,~~ and total phosphorus~~, and total suspended solids~~ from existing developed lands served by the MS4 as of June 30, 2009, within the 2010 Census urbanized areas by at least ~~40%~~ 100% of the Level 2 (L2) Scoping Run Reductions. The ~~40%~~ 100% reduction is the sum of (i) the first phase reduction of 5.0% of the L2 Scoping Run Reductions based on the lands located within the 2000 Census urbanized areas required by June 30, 2018; (ii) the second phase reduction of at least 35% of the L2 Scoping Run based on lands within the 2000 Census urbanized areas required by June 30, 2023; ~~and~~ (iii) the second phase reduction of at least 40% of the L2 Scoping Run , which shall only apply to the additional lands that were added by the 2010 expanded Census urbanized areas required by June 30, 2023; and (iv) the third phase reduction of least 60% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas required by October 31, 2028. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d below as applicable:

Table 3a

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the James River, Lynnhaven, and Little Creek Basins

		A	B	C	D	~~E~~	~~F~~ E	~~G~~ F

Proposed 9VAC25-890 Part II A Sediment Revision Sheet

Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within the 2010 CUA (acres)[2]	Load(lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	~~Percentage of L2 required reduction by 6/30/2023~~	~~40%~~ 100% cumulative reduction Required by ~~6/30/2023~~ 10/31/2028 (lbs/yr)[4]	Sum of ~~40%~~ 100% cumulative reduction (lb/yr)[5]
Nitrogen	Regulated urban impervious	9.39			9%	~~40%~~		
	Regulated urban pervious	6.99			6%	~~40%~~		
Phosphorus	Regulated urban impervious	1.76			16%	~~40%~~		
	Regulated urban pervious	0.5			7.25%	~~40%~~		
~~Total suspended solids~~	~~Regulated urban impervious~~	~~676.94~~			~~20%~~	~~40%~~		
	~~Regulated urban pervious~~	~~101.08~~			~~8.75%~~	~~40%~~		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column ~~F~~ E = Column C x Column D ~~x Column E~~.

[5]Column ~~G~~ F = The sum of the subsource cumulative reduction required by ~~6/30/23~~ 10/31/2028 (lbs/yr) as calculated in Column ~~F~~ E.

Table 3b

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Potomac River Basin

		A	B	C	D	~~E~~	~~F~~ E	~~G~~ F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within the 2010 CUA (acres)[2]	Load (lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	~~Percentage of L2 required reduction by 6/30/2023~~	~~40%~~ 100% cumulative reduction required by ~~6/30/2023~~ 10/31/2028 (lbs/yr)[4]	Sum of ~~40%~~ 100% cumulative reduction (lb/yr)[5]
Nitrogen	Regulated urban impervious	16.86			9%	~~40%~~		
	Regulated urban pervious	10.07			6%	~~40%~~		
Phosphorus	Regulated Urban Impervious	1.62			16%	~~40%~~		
	Regulated urban pervious	0.41			7.25%	~~40%~~		

~~Total suspended solids~~	~~Regulated urban impervious~~	~~1171.32~~			~~20%~~	~~40%~~		
	~~Regulated urban pervious~~	~~175.8~~			~~8.75%~~	~~40%~~		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column ~~F~~ E = Column C x Column D ~~x Column E~~.

[5]Column ~~G~~ F = The sum of the subsource cumulative reduction required by ~~6/30/23~~ 10/31/2028 (lbs/yr) as calculated in Column ~~F~~ E.

Table 3c

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the Rappahannock River Basin

		A	B	C	D	~~E~~	~~F~~ E	~~G~~ F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within the 2010 CUA (acres)[2]	Load (lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	~~Percentage of L2 required reduction by 6/30/2023~~	~~40%~~ 100% cumulative reduction Required by ~~6/30/2023~~ 10/31/2028 (lbs/yr)[4]	Sum of ~~40%~~ 100% cumulative reduction (lb/yr)[5]
Nitrogen	Regulated urban impervious	9.38			9%	~~40%~~		
	Regulated urban pervious	5.34			6%	~~40%~~		

Phosphorus	Regulated urban impervious	1.41			16%	~~40%~~		
	Regulated urban pervious	0.38			7.25%	~~40%~~		
~~Total suspended solids~~	~~Regulated urban impervious~~	~~423.97~~			~~20%~~	~~40%~~		
	~~Regulated urban pervious~~	~~56.01~~			~~8.75%~~	~~40%~~		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column ~~F~~ E = Column C x Column D ~~x Column E~~.

[5]Column ~~G~~ F = The sum of the subsource cumulative reduction required by ~~6/30/23~~ 10/31/2028 (lbs/yr) as calculated in Column ~~F~~ E.

Table 3d

Calculation Sheet for Estimating Existing Source Loads and Reduction Requirements for the York River and Poquoson Coastal Basin

		A	B	C	D	~~E~~	~~F~~ E	~~G~~ F
Pollutant	Subsource	Loading rate (lbs/ac/yr)[1]	Existing developed lands as of 6/30/09 served by the MS4 within the	Load (lbs/yr)[3]	Percentage of MS4 required Chesapeake Bay total L2 loading reduction	~~Percentage of L2 required reduction by 6/30/2023~~	~~40%~~ 100% cumulative reduction required by ~~6/30/2023~~ 10/31/20	Sum of ~~40%~~ 100% cumulative reduction (lb/yr)[5]

			2010 CUA (acres)[2]				28 (lbs/yr)[4]	
Nitrogen	Regulated urban impervious	7.31			9%	~~40%~~		
	Regulated urban pervious	7.65			6%	~~40%~~		
Phosphorus	Regulated urban impervious	1.51			16%	~~40%~~		
	Regulated urban pervious	0.51			7.25%	~~40%~~		
~~Total suspended solids~~	~~Regulated urban impervious~~	~~456.68~~			~~20%~~	~~40%~~		
	~~Regulated urban pervious~~	~~72.78~~			~~8.75%~~	~~40%~~		

[1]Edge of stream loading rate based on the Chesapeake Bay Watershed Model Progress Run 5.3.2.

[2]To determine the existing developed acres required in Column B, permittees should first determine the extent of their regulated service area based on the 2010 Census urbanized area (CUA). Next, permittees will need to delineate the lands within the 2010 CUA served by the MS4 as pervious or impervious as of the baseline date of June 30, 2009.

[3]Column C = Column A x Column B.

[4]Column ~~F~~ E = Column C x Column D ~~x Column E~~.

[5]Column ~~G~~ F = The sum of the subsource cumulative reduction required by ~~6/30/23~~ 10/31/2028 (lbs/yr) as calculated in Column ~~F~~ E.

4. No later than ~~the expiration date of this permit~~ October 31, 2028, the permittee shall offset ~~40%~~ 100% of the increased loads from new sources initiating construction between

July 1, 2009, and ~~June 30, 2019~~ October 31, 2023, and designed in accordance with 9VAC25-870 Part II C (9VAC25-870-93 et seq.) if the following conditions apply:

a. The activity disturbed one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 of Part II A 5 to develop the equivalent pollutant load for new sources of nitrogen ~~and total suspended solids for new sources~~ meeting the requirements of this condition.

5. No later than ~~the expiration date of this permit~~ October 31, 2028, the permittee shall offset the increased loads from projects grandfathered in accordance with 9VAC25-870-48 that begin construction after July 1, 2014, if the following conditions apply:

a. The activity disturbs one acre or greater; and

b. The resulting total phosphorous load was greater than 0.45 lb/acre/year, which is equivalent to an average land cover condition of 16% impervious cover.

The permittee shall utilize Table 4 below to develop the equivalent pollutant load for grandfathered sources of nitrogen ~~and total suspended solids for grandfathered sources~~ meeting the requirements of this condition.

Table 4
Ratio of Phosphorus Loading Rate to Nitrogen ~~and Total Suspended Solids~~ Loading Rates for Chesapeake Bay Basins

Ratio of Phosphorus to Other POCs (Based on All Land Uses 2009 Progress Run)	Phosphorus Loading Rate (lbs/acre)	Nitrogen Loading Rate (lbs/acre)	~~Total Suspended Solids Loading Rate (lbs/acre)~~
James River Basin, Lynnhaven, and Little Creek Basins	1.0	5.2	~~420.9~~
Potomac River Basin	1.0	6.9	~~469.2~~
Rappahannock River Basin	1.0	6.7	~~320.9~~
York River Basin (including Poquoson Coastal Basin)	1.0	9.5	~~531.6~~

6. Reductions achieved in accordance with the General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems effective July 1, 2013, and November 1, 2018, shall be applied toward the total reduction requirements to demonstrate compliance with Part II A 3, A 4, and A 5.

7. ~~Reductions shall be achieved in each river basin as calculated in Part II A 3 or for reductions in accordance with Part II A 4 and A 5 in the basin in which the new source or grandfathered project occurred.~~ Forty percent (40%) of L2 reductions for total nitrogen~~,~~ and total phosphorus~~, and total suspended solids~~ shall at a minimum, be maintained by the permittee during the permit term.

8. ~~Loading and reduction values greater than or equal to 10 pounds calculated in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to the nearest pound without regard to mathematical rules of precision. Loading and reduction values of less than 10 pounds reported in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to two significant digits.~~ Reductions shall be achieved in each river

basin as calculated in Part II A 3 or for reductions in accordance with Part II A 4 and A 5 in the basin in which the new source or grandfathered project occurred.

9. ~~Reductions required in Part II A 3, A 4, and A 5 shall be achieved through one or more of the following:~~ Loading and reduction values greater than or equal to 10 pounds calculated in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to the nearest pound without regard to mathematical rules of precision. Loading and reduction values of less than 10 pounds reported in accordance with Part II A 3, A 4, and A 5 shall be calculated and reported to two significant digits.

~~a. BMPs approved by the Chesapeake Bay Program;~~

~~b. BMPs approved by the department; or~~

~~c. A trading program described in Part II A 10.~~

10. ~~The permittee may acquire and use total nitrogen and total phosphorus credits in accordance with § 62.1-44.19:21 of the Code of Virginia and total suspended solids in accordance with § 62.1-44.19:21.1 of the Code of Virginia for purposes of compliance with the required reductions in Table 3a, Table 3b, Table 3c, Table 3d of Part II A 3; Part II A 4; and Part II A 5, provided the use of credits has been approved by the department. The exchange of credits is subject to the following requirements:~~ Reductions required in Part II A 3, A 4, and A 5 shall be achieved through one or more of the following:

a. ~~The credits are generated and applied to a compliance obligation in the same calendar year;~~ BMPs approved by the Chesapeake Bay Program;

b. ~~The credits are generated and applied to a compliance obligation in the same tributary;~~ BMPs approved by the department; or

c. ~~The credits are acquired no later than June 1 immediately following the calendar year in which the credits are applied;~~ A trading program described in Part II A 11.

~~d. No later than June 1 immediately following the calendar year in which the credits are applied, the permittee certifies on an MS4 Nutrient Credit Acquisition Form that the permittee has acquired the credits;~~

~~e. Total nitrogen and total phosphorus credits shall be either point source credits generated by point sources covered by the Watershed Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed general permit issued pursuant to § 62.1-44.19:14 of the Code of Virginia, or nonpoint source credits certified pursuant to § 62.1-44.19:20 of the Code of Virginia;~~

~~f. Sediment credits shall be derived from one of the following:~~

~~(1) Implementation of BMP in a defined area outside of an MS4 service area, in which case the necessary baseline sediment reduction for such defined area shall be achieved prior to the permittee's use of additional reductions as credit; or~~

~~(2) A point source wasteload allocation established by the Chesapeake Bay total maximum daily load, in which case the credit is the difference between the wasteload allocation specified as an annual mass load and any lower monitored annual mass load that is discharged as certified on an MS4 Sediment Credit Acquisition Form.~~

~~g. Sediment credits shall not be associated with phosphorus credits used for compliance with the stormwater nonpoint nutrient runoff water quality criteria established pursuant to § 62.1-44.15:28 of the Code of Virginia.~~

11. ~~No later than 12 months after the permit effective date, the permittee shall submit an updated Chesapeake Bay TMDL action plan for the reductions required in Part II A 3, A 4, and A 5 that includes the following information:~~ The permittee may acquire and use total nitrogen and total phosphorus credits in accordance with § 62.1-44.19:21 of the Code of

Virginia ~~and total suspended solids in accordance with § 62.1-44.19:21.1 of the Code of Virginia~~ for purposes of compliance with the required reductions in Table 3a, Table 3b, Table 3c, Table 3d of Part II A 3; Part II A 4; and Part II A 5, provided the use of credits has been approved by the department. The exchange of credits is subject to the following requirements:

a. ~~Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders, and interjurisdictional agreements, implemented or needing to be implemented to meet the requirements of Part II A 3, A 4, and A 5.~~ The credits are generated and applied to a compliance obligation in the same calendar year;

b. ~~The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.~~ The credits are generated and applied to a compliance obligation in the same tributary;

c. ~~The total reductions achieved as of July 1, 2018, for each pollutant of concern in each river basin.~~ The credits are acquired no later than June 1 immediately following the calendar year in which the credits are applied;

d. ~~A list of BMPs implemented prior to July 1, 2018, to achieve reductions associated with the Chesapeake Bay TMDL including:~~ No later than June 1 immediately following the calendar year in which the credits are applied, the permittee certifies on an MS4 Nutrient Credit Acquisition Form that the permittee has acquired the credits;

~~(1) The date of implementation; and~~

~~(2) The reductions achieved.~~

e. ~~The BMPs to be implemented by the permittee prior to the expiration of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable:~~ Total nitrogen and total phosphorus credits shall be either point source credits generated by point sources covered by the Watershed Permit for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Bay Watershed general permit issued pursuant to § 62.1-44.19:14 of the Code of Virginia, or nonpoint source credits certified pursuant to § 62.1-44.19:20 of the Code of Virginia;

~~(1) Type of BMP;~~

~~(2) Project name;~~

~~(3) Location;~~

~~(4) Percent removal efficiency for each pollutant of concern; and~~

~~(5) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 8 for each pollutant of concern; and~~

~~f. A summary of any comments received as a result of public participation required in Part II A 12, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.~~ ~~Sediment credits shall be derived from one of the following:~~

~~(1) Implementation of a BMP in a defined area outside of an MS4 service area, in which case the necessary baseline sediment reduction for such defined area shall be achieved prior to the permittee's use of additional reductions as credit; or~~

~~(2) A point source wasteload allocation established by the Chesapeake Bay total maximum daily load, in which case the credit is the difference between the wasteload allocation specified as an annual mass load and any lower monitored annual mass load that is discharged as certified on an MS4 Sediment Credit Acquisition Form.~~

~~g. Sediment credits shall not be associated with phosphorus credits used for compliance with the stormwater nonpoint nutrient runoff water quality criteria established pursuant to § 62.1-44.15:28 of the Code of Virginia.~~

12. ~~Prior to submittal of the action plan required in Part II A 11, the permittee shall provide an opportunity for public comment on the additional BMPs proposed to meet the reductions not previously approved by the department in the first phase Chesapeake Bay TMDL action plan for no less than 15 days.~~ Chesapeake Bay TMDL action plan requirements.

a. Permittees applying for initial coverage under this general permit shall submit a draft first phase Chesapeake Bay TMDL action plan to the department no later than October 31, 2028, unless the department grants a later date. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable. The first phase action plan shall achieve a minimum reduction of least 40% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas no later than October 31, 2033. The action plan shall include the following information:

(1) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.

(2) The BMPs to be implemented by the permittee to achieve 40% of the reductions calculated in Part II A 13 a:

(a) Type of BMP;

(b) Project name;

(c) Location;

(d) Percent removal efficiency for each pollutant of concern; and

(e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern; and

b. For permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018, no later than 12 months after the permit effective date, the permittee shall submit a third phase Chesapeake Bay TMDL action plan for the reductions required in Part II A 3, A 4, and A 5 that includes the following information:

(1) Any new or modified legal authorities, such as ordinances, permits, policy, specific contract language, orders, and interjurisdictional agreements, implemented or needing to be implemented to meet the requirements of Part II A 3, A 4, and A 5.

(2) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.

(3) The total reductions achieved as of November 1, 2023, for each pollutant of concern in each river basin.

(4) A list of BMPs implemented prior to November 1, 2023, to achieve reductions associated with the Chesapeake Bay TMDL including:

(a) The date of implementation; and

(b) The reductions achieved.

(5) The BMPs to be implemented by the permittee within 60 months of the effective date of this permit to meet the cumulative reductions calculated in Part II A 3, A 4, and A 5, including as applicable:

(a)Type of BMP;

(b) Project name;

(c) Location;

(d) Percent removal efficiency for each pollutant of concern; and

(e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern; and

(6) A summary of any comments received as a result of public participation required in Part II A 14, the permittee's response, identification of any public meetings to address public concerns, and any revisions made to Chesapeake Bay TMDL action plan as a result of public participation.

13. ~~For each reporting period, the corresponding annual report shall include the following information:~~ Prior to submittal of the action plan required in Part II A 12 b, the permittee shall provide an opportunity for public comment for no less than 15 days on the additional BMPs proposed in the third phase Chesapeake Bay TMDL action plan.

a. ~~A list of BMPs implemented during the reporting period but not reported to the DEQ BMP Warehouse in accordance with Part I E 5 g and the estimated reduction of pollutants of concern achieved by each and reported in pounds per year;~~ Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018 shall submit a Chesapeake Bay TMDL implementation annual status report in a method, (i.e., how the permittee must submit) and format (i.e., how the report shall be laid out) as specified by the department no later than October 1 of each year. The report shall cover the previous year from July 1 to June 30.

b. ~~If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired;~~ Following notification from the department of the start date for the required electronic submission of Chesapeake Bay TMDL implementation annual status 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

c. ~~The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids; and~~ The year two Chesapeake Bay TMDL implementation annual status report shall contain a summary of any public comments on the Chesapeake Bay TMDL action plan received and how the permittee responded.

d. ~~A list of BMPs that are planned to be implemented during the next reporting period.~~ Each Chesapeake Bay TMDL implementation annual status report shall include the following information:

(1) A list of Chesapeake Bay TMDL action plan BMPs (not including annual practices) implemented prior to the reporting period that includes the following information for reported BMP;

(a) The number of BMPs for each BMP type;

(b) The estimated reduction of pollutants of concern achieved by each BMP type and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported Chesapeake Bay TMDL action plan BMPs inspected using the DEQ BMP Warehouse in accordance with Part III B 5.

(2) A list of newly implemented BMPs including annual practices implemented during the reporting period that includes the following information for each reported BMP or a statement that no BMPs were implemented during the reporting period:

(a) The BMP type and a description of the location for each BMP;

(b) The estimated reduction of pollutants of concern achieved by each BMP and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part III B 3.

e. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired; f. Pollutant load reductions generated by annual practices such as street and storm drain cleaning shall only be applied to the compliance year in which the annual practice was implemented.

f. The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen~~, and total phosphorus, and total suspended solids. Any revisions made to the Chesapeake Bay TMDL action plan.~~

g. Any revisions made to the Chesapeake Bay TMDL action plan

h. A list of BMPs that are planned to be implemented during the next reporting period.

FACT SHEET
REISSUANCE OF A GENERAL VPDES PERMIT FOR DISCHARGES OF STORMWAER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS
Effective November 1, 2023

The Virginia State Water Control Board has under consideration the reissuance of a VPDES general permit for point source discharges of stormwater from small municipal separate storm sewer systems (MS4s) to the surface waters of the Commonwealth of Virginia.

Permit Number: VAR04

Name of Permittee: Any operator of a qualifying small municipal separate storm sewer system with point source discharges to the surface waters of the Commonwealth of Virginia.

Facility Location: Commonwealth of Virginia

Receiving Waters: Surface waters within the boundaries of the Commonwealth of Virginia, except those specifically named in Board regulations 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 VPDES permit subject to certain conditions. The Board has determined that this category of discharges is appropriately controlled under a general permit. The category of discharges to be included involves facilities with the same or similar types of operations that discharge the same or similar types of stormwater. The general permit requires that all covered facilities develop, implement, and enforce a MS4 program designed to reduce the discharge of pollutants from the small MS4 to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the State Water Control Law and its attendant regulations.

The permit requires the permittee to maintain and implement an MS4 program such that the discharge of pollutants from the MS4 is “reduced to the maximum extent practicable (MEP)”. MEP for this permit term has been established by DEQ as the implementation of the MS4 program requirements in Part I, the Chesapeake Bay and the TMDL special conditions in Part II, and BMP Warehouse Reporting in Part III of the permit. MEP established under this permit constitutes adequate progress in meeting water quality standards and satisfies the appropriate water quality requirements of the State Water Control Law and its attendant regulations for this permit term.

The Clean Water Act Section 402(p)(3)(B)(iii) specifies that National Pollutant Discharge Elimination System (NPDES) permits for discharges from MS4s "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods" rather than through end of pipe limitations typically associated with point source discharges.

The department considers narrative effluent limitations requiring implementation of Best Management Practices (BMPs), rather than numeric limits, to be the appropriate form of effluent limitations for MS4s. CWA section 402(p)(3)(b)(iii) establishes a process for narrative rather than numeric effluent limits for MS4s, for example, by reference to "management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." 33 U.S.C. 1342(p)(3)(B)(iii). Additionally, it is not presently technically feasible to establish numeric effluent limits for MS4 stormwater discharges due to the highly variable stormwater flow and sources of pollutants from each the systems. Water quality based effluent limits are based on low flow conditions for end-of-pipe discharges. Low flow condition assessments are not applicable to stormwater discharges from an MS4. For example, the highest

concentrations are often found in the first flush, which are not low flow conditions. Stormwater discharges are also variable based on the storm event itself, with varying flow conditions on a two-year, ten-year, or 100-year event.

MS4 operators need flexibility to optimize reductions in stormwater pollutants on a location-by-location basis given the unique local hydrologic and geologic concerns that may exist and the differing possible pollutant control strategies. Continued implementation of MS4 programs through an adaptive, iterative process allows MS4 permittees to evaluate those specific strategies that work best for reducing pollutants associated with stormwater discharges from their MS4. Permittees must still comply with the requirements of the permit, and through time, adaptive management of the MS4 program results in reduced pollutant loads from the MS4. Selection of strategies to demonstrate compliance with the permit conditions is left to the permittee. The MS4 program plan acts as an implementation tool to demonstrate compliance with the terms of the permit. The permittee can modify the MS4 program through the adaptive, iterative approach which provides them the flexibility necessary to deal with unique circumstances specific to their MS4. This approach is consistent with the traditional permitting approach of EPA's Small MS4 Remand Rule described above.

Due to the nature of an MS4, stormwater discharge is received from a variety of sources including both public and private properties. Since MS4s are operated by federal, state, and local government entities, the authority to regulate discharges to the MS4 may be limited. In order to reduce pollutants to the MEP, permittees should use the legal authorities available to them to control the discharge of pollutants to and from the MS4. This includes, but is not limited to statutes, ordinances, regulations, permits, policies, and contract language.

The Department has determined that the most economically and environmentally feasible method for MS4s to meet the requirements established by this permit is through the implementation of BMPs using an iterative process over a series of permit cycles. MS4 BMPs may consist of structural stormwater controls as well as ordinances, policies, procedures, planning and other programmatic efforts aimed at reducing pollutant loads that are designed with the ultimate compliance goal of meeting the requirements established by this permit.

Section 9VAC25-870-460 provides for the use of BMPs to control or abate the discharge of pollutants when numeric effluent limitations are infeasible. The Department finds that at this time numeric effluent limits are infeasible given current technologies and legal authority limitations. The determination of the appropriateness for establishing BMPs as permit conditions in lieu of numeric effluent limits is consistent with the Clean Water Act. § 40 CFR 122.44 (k) of the Code of Federal Regulations provides for the use of BMPs to control or abate the discharge of pollutants when numeric effluent limitations are infeasible or when authorized under section 402(p) of the Clean Water Act for the control of stormwater discharges.

In selecting the BMP approach, the Department utilized the recommendations found in EPA's guidance document *Interim Permitting Approach for Water Quality-Based Effluent Limitations in Stormwater Permits* (EPA833-D-96-001 September 1996) to develop a permit that requires the iterative implementation of BMPs. The iterative process allows the permittee the flexibility to select, implement, evaluate and modify its scheme of BMPs to ensure implementation of the most effective BMPs in reducing the discharge of pollutants.

This permit establishes conditions that refine the implementation of the permittee's long-term MS4 program in an iterative manner that represents reasonable further progress consistent with the water quality requirements established under the CWA. Conditions in this permit are generally in the form of comprehensive programs implemented on a system-wide basis to control sources of pollution rather than targeted treatment methods. At a local level, these types of programs consist of various components, including pollution prevention measures, management or removal techniques, stormwater monitoring, use of legal authority, and other appropriate means necessary to control the quality and quantity of stormwater discharged from the MS4.

In some instances, it may be appropriate for the permittee to consider and implement engineered permanent structural stormwater management facilities. However, the large number of MS4 outfall locations, the unavailability of land in highly developed areas and intermittent and varied discharge conditions, do not allow for the efficient use of large scale design or for the use of 'end of pipe treatment'. Therefore, conditions in this permit stress the use of a source reduction and pollution prevention approaches for the reduction of pollutants in stormwater discharges. These approaches are supported on the basis that the quality of stormwater discharge from the MS4 is dependent on the sources of pollutants that contribute to the system through runoff. Minimizing pollutant sources reduces the pollutant loading in MS4 discharges.

Under this permit, the permittee is required to submit an updated Chesapeake Bay TMDL action plan no later than 12-months after the permit effective date for the reduction required in the permit. For Local TMDLs approved by the EPA prior to July 1, 2018 and for which an individual or aggregate wasteload has been allocated to the permittee, the permittee is required to update the previously approved local TMDL action plans to meet the conditions of Part I.E.2.c); E.2.d); E.2.e); and E.2.f) as applicable no later than 18 months after the permit effective date and continue implementation of the action plan. For TMDLs approved by the EPA on or after July 1, 2018 and prior to the permit effective date, in which an individual or aggregate wasteload has been allocated to the permittee, the permittee is required to develop and initiate implementation of action plans to meet the conditions of Parts I.E.2.c); E.2.d); E.2.e) and E.2.f) as applicable for each pollutant for which wasteloads have been allocated to the permittee's MS4 no later than 30 months after the permit effective date. TMDL action plans shall be developed consistent with the assumptions and requirements of applicable TMDLs and incorporate an iterative, BMP-based approach consistent with the discussion above.

Public involvement in permit reissuance: (to be revised after public hearing)

A public hearing was held at the following location: The notice of the public comment period/public hearing were published in, and the Virginia Register. During the public comment period, DEQ staff reviewed comments received, drafted responses, and made revisions to the final permit regulation as appropriate. The State Water Control Board adopted the general permit regulation on. The regulation is effective for all covered facilities on November 1, 2023. Every authorization to discharge under this general permit will expire October 31, 2028.

The staff contact at Central Office DEQ is:

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Activities covered by this general permit

This general permit authorizes the point source discharges of stormwater from small municipal storm sewer systems (MS4) to surface waters of the Commonwealth of Virginia. A small MS4 is regulated if it is owned or operated by a federal, state, tribal, or local government entity and is located in an urbanized area as determined by the 2010 census performed by the U.S. Bureau of the Census; is designated by the Board pursuant to 9VAC25-870-400 B.1.b; or is based upon a petition under 9VAC25-870-400 B.2. If the small MS4 is not located entirely within an urbanized area, only the portion that is within the urbanized area is regulated. A small MS4 operator may alternatively choose to apply for and obtain coverage under an individual permit as allowed by 9VAC 25-870-400

C.2. Additionally, the Board may waive the requirements for a regulated small MS4 to obtain permit coverage if the criteria list in 9VAC25-870-400 B.4 or 5 are met.

Any operator is authorized to discharge to surface waters of the Commonwealth of Virginia under this general permit if the owner submits and receives acceptance by the Board of the registration statement per 9VAC25-890-30, submits any permit fee required by 9VAC25-870-700, if applicable, complies with the requirements of 9VAC25-890-40, and provided that the Department has not notified the owner that the discharge is not eligible for coverage because of one of the following:

1. The permittee is required to obtain an individual permit in accordance with 9VAC25-870-410 B.3;

2. The permittee is proposing discharges to surface waters specifically named in other board regulations that prohibit such discharges;

3. The permittee fails to implement BMPs to reduce pollutants to the maximum extent practicable (MEP) standard in order to demonstrate progress toward meeting the water quality requirements as listed in 9 VAC 25-31-220 D.1.a

The regulation also contains section 9VAC25-890-20 K which allows for continuation of permit coverage when an owner authorized to discharge under the general permit submits a complete and timely registration statement and is not violating conditions under the expiring or expired general permit.

Considerations

Interim Guidance on Census Elimination of "Urbanized Area" Definition
The US Census Bureau has adopted new "urban area" criteria for the 2020, which significantly deviates from previous decennial census "urbanized area" criteria and effectively eliminates the distinction between "urbanized area" and "urban clusters" established by previous decennial censuses. This change in terminology from "urbanized area" to "urban area" has implications impacting applicability of the 2020 census for Phase II MS4 automatic designation since 40 CFR specifically references "urbanized area," not "urban area."

On July 28, 2022 EPA published Interim Guidance on Census Elimination of "Urbanized Area" Definition stating the following: *On March 24, 2022, the Census Bureau finalized revisions to its criteria for defining urban areas based on the results of the 2020 Decennial Census. As part of that action, the Census Bureau ceased distinguishing between different types of urban areas, including "urbanized areas." This means that the Decennial Census, starting in 2020 and into the future, will not identify "urbanized areas." Because the Phase II regulations are written to cover MS4s located in "urbanized area[s] as determined by the latest Decennial Census," questions have arisen about what effects the Census Bureaus' new change has on which systems are considered regulated small MS4s moving forward. EPA is currently evaluating next steps to provide clarity on this issue, including whether revisions to the Phase II stormwater regulations may be appropriate*.

Due to the discontinuation of the Census Bureau's classification of urbanized area for the 2020 Census this general permit does not include provisions for the designation of new regulated Phase II MS4s outside of the 2010 census designated urbanized area. The department does not anticipate utilizing 2020 census "urban area" for Phase II MS4 automatic designation until further direction is provided by EPA if provided prior for the reissuance of this permit in 2028.

Commonwealth of Virginia Chapter 356 of the 2022 Acts of Assembly (Senate Bill 657)

SB 657 was passed during the 2022 Session of the General Assembly. This bill limits the authority of the State Water Control Board under Chapters 3.1 (State Water Control Law), 24 to the issuance of regulations and transfers the Board's existing authority to issue permits and orders to DEQ. The Governor signed this bill into law on April 11, 2022 (SB657 – Chapter 356 of the 2022 Acts of Assembly) and these changes became effective July 1, 2022. The State Water Control Board adopted regulatory amendments to 9VAC25-890 on August 25, 2022, and affirmed changes to be incorporated into 9VAC25-890 resulting from Chapter 356 of the 2022 Acts of Assembly (Senate Bill 657). Revisions to the regulations include those necessary to address changes to the authority of the State Water Control Board to issue and enforce permits. Changes to the regulations included changing designations from "board" to "department" where appropriate; adding definitions of "Board" and "Department"; and the repeal of the delegation of authority provisions.

Commonwealth of Virginia Chesapeake Bay TMDL Phase III Watershed Implementation Plan (WIP)
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. 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…*"

On November 22, 2022 the DEQ Agency Director submitted a letter to the EPA Region 3 Regional Administrator stating: *"Based upon the Department of Environmental Quality's (DEQ) understanding of the PSC-approved language, DEQ intends to reissue its MS4 individual permits without the previously required sediment load reductions. The reissued individual permits will continue to include the required nutrient (i.e., total nitrogen and total phosphorus) load reductions at a much accelerated rate to focus on achieving the needed nitrogen and phosphorous reduction.* ***In addition, DEQ intends to revise MS4 general permit regulation to remove the previously required sediment load reductions. The amended general permit regulation will continue to include the required nutrient load reductions."***

Based upon the above referenced Virginia Phase III WIP and November 22, 2022 letter, the proposed general permit Chesapeake Bay TMDL special condition (Part II A) has been revised, removing previously required sediment reductions under the 2018 general permit. These revisions have not been discussed with the TAC and DEQ anticipates bringing these revisions to the attention of the SWCB on November 29, 2022, at which time DEQ will request authorization to hold a 60-day public comment period specifically soliciting comment on the proposed removal of the sediment reduction requirements under the Chesapeake Bay TMDL special condition.

This proposed general permit maintains sediment reduction BMP Warehouse reporting requirements under Part III since sediment reduction tracking for permittee BMP implementation is still necessary for Chesapeake Bay Program reporting purposes and Chesapeake Bay TMDL modeling efforts.

Summary of Substantive Changes:

1. Adding definitions for common MS4 terminology and modifying the high-priority facility definition.
2. Requiring electronic submission of annual reports after at least three months' notice provided by the Department in accordance with 9VAC25-31-1020.

3. Adding permit conditions specific to traditional and nontraditional MS4 permittees to address existing permit conditions that are inherently not applicable to nontraditional permittees or not practicable for nontraditional permittee implementation.
4. Requiring third phase Chesapeake Bay TMDL action plan submittal and completion of 100% of required nitrogen, phosphorus, and sediment reductions no later than 10/31/2028.
5. Requiring Chesapeake Bay TMDL implementation annual status reports be maintained as separate documents from annual reports and posted to the permittee's publically accessible stormwater webpage.
6. Requiring permittees to provide MS4 maps in a GIS shapefile format and no longer allowing pdf format to satisfy this requirement and establishing data standards for GIS shapefile submission.
7. Adding provisions allowing permittees to adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Each observation point screened may be counted as one outfall screening activity equivalent; however, 50% of the minimum annual screening events must include outfalls. These provisions are voluntary and permittees may choose to adopt this approach at their discretion.
8. Removing electronic BMP database requirements as these requirements are duplicative of BMP Warehouse reporting requirements.
9. Moving BMP warehouse reporting conditions to new permit section (Part III) and adding reporting requirements for ecosystem restoration projects.
10. Reformatting and integrating good housekeeping requirements:
    a. For written procedures, differentiating between the objectives each procedure shall meet and activities that require procedures.
    b. Incorporating existing good housekeeping permit conditions into written procedure requirements and improving linkage to contract language and training requirements.
    c. Removed subjectivity from SWPPP applicability, clarified SWPPP requirements, and integrated utilization of applicable written good housekeeping procedures.
11. Requiring good housekeeping written procedures for the following activities:
    a. Requiring permittees that apply anti-icing and deicing agents to update road, street, sidewalk, and parking lot procedures to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage.
    b. Requiring permittees to develop written procedures for renovation and significant exterior maintenance activities.
    c. Clarifying written good housekeeping procedures for temporary storage of landscaping materials recognizing that long-term bulk storage meets the definition of high-priority facility.
12. Requiring DCR approval and renewal of nutrient management plans.
13. Requiring chloride TMDL Action Plans where applicable.
14. Requiring inspection and maintenance procedures for ecosystem restoration projects.
15. Removing sediment reduction requirements from the Chesapeake Bay TMDL special condition.

Summary of Requirements, Rationale and Changes

CHAPTER 890

Updated the chapter title to "*VIRGINIA POLLUTANT DISCHARGE ELIMINATION SYSTEM (VPDES) GENERAL PERMIT FOR DISCHARGES OF STORMWATER FROM SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4S)"* for consistency with other VPDES general permit chapter title convention.

9VAC 25-890-1 Definitions

Added "*the Virginia Stormwater Management Program (VSMP) Regulation*" to the heading of 9VAC25-890-1. Definitions for clarity.

Added "*Annual practices" means a nonstructural best management practice such as street or storm drain cleaning that reduces pollution for one compliance year upon implementation*. This definition was added to provide clarification that pollutant reductions generated be annual practices are creditable towards one compliance year for TMDL action plans and annual practices must be implemented in the specific compliance year in order to receive pollutant reduction credit for that specific year (i.e. pollutant reductions generated must correspond to one compliance year). Reductions generated may vary year-to-year and will be dependent on the extent of annual practice implementation. For example, a permittee must sweep the same number lane miles year-to-year in order to generate the same amount of pollutant reductions. Also, storm sewer cleaning pollutant reductions may be dependent on the amount sedimentation in the sewer being cleaned and sewer cleaning implemented in years after a sewer was initially cleaned should be expected to yield lower pollutant reduction in most cases (i.e. estimated pollutant reductions achieved by this practice may be difficult to calculate for action plan purposes).

Added *"Ecosystem restoration projects" means practices implemented to reestablish and maintain natural systems that prevent, reduce, or remediate pollutant loadings. Examples of ecosystem restoration projects include stream restoration, shoreline restoration, land-use conversion, and reforestation.* This permit introduces the term ecological restoration projects in Part II C and Part III of this permit in order to recognize the regulatory distinction between ecosystem restoration projects and stormwater management facilities as defined in 9VAC25-870-1:

Modified the definition of "*High-priority facilities*" to include the following:
Added the qualifier "*with drainage to any permitted MS4*" to "*facilities owned or operated by the permittee,*" recognizing drainage to an MS4 is important for classifying high-priority facilities (HPFs). A facility should not be considered a HPF if the facility has no drainage to an MS4 since the potential to discharge pollutants to an MS4 is nonexistent.

The following modifications were made to activities defining high-priority facilities HPFs:
(ii) Added "*cleaning*" to equipment storage and maintenance.
(iii) Added "*long-term bulk*" to materials storage as a qualifier to distinguish large permanent storage areas such as facility maintenance yards that continuously store building materials from smaller temporary material storage areas such as temporary on-site storage of construction and maintenance supplies. These activities should either have written good housekeeping procedures or separate SWPPP requirements covered under the stormwater construction general permit (CGP).
(iv) Added "*herbicide and fertilizer*" to pesticide storage recognizing these storage materials carry risks for pollutant discharges.
(v) This provision was removed as it is more generalized and overlaps other activities defining HPFs.
(vii) Replaced "*salt*" with "*anti-icing and deicing agent*" to include all chemicals used for anti-icing and deicing and for consistency with Virginia Salt Management Strategies (SaMS). Added "handling and transfer" to "salt storage" recognizing these activities carry risks for pollutant discharges.
(ix) Added "washing" and "salvage" to "vehicle maintenance," recognizing these activities carry risks for pollutant discharges. Removed "*storage*" since every parking lot should not be construed to meet the definition of HPF. "*Salvage*" was also added to distinguish parking lots from damaged vehicle storage which have higher risk for leaking and pollutant discharges.

Added *"Nontraditional MS4 permittee" or "nontraditional permittee" means a government entity that operates a regulated MS4 that is not under the authority of a county board of supervisors, a city council, or a town council.*

Added *"Traditional MS4 permittee" or "traditional permittee" means a local government that operates a regulated MS4 under the authority of a county board of supervisors, a city council, or a town council.*

Traditional and nontraditional are two categories of Phase II MS4 permittees and these terms have been in common use within the MS4 program for many years. This permit introduces the terms traditional and nontraditional permittee as qualifier for several permit conditions throughout the permit recognizing the differences in jurisdictional authority between traditional local governments and all other government entities considered nontraditional permittees. Traditional permittees are limited to counties, cities, and towns. Nontraditional permittees may include but are not limited to operators of state and federal facilities such as transportation infrastructure, college campuses, hospitals, correctional facilities, military installations, administrative campuses, and research facilities. Nontraditional permittees may also include local authority operators for facilities such as public schools and other regional authorities that may operate an MS4. Traditional and nontraditional permittee differences necessitated the need for distinct permit conditions for traditional and nontraditional permittees for ordinance development, public education and outreach and public participation target audiences, Erosion and Sediment Control and VSMP program administration, and TMDL special conditions.

9VAC 25-890-10 Purpose; Effective Date of the State Permit

B. Updated the effective and expiration date of the general permit.

9VAC 25-890-15 Applicability of Incorporated References Based on the Dates That They Became Effective
Updated the Title 40 CFR publication date to July 1, 2022.

9VAC 25-890-20 Authorization to Discharge

A. removed "*small municipal separate storm sewer system"* for clarity.

D.3 Updates:
g - Added "*managed in manner to avoid instream impact"* for clarification.
q – Added *freshwater* and *managed in manner to avoid instream impact* for clarification and consistency with DEQ Guidelines for the Release of Swimming Pool Water (October 12, 2012).
r – Modified "*street wash waters*" to "*Street and pavement wash waters that do not contain cleaning additives or are otherwise managed in a manner to avoid instream impact*" for clarification.
s – Added *emergency* qualifier to firefighting activities.
t – Added *discharges or flows of water for fire prevention or firefighting training activities managed in a manner to avoid instream impact in accordance with § 9.1-207.1 of the Code of Virginia* for clarification.
u – Added *in accordance with § 15.2-2114.1 of the Code of Virginia* to *Discharges from noncommercial fundraising car washes if the washing uses only biodegradable, phosphate-free, water-based cleaners* for clarification.

K. updated dates for consistent timeframes with new permit cycle.

9VAC 25-890-30 – Registration Statement

A.2 – Revised registration due date to October 1, 2023.

Added B.5 - *If the MS4 is operated under the authority of a city council or a county board of supervisors, indicate if public school facilities are included in the application* in order to confirm county and city MS4 programs cover public schools that do not separate general permit coverage.

B.10 – Updated to require third phase Chesapeake Bay TMDL action plan.

9VAC 25-890-40 – General Permit

As part of the 2023 general permit, a variety of non-substantive revisions have been made to clarify requirements, re-organize permit conditions to enhance the reader's ability to understand the requirements of the permit, and establish practically enforceable permit conditions. Below is a list of the substantive changes and or permit condition rationale for *Part I – Discharge Authorization and Special Conditions, Part II TMDL Special Conditions, Part III DEQ BMP Warehouse Reporting, and Part IV Conditions Applicable to All State and VPDES Permits*:

A. This special condition describes the authorization and coverage under the small MS4 General Permit.

B. The permit requires the permittee to develop, implement and enforce an MS4 program such that the discharge of pollutants from the MS4 is "reduced to the maximum extent practicable (MEP). MEP for this permit term has been established by DEQ as the implementation of the minimum control measures in Part I.E. and the Chesapeake Bay and local TMDL requirements in Part II of the permit. This section recognizes that MEP established under this permit constitutes adequate progress in meeting water quality standards and satisfies the appropriate water quality requirements of the State Water Control Law and its attendant regulations."

The Clean Water Act Section 402(p)(3)(B)(iii) specifies that National Pollutant Discharge Elimination System (NPDES) permits for discharges from MS4s "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods" rather than through end of pipe limitations typically associated with point source discharges.

The department considers narrative effluent limitations requiring implementation of Best Management Practices (BMPs), rather than water quality based standards, to be the appropriate form of effluent limitations for MS4s. CWA section 402(p)(3)(b)(iii) establishes a process for narrative rather than numeric effluent limits for MS4s, for example, by reference to "management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." 33 U.S.C. 1342(p)(3)(B)(iii). Additionally, it is not technically feasible to establish numeric effluent limits for MS4 stormwater discharges due to the highly variable stormwater flow and sources of pollutants from each the systems. Water quality based effluent limits are based on low flow conditions for end-of-pipe discharges. Low flow condition assessments are not applicable to stormwater discharges from an MS4. For example, the highest concentrations are often found in the first flush, which are not low flow conditions. Stormwater discharges are also variable based on the storm event itself, with varying flow conditions on a two-year, ten-year, or 100-year event.

MS4 operators need flexibility to optimize reductions in stormwater pollutants on a location-by-location basis given the unique local hydrologic and geologic concerns that may exist and the differing possible pollutant control strategies. Continued implementation of MS4 programs through an adaptive, iterative process allows MS4 permittees to evaluate those specific strategies that work best for reducing pollutants associated with stormwater discharges from their MS4. Permittees must still comply with the requirements of the permit, and through time, adaptive management of the MS4 program results in reduced pollutant loads from the MS4. Part I.C, D, and E establish the minimum requirements of the MS4 program. Selection of strategies to demonstrate compliance with

the permit conditions is left to the permittee. The MS4 program plan acts as an implementation tool to demonstrate compliance with the terms of the permit. The permittee can modify the MS4 program through the adaptive, iterative approach which provides them the flexibility necessary to deal with unique circumstances specific to their MS4. This approach is consistent with the traditional permitting approach of EPA's Small MS4 Remand Rule described above.

Due to the nature of an MS4, stormwater discharge is received from a variety of sources including both public and private properties. Since MS4s are operated by federal, state, and local government entities, the authority to regulate discharges to the MS4 may be limited. In order to reduce pollutants to the MEP, permittees should use the legal authorities available to them to control the discharge of pollutants to and from the MS4. This includes, but is not limited to statutes, ordinances, regulations, permits, policies, contract language.

C. MS4 Program Plan

An operator of a regulated small MS4 is required to develop, implement, and enforce a stormwater management program. The MS4 program plan is to be used as a tool to implement the requirements of the permit described in Part I.E (Minimum Control Measures) and Part II.A and B (TMDL Special Conditions for the Chesapeake Bay and local receiving waters). The MS4 program plan can and should be updated through the adaptive, iterative process by the permittees including the revision or replacement of BMPs and strategies in compliance with the requirements of the permit.

Existing permittees permitted under the 2018 MS4 general permit, are required to update their program plans in accordance with the requirements of the 2023 general permit. Revisions to the MS4 program plan are expected throughout the permit cycle as part of the iterative process to reduce pollutant loading to the MEP and protect water quality. The changes to the MS4 program plan do not require modification of the permit, but require the permittee to summarize revisions made to the MS4 program plan as part of the annual report described in Part I.D.2. With this revised for requirement MS4 program implementation, the underlying permit requirements are not changed, only the strategy used by the permittee to comply with the permitting requirement. Note that permittees receiving initial coverage under the 2023 general permit are required to submit a schedule of program development that does not exceed the expiration date of this general permit to the Department within 6 months of permit coverage.

C.2 – Changed the *"expiration date of this permit"* to *"October 31, 2028, unless the department grants a later date"* for permit consistency and recognizing new permittees may have less than five years to fully implement an a comprehensive MS4 program plan.

D. Annual reporting requirements

In accordance with 9VAC25-870-400 D.7, permittees are required to submit an annual report to the Department by October 1st of each year that describes the implementation of the MS4 program for the immediate preceding reporting period of July 1st through June 30th. The annual report will include those annual reporting items for each MCM, a signed certification statement by a responsible official or his designee, an overall evaluation of the MS4 program implementation to determine the program's effectiveness and determine whether or not changes are needed to the program. The annual report will also include a status update for local TMDL action plan implementation, as applicable.

The annual report will no longer include a status update for Chesapeake Bay TMDL implementation. Chesapeake Bay TMDL implementation annual status reports are now required to be maintained as separate document in accordance with Part I D.6. and shall be posted to the permittee's stormwater webpage in accordance with Part I E.2.b.(5) to promote transparency and allow both DEQ and other interested parties to easily track Chesapeake Bay

TMDL progress towards achieving 100% reductions by October 31, 2028. The required contents of each Chesapeake Bay TMDL implementation annual status report are located in Part II.A.13.

1. Added annual reporting clarification on "*method, (i.e. how the permittee must submit) and format (i.e. how the report shall be laid out)*" and specified "*the required content of the annual report is specified in Part I E and Part II B.*" The method annual report submittal "Nform" is being developed by the department and guidance for will provided to permittees on Nform annual report submittals once the MS4 Nform module is fully developed for roll-out and permittee use. Nform permittee reporting is part of the department's strategy to fulfill EPA's e-reporting rule published on November 2, 2020.

2. Added, *Following notification from the department of the start date for the required electronic submission of annual 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically* for further clarification on Nform submittal roll-out.

Removed 4. - *For those permittees with requirements established under Part II A, the annual report shall include a status report on the implementation of the Chesapeake Bay TMDL action plan in accordance with Part II A of this permit including any revisions to the plan.* Annual reporting requirements for the Chesapeake Bay TMDL have been moved to Part II A of this permit. This permit introduces a new requirement that Chesapeake Bay TMDL implementation annual status updates be maintained as separate documents on permittee webpages.

6. Added additional clarification that "*the MS4 program plan, annual reports, the Chesapeake Bay TMDL action plan, and Chesapeake Bay TMDL implementation annual status reports, shall be maintained as separate documents"* primarily to promote public transparency. Removed submitted to the department as required by this permit as separate documents as Part I D 1 and Part II A 14 already cover reporting method and format.

E. Minimum control measures (MCM)

1. Public education and outreach

Following 9VAC25-870-400 D.2.a, and 40 CFR 122.34(b)(1), this general permit requires the permittee to implement public education and outreach programs. The permit requires the permittee to identify three high priority stormwater issues on which to educate the public including the importance of the issue and what actions the public can take to minimize the impact associated with the stormwater issue. The permit identifies a variety of strategies that the permittee can use in the messaging. To ensure a diverse audience receives the message, the permittee must choose at least two of the messaging strategies.

The 2023 permit requires the message to focus on water quality and stormwater pollution issues. This general permit continues to allow for coordination between MS4 operators and requires evaluation of the delivery methods to ensure that the target audiences are adequately reached.

b. Added "*litter control, BMP maintenance, anti-icing and de-icing agent application, planned green infrastructure redevelopment, planned ecosystem restoration*" to expand examples of high priority issues.

d. Added "*target audience*" to clarify that a high priority issue might be targeted towards a specific audience which may include the general public.

Table 1:

- Added "*or GIS story maps*" to Media Materials strategies.
- Added "*Public Education Activities*" to the strategies with "*Booth at community fair, demonstration of stormwater control projects, presentation of stormwater materials to schools to meet applicable education standards of learning or curriculum requirements, or watershed walks"* listed as examples.
- Added *"Public Meetings"* to the strategies with *"Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecological restoration, TMDL development, voluntary residential low impact development, and other stormwater issues"* listed as examples.

f. MS4 program plan shall include:

Updated (3) – identification of "*target audience*" rather than "*public audience*".

Added (4) – *"Nontraditional permittees may identify staff, students, and other facility users operated by the permittee as the target audience for education and outreach strategies.*" This added clarification will help nontraditional permittees to better define targeted audiences.

Added (5) – "*Traditional permittees may identify staff and students as part of the target audience for education and outreach strategies; however, staff shall not be the majority of the target audience."* This added clarification will help permittees better define target audiences while differentiating target audiences for traditional and nontraditional permittees.

Added (6) – *"Staff training required in accordance with Part I E 6 d does not qualify as a strategy for public education and outreach."* This added clarification reinforces the intent of the public education requirements and that education and outreach programs with all staff as the targeted audience are to be included in the good housekeeping training program.

g. The annual report shall include the following information:

Added (2) - "*A summary of the public education and outreach activities conducted for the report year, including the strategies used to communicate the identified high-priority issues."* This summary is meant to specify the strategies implemented during to communicate high-priority issues during the report year.

(3) Revised language to *"A description of any changes in high priority stormwater issues, strategies used to communicate high-priority stormwater issues, or target audiences for the public education and outreach plan. The permittee shall provide a rationale for any of the above changes."* The revised language clarifies the expectations for documenting an iterative education and outreach program.

2. Public participation and involvement

9VAC25-870-400 D.2.b and 40 CFR 122.34(b)(2) require the permittee to provide for public participation and public involvement of the MS4 program. The permittee is required to develop procedures for the public to report illicit discharges to the MS4, receive public input on the MS4 program or complaints regarding stormwater management pertaining to the MS4, and respond to input and complaints. Additionally, permittees are required to develop and maintain webpages dedicated to the MS4 program and stormwater pollution prevention so that information can be readily available to the public, or at a minimum inform the

public how the information can be accessed. Language has been added for those facilities under security provisions restricting public facing websites to allow compliance with the webpage provisions.

Consistent with EPA's Electronic Reporting Rule, published October 22, 2015 and November 2, 2020, the Department is in the process of developing and finalizing tools to assist permittees in submitting their reports via electronic portals. This will allow for information to flow from the permittee to the EPA as efficiently as possible. As such, the permit has provisions for electronic reporting as tools and options are made available.

This general permit also requires the permittee to engage in a minimum of four local activities pertaining to improvement of water quality and support of local restoration and clean-up projects. The permit provides a list of opportunities with examples that permittees may choose from for implementation. To ensure that the permittee engages in diverse activities, the permittee must choose from at least two different opportunities.

a. The permittee shall develop and implement procedures for the following:

(2) Changed "*input*" to "*comments*" for consistency with public comment requirements.

Removed (3) – "*Receiving public input or complaints*." This provision was redundant with Part I E 2 a (1) and (2) requirements and may inadvertently require permittees to capture input or complaints beyond the scope of this permit for issues such as flooding which this permit does not address.

(4) Removed "*or complaints*" as this is duplicative of preceding language and permittees do not need differentiate between public comments and complaints on program plans. Changed "*comments* received" from "*input* received"

b. Webpage dedicated to the MS4 program and stormwater pollution prevention: updated the requirement to include "*update and maintain*" from "*develop and maintain"* recognizing existing permittees have already developed this webpage.

Added (4) - "For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the most current Chesapeake Bay TMDL action plan or location where the Chesapeake Bay TMDL action plan can be obtained."

Added (5) - *"For permittees whose regulated MS4 is located partially or entirely in the Chesapeake Bay watershed, the Chesapeake Bay TMDL implementation annual status reports for each year of the term covered by this permit no later than 30 days after submittal to the department*" to add Bay action plan and annual status reports to publically accessible website to allow for public transparency, involvement and input.

(7) Added "*and if applicable, the Chesapeake Bay TMDL action plan in accordance with Part II A 13*" for clarification.

Added (8) *"Federal and state permittees with security policies preventing a MS4 program and stormwater pollution prevention webpage from being publically available may utilize an internal staff accessible webpage such as an intranet webpage to meet the requirements of Part 1 E 2 b."* to provide a

mechanism for government entities with restrictive security policies such as DOD and correctional facilities to demonstrate compliance with MS4 program webpage requirements.

Updated c. To address "traditional permittees."

Added d. - "*Nontraditional permittees shall implement, promote, participate in, or coordinate on no less than four activities per year from two or more of the categories listed in Table 2 below to provide an opportunity for public involvement to improve water quality and support local restoration and clean-up projects."* to clarify the distinction between traditional and non-traditional permittee expectations for this requirement recognizing nontraditional permittees often have narrowly defined target audiences, more limited resources, and may benefit from partnering with traditional permittees and other organizations for providing target audiences with participation events.

Table 2:

- Added language under Restoration examples "*Stream, watershed, shoreline, beach, or park clean-up day, adopt-a-water way program, tree plantings, and riparian buffer plantings*" to expand strategy examples.
- Revised "*Public Education Events*" with removal of "*participation on environmental advisory committees*" since this strategy was expanded on with the addition of "*Public Meetings*" strategy category.
- Added "*Public Meetings*" and examples, "*Public meetings on proposed community stormwater management retrofits, green infrastructure redevelopment, ecological restoration, TMDL development, voluntary residential low impact development, and other stormwater issues*" to expand upon potential stormwater related public meetings.

Added f. - "*The Permittee may include staff and students in public participation events; however, the activity cannot solely include or be limited to staff participants with stormwater, grounds keeping, and maintenance duties in order for an event to qualify as a public participation event."* This added clarification will help permittees better define target audiences public participation events, which may include but not solely be comprised of staff.

Added g. - *"Staff training required in accordance with Part I E 6 d does not qualify as a public participation event unless the training activity solicits participation from target audiences beyond staff or contractors with stormwater, grounds keeping, and maintenance duties."* This added clarification distinguishes between public participation events and training which should be included as part of the good housekeeping training program.

i. The annual report shall include the following information:

(1) Clarified language to be specific to public comments on MS4 program plan.

Added (2) "*A summary of stormwater pollution complaints received under the procedures established in Part I E 2 a (1) (excluding flooding complaints) and how the permittee responded*" for clarification.

(4) Added *"Federal and state permittees with security policies preventing the MS4 program and stormwater pollution prevention webpage from being publically available utilizing an internal staff accessible website such as intranet shall provide evidence of the current internal MS4 program and stormwater pollution prevention webpage"* to provide a mechanism for government entities with

restrictive security policies to demonstrate compliance with MS4 program webpage requirements and consistency in the annual reporting requirements.

3. Illicit discharge detection and elimination

Following 9VAC 25-870-400 D.2.c and 40 CFR 122.34(b)(3)., the 2023 permit continues to require that permittees implement a program to detect and eliminate illicit discharges to the MS4. As part of the program, permittees are required to maintain an updated map of the MS4, submitted on an annual basis. The permit requires an MS4 system map to include outfalls, the regulated service area, receiving waters, stormwater management facilities, and associated information. Most of the information table requirements remain unchanged from the 2018 permit, however, GIS-compatible formats have been specified for programmatic consistency across all permittees.

The department will use the map and outfall table information when reviewing MS4 program annual reports, during identification of illicit discharges, and other general purposes. Mapping information may also be used in the development of local TMDLs by the Department. Additionally, for those permittees located within the Chesapeake Bay watershed, the maps will be used in delineation of the MS4 service area as part of the Chesapeake Bay Watershed modeling efforts.

As part of the illicit discharge and detection program, permittees are required to implement a dry weather screening program and establish procedures for responding to reports or discoveries of illicit discharges. The 2023 general permit adds an option for up to 50% of the dry weather screenings be allocated to a risk-based approach in which permittees identify observation points, which may include outfalls or points of interconnection and specified points upstream of an outfall that have historically relevant or significant cause for potential increased discharge concerns. Based on the size and nature of the service area, permittees are still required to screen up to 50 outfalls (or all, if less than 50 outfalls within the MS4), with up to 50% of the screening points identified as part of the risk-based approach. This general permit also clarifies specific items to be observed and documented during the screening event, in line with EPA guidance and identification of potential illicit discharges not present at the time of the dry weather screening event.

a. MS4 map and information table:

(1) Revised language to "*An updated map of the MS4 owned or operated by the permittee within the census urbanized area identified by the 2010 decennial census no later than 12 months after the permit effective date*" for clarification.

(1) The above revised language requires permittee MS4 maps "*be updated no later than 12 months after the permit effective date*" in recognizing no significant changes to the MS4 map are required by this permit reissuance and also recognizes the need for the department to obtain up to date MS4 mapping data for Chesapeake Bay TMDL and DEQ Electronic Data Mapper (EDM) initiatives.

(2) Revised language to "*The permittee shall maintain an outfall information table associated with the MS4 map that includes the following information for each outfall or point of discharge for those cases in which the permittee elects to map the known point of discharge in accordance with Part I E 3 a (1) (a). The outfall information table may be maintained as a shapefile attribute table. The outfall information table shall contain the following:"* to clarify the use of GIS-compatible data tables and what information is required for the outfall information table.

(f). Revised language from "*2016*" to "*2020*" to reflect updated 305(b)/303(d) Water Quality Assessment Integrated Report, referencing the most current report available.

Removed (g) since a predominant land use generalization is not a helpful data element for the permittee or the department.

(3) Revised language to "*No later than 12 months after permit issuance, the permittee shall submit to DEQ, a format file geodatabase or two shapefiles that contain at a minimum…*" to specify required GIS-compatible formats for GIS data submittals to ensure the department receives updated GIS data from permittees.

(3) Removed "*If the permittee does not have an MS4 map in a GIS compatible format, the permittee shall provide the map as a PDF document*" since open-source geospatial data software is available for use to permittees and there are also recorded tutorial resources for software use training available on YouTube, etc.

(3) Added (a) and (b):

"(a) A point feature class or shapefile for outfalls with an attribute table containing outfall data elements required in accordance with Part I E 3 a (1) (a), (b), and (c) and Part I E 3 a (2); and

(b) A polygon feature class or shapefile for MS4 service area as required in accordance with Part I E 3 a (1) (d) with an attribute table containing the following information:

(i) MS4 operator name;

(ii) MS4 permit number (VAR04); and

(iii) MS4 service area total acreage rounded to the nearest hundredth." to detail GIS-compatible formats for map submittals, to ensure consistency and adequate detail of the MS4 service area and data.

(3) (a) and (b) were added to specify data fields required for GIS data submittals.

(4) Modified to specify the following data standards:

"(4) All file geodatabase feature classes or shapefiles shall meet the following data format standards:

(a) Point data collected in NAD83 or WGS84 decimal degrees global positional system coordinates;

(b) Data projected in Virginia Lambert Conformal Conic projection;

(c) Outfall location accuracy shall be represented in decimal degrees rounded to at least the fifth decimal place for latitude and longitude to ensure point location accuracy (e.g. 37.61741, -78.15279); and

(d) Metadata shall provide a description of each feature class or shapefile dataset, units of measure as applicable, coordinate system, and projection."

(4) Modifications are to ensure all GIS data submitted to the department meets specified minimum standards and as well as to ensure data consistency across permittee GIS data submittals.

(5) Revised to specify "*No later than October 1 of each year, the permittee shall update the MS4 map and outfall information table to include any new outfalls constructed or TMDLs approved or both during the immediate preceding reporting period."*

c. IDDE written procedures: (2) dry weather screening protocols:

Added (d) - "*The permittee may adopt a risk-based approach to dry weather screening identifying observation points based upon illicit discharge risks upstream of an outfall. Observation points may include points of interconnection, manholes, points of discharge, conveyances, or inlets suspected to have a high likelihood of receiving illicit discharges;"* to expand the dry weather screening program to incorporate an option for a risk based approached that goes beyond the outfall, based upon historical knowledge and land use, allows for a more targeted approach. This risk-based option may allow for better resource allocation and a potentially more productive and directed screening efforts.

Added (e) - "*Each observation point screened may be counted as one outfall screening activity equivalent and counted towards the requirements of Part I E 3 c (2) (b) or (c); however, at least 50% of the minimum annual screening events must include outfall screening;*" to further support the potential implementation of a partial risk based screening approach while maintaining a fundamental reference point for comparison and programmatic stability.

Added (f) - "*Illicit discharges reported by the public and subsequent investigations may not be counted as screening events; however once the resolution of the investigation and the date the investigation was closed has been documented, an observation point may be established for future screening events*" to clarify that publically reported illicit discharges are not counted toward the dry weather screening program; however, they can be utilized to determine a future risk based observation points.

(g) Tracking:

(i) - Revised language "*The unique identifier for the outfall or observation point"* to allow for tracking and usage of observation points, as described in Part I E.3.c.(2)(d), in a risked based approach to the dry weather screening program.

Updated (v) – "*Observed indicators of possible illicit discharge events such as, floatables, deposits, stains, and vegetative conditions (e.g., dying or dead vegetation, excessive vegetative growth, etc.)."* These illicit discharge indicators were moved from Part I E.3.c.(2)(g)(vi) to clarify indicators of illicit discharges should be noted and tracked for all dry-weather screening events.

Updated (vii) – *"If a discharge was observed, the estimated discharge rate and visual characteristics of the discharge (e.g., odor, color, clarity) and the physical condition of the outfall"* for clarification.

Added (viii) – *"For observation points, the location, downstream outfall unique identifier, and risk factors or rationale for establishing the observation point"* applicable to the use observation points forclarification.

Permittees should reference the EPA and Center for Watershed Protection 2004 "IDDE Guidance Manual for Program Development and Technical Assessments" (link to manual with appendices here) for more detail on what specific items should be reviewed and the rationale behind those items. If an outfall exhibits

indicators of illicit discharges or physical conditions that contribute to erosion, sediment loading, and nutrient loading, these observations shall be documented and tracked by the permittee.

d. The MS4 program plan shall include:

d. – Changed "*information table*" to "*outfall information table*" for consistency and clarification.

e. The annual report shall include:

(1) Added "*outfall*" to "*information table*."

(2) Added "*observation points*" for annual reporting if the permittee elects to identify observation points

(3) A list of illicit discharges to the MS4 including spills reaching the MS4 with information as follows:

(a) Added "*location*" for geographic reference of the "*source of the illicit discharge*."

4. Construction stormwater runoff control - Added "*erosion and sediment"* to title of Part I E.4. for consistency with Erosion and Sediment Control Law used to satisfy many elements of MCM4.

Following 9VAC25-870-400 D.2.d and 40 CFR 122.34(b) (4), MS4 permittees are required to implement a program to control runoff associated with construction activities. Polluted stormwater runoff from active construction sites often flows to MS4s and ultimately is discharged into local waterbodies.

Stormwater discharges from construction sites generally include sediment and other pollutants such as phosphorus and nitrogen, pesticides, petroleum derivatives, construction chemicals, and solid wastes that may become mobilized when land surfaces are disturbed. The Virginia Erosion and Sediment Control (VESC) regulations (9VAC 25-840) contain the criteria and requirements entities must meet for land disturbing activities related to development or redevelopment (development on prior developed lands). This 2023 general permit requires traditional MS4 permittees to continue implementation of an ESC program in accordance with the Virginia Erosion and Sediment Control Law (§ 62.1-44.15:51) and the attendant regulations

This general permit requires nontraditional permittees to continue implementation of the most recently department approved annual standards and specifications for erosion sediment control. Projects not covered under annual standards and specifications must comply with an erosion and sediment control authority approved erosion and sediment control plan and the permittee must inspect all land disturbing activities as defined in § 62.1-44.15:51 of the Code of Virginia that result in the disturbance activities of 10,000 square feet or greater, or 2,500 square feet or greater in accordance with areas designated under the Chesapeake Bay Preservation.

The VESC regulations and the Virginia Erosion and Sediment Control Law provide for among other programmatic requirements, specific provisions to:

- Require the use of an ordinance or other regulatory mechanism mandating the use of erosion and sediment controls (§ 62.1-44.15:54 and 9VAC25-840-90).
- The establishment of appropriate sanctions to ensure compliance (9VAC25-840-90).
- Require construction site operators to implement appropriate erosion and sediment control measures (§ 62.1-44.15:55 and 9VAC25-840-40).

- Require plan review procedures that account for water quantity as well as water quality where appropriate (§ 62.1-44.15:55 and 9VAC25-840-40).
- Require procedures for site stormwater management facility inspection and maintenance (9VAC25-840-60).

This 2023 general permit further draws a distinction between traditional and non-traditional permittees, as MS4 permittees may have varying legal and program authorities. Local governments are responsible for implementing the Virginia Erosion and Sediment Control Program (VESCP) for private and local public projects within their jurisdictions. The Department is the VESCP authority for projects implemented by state agencies and federal entities and is responsible for plan review and compliance inspections.

It should be noted that in accordance with Section 62.1-44.15.56 VESC law, state agencies must and federal entities may submit ESC Annual Standards and Specification to the Department for review and approval which allows them to implement the VESCP for their projects. Under the ESC Annual Standards and Specification program, DEQ remains the VESCP authority and maintains oversight of the program for these projects; however, the ESC Annual Standards and Specification program allows those entities to implement an ESC program similarly to a local government in such that they are able to approve their own ESC plans and must conduct inspections of projects. The ESC Annual Standards and Specifications program must conform to meet the minimum requirements of the VESC law and VESCP regulations.

All MS4 permittees are still required to implement an ESC program for runoff associated with construction activities; however, in keeping with the 2018 permit, this permit includes requirements based on the VESCP authority for each potential type of MS4 permittee as follows:

- Cities, counties, or towns with an approved VESCP;
- Towns that rely on the surrounding county to implement the VESCP;
- State agencies or federal entities with Department approved annual standards and specifications for erosion and sediment control;
- State agencies or federal entities without Department approved annual standards and specifications; and
- Subdivisions of local government that operate as separate entities from the local government itself (i.e., school boards)

The 2023 general permit, continues to have programmatic requirements incorporated by reference for the purposes of streamlining current regulatory requirements. Note that in 2016, the Virginia General Assembly passed legislation that consolidated the VESC law and the Virginia Stormwater Management Act (2016 Va. Acts Ch. 758.). Under this law, the Department is required to promulgate regulations that combine the VESCP regulations and the VSMP regulations to make the requirements more consistent, among other things. These regulatory changes are in the process of development and implementation; however, it is likely that the next iteration of the general permit and local government ordinances and programs will require revisions. Additionally, Virginia has seen multiple legislative initiatives related to stormwater over the past several years. The potential for contradictory requirements in the MS4 general permit and future regulation is minimized by incorporating regulatory requirement by reference.

a. (1), (2), (3), (4), and (5):

Each section of Part I E.4.a. incorporates the terms *"traditional"* and *"nontraditional"* where applicable for clarification.

(5) Removed "*subdivision of a local government such as a*" in reference to school boards or other local government bodies since school boards are separate local government entities from city councils and county boards of supervisors.

c. – Moved from Part I E.6. "*Employees and contractors serving as plan reviewers, inspectors, program administrators, and construction site operators shall obtain the appropriate certifications as required under the Virginia Erosion and Sediment Control Law and its attendant regulations*." This language was moved from minimum control measure 6 training requirements as this certification pertains more to minimum control measure 4: construction stormwater runoff inspection requirements than to minimum control measure 6: pollution prevention and good house-keeping training requirements.

d. The permittee's MS4 program plan shall include:

(1) - Updated to "*If the permittee implements a an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (1), the local ordinance citations for the VESCP program"* for clarification.

(2) - Updated to *"If the permittee is a town that does not implement an erosion and sediment control program for construction site stormwater runoff in accordance with Part I E 4 a (2), the county ordinance citations for the VESCP program the town is subject to"* for clarification.

(3) – Updated to *"If the permittee implements annual standards and specifications for erosion and sediment control and construction site stormwater runoff in accordance with Part I E 4 a (3)"* for clarification.

(5) - Modified to apply to traditional permittee inspection written procedures requirements consistent with VESCP programmatic requirements established by 9VAC25-840-90.A and inspection requirements established by 9VAC25-840-60.B.

Added (6) – "*For nontraditional permittees, erosion and sediment control plans or annual standards and specifications shall be approved by the Department in accordance with § 62.1-44.15:55. Compliance with approved erosion and sediment control plans or annual standards and specifications shall be ensured by the permittee with written inspection procedures that at minimum include the following;*

(a) An inspection checklist for documenting onsite erosion and sediment control structures and systems are properly maintained and repaired as needed to insure continued performance of their intended function; and

(b) A list of all associated documents utilized for inspections including inspection schedules, checklists, department approved erosion and sediment control plans, the most recently department approved annual standards and specifications, and any other documents utilized."

(6) (a) and (b) were added in an effort to differentiate written procedures requirements for traditional and nontraditional permittees. TAC DEQ technical liaisons indicated that corrective actions for minimum control measure 4 are common for nontraditional permittees. (6) (a) and (b) were added to better define minimum requirements for the content needed in written procedures for nontraditional MS4s. The 2018 general permit provides little detail on what content is required in written procedures in order to resolve systemic compliance issues that may stem from vague permit conditions.

(7) - Modified to apply to traditional permittee corrective action and enforcement action written procedures requirements consistent with VESCP programmatic requirements established by § 62.1-44.15:58.

(8) - Added *"Nontraditional permittees shall maintain written procedures for requiring compliance with department approved erosion and sediment control plans and annual standards and specifications through corrective action or enforcement action"* to clarify corrective action and enforcement action written procedures expectations for nontraditional permittees.

(9) – Language clarified.

e. The annual report shall include the following information:

(1) Clarified this provision applies to nontraditional permittees with (a) applying to projects covered under current department approved annual standards and specifications for erosion and sediment control and (b) applying to projects covered under department approved erosion and sediment control plans.

(2) Language clarified.

(3) Language clarified and redundancy eliminated.

5. Post-construction stormwater management for new development and development on prior developed lands

Following 9VAC25-870-400 D.2.e and 40 CFR 122.34(b)(5), MS4 permittees must implement a program to address post construction stormwater runoff from new development and redevelopment projects. Post construction stormwater management in areas undergoing new development or redevelopment is necessary because runoff from these areas has been shown to significantly affect receiving waterbodies. Post construction runoff has the potential to cause substantial impacts in two forms: increased discharge of pollutants and increased quantity of water discharging to a receiving stream. The Virginia Stormwater Management Program (VSMP) regulations contain specific water quantity and quality criteria that must be met for new development and redevelopment projects. The 2023 general permit requires MS4 permittees to continue implementation of a post development stormwater program. The post development stormwater program must include strategies which may include both structural and non-structural BMPs in accordance with 9VAC870-63 and 9VAC25-870-65. Permittees must use an ordinance or other regulatory mechanism to address post-construction stormwater runoff as required in 9VAC25-870-106. The post development stormwater program must ensure adequate long term operation and maintenance of post-construction BMPs under 9VAC25-870-112 and 9VAC25-870-114.

The 2018 permit referenced the Virginia Stormwater Program requirements, but did not differentiate between permittees with varying types of legal and program authorities. In Virginia, local governments with an MS4 program are responsible for implementing the Virginia Stormwater Management Program (VSMP) for private and local public projects within their jurisdictions including plan review and inspections. The Department is the VSMP authority for projects implemented by state agencies and federal entities and is responsible for plan review and compliance inspections.

In accordance with Section 62.1-44.15.31 of the Virginia Stormwater Management Act, state agencies are required to and federal entities may submit Annual Standards and Specifications consistent with the Virginia Stormwater Management Program. DEQ retains the authority of the stormwater management program with oversight, however, these entities are authorized to approve their own stormwater management plans and must conduct inspections. The Stormwater Annual Standards and Specifications program must conform to meet the minimum requirements of the Virginia Stormwater Management Act and VSMP regulations.

The 2023 permit has been revised to reflect the type of stormwater management authority that the permittee may have recognizing the differences between traditional and nontraditional permittees. These are the same categories identified under MCM 4, which are:

- Cities, counties, or towns with an approved VSMP;
- Towns that rely on the surrounding county to implement the VSMP;
- State agencies or federal entities with Department approved annual standards and specifications for stormwater management;
- State agencies or federal entities without Department approved annual standards and specifications; and
- Local governments that operate as separate entities from the traditional local government itself (i.e., school boards)

For the same reasons explained in the construction stormwater runoff requirements in MCM 4, the post construction stormwater requirements have been streamlined to incorporate by reference the VSMA and VSMP regulations.

Requirements for development and implementation of a stormwater management facility inspection program from the 2018 permit have been retained. These conditions require that permittee owned stormwater management facilities be inspected once per year; and if the permittee is a VSMP authority then the privately owned stormwater management facilities must be inspected once per five years. The permit also includes a provision under which a permittee can propose an alternative inspection frequency for permittee owned BMPs that is less than once per year. The VSMP regulations require inspections at a frequency of once per five years. DEQ believes that in certain circumstances such as when a BMP is first installed or maintenance is performed, inspections of once per year may not be necessary, and the permittee may want to focus resources in other areas. As such, an alternative frequency with the appropriate rationale can be implemented, but by no means can the reduced frequency be less than once per five years, as required by the VSMP regulations.

The 2018 permit included requirements for the use of the DEQ Construction Stormwater Database or other application as specified by DEQ, to report each stormwater management facility installed after July 1, 2014 that is used to control post construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities. Additionally, the 2018 permit included reporting requirements for permittees to report all other stormwater management facilities and BMPs to the DEQ BMP Warehouse. These requirements did not define the term of "BMP" in the context of MCM 5 and the 2023 permit BMP Warehouse Reporting requirements have been moved to Part III and "BMP" has been defined in the context of this new section to include stormwater management facilities, ecological restoration projects, and annual practices. Part III also replaces the conditions in the 2018 permit that required permittees to electronically submit stormwater management facilities using a spreadsheet or database. Reporting for stormwater management facilities using a spreadsheet or database is no longer required for the purposes of this permit although DEQ recognizes some permittees may want to retain this spreadsheet or database for asset management purposes.

<u>a. (1), (2), (3), (4), (5), and (6):</u>

Each section of Part I E.5.a. incorporates the terms "traditional" and "nontraditional" where applicable for clarification.

Added (3) – "*If the traditional permittee is a city, county, or town receiving initial permit coverage during the permit term and must obtain VSMP approval from the State Water Control Board, the permittee shall implement*

the VSMP consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq. of the Code of Virginia) and VSMP Regulations (9VAC25-870) as well as develop an inspection and maintenance program in accordance with Parts I E 5 b and c no later than 60 months after receiving permit coverage;" in the event that a new Phase II MS4 traditional permittee is designated and issued permit coverage and does not already have an established VSMP. § 62.1-44.15:27. of the Code of Virginia requires all localities that operate a regulated MS4 adopt a VSMP.

b.- Revised language from "*that discharges to the MS4 as follows*" to "*as follows*" for conciseness and clarity, as stormwater management facilities within the MS4 service area owned or operated by the permittee are more often inherently part of the permittee's MS4 and shall be included in an inspection and maintenance program and reported to the BMP Warehouse in Part III.

(1) – Added *"The permittee may use inspection and maintenance specifications available from the Virginia Stormwater BMP Clearinghouse or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines"* for clarification that permittees may rely on established BMP specifications and monitoring plans to satisfy this requirement. (2) - Inspections shall be conducted by a person who is licensed as a professional engineer, architect, landscape architect, or land surveyor pursuant to Article 1 (§ 54.1-400 et seq.) of Chapter 4 of Title 54.1; a person who works under the direction and oversight of the licensed professional engineer, architect, landscape architect, or land surveyor; or a person who holds an appropriate certificate of competence from the department in accordance with 9VAC25-850.

Moved (2) from Part I E.6 – *"Employees and contractors implementing the stormwater program shall obtain the appropriate certifications as required under the Virginia Stormwater Management Act and its attendant regulations*." These stormwater certification requirements are related to MCM 5 inspection procedures more so than MCM 6 training procedures. This move was done similarly to certification requirements for erosion and sediment control being moved from MCM 6 to MCM 4. These certification requirements were moved to MCM 4 and MCM 5 recognizing consolidation efforts taking place for 9VAC25-840, 9VAC25-850, and 9VAC25-870.

c. For traditional permittees described in Part I E 5 a (1), (2), or (3), the permittee shall:

Added (4) - *"The permittee may utilize the inspection reports provided by the owner of a stormwater management facility as part of an inspection and enforcement program in accordance with 9VAC25-870-114"* to clarify that a permittee may incorporate inspection reports provided by the owner of a stormwater management facility, in their inspection and compliance program for consistency with VSMP requirements.

Removed provision formerly under d. - *"The permittee shall maintain an electronic database or spreadsheet of all known permittee-owned or permittee-operated and privately owned stormwater management facilities that discharge into the MS4. The database shall also include all BMPs implemented by the permittee to meet the Chesapeake Bay TMDL load reduction as required in Part II A. A database shall include the following information as applicable*." Stormwater management facilities are reported, tracked, and updated by the permittee in the DEQ BMP Warehouse. Reporting requirements for the BMP Warehouse are now located in Part III. Data elements specified in d. (1), (2), (3), (4), (5), (6), (7), (8), and (9) have been moved to Part III. In (3), pervious acreage was not moved to Part III since the BMP Warehouse does not track pervious acreage; however, this information is ascertained by the department using total and impervious acreages for Chesapeake Bay TMDL modeling purposes.

Removed provision formerly under e. – Updates to the BMP Warehouse are required annually in Part III.

Moved f. and g. provisions to Part III.

d. The MS4 program plan shall include:

d. Language clarified and removed "(6) *The stormwater management facility spreadsheet or database incorporated by reference and the location or webpage address where the spreadsheet or database can be reviewed"* as maintaining this spreadsheet or database id no longer required.

e. The annual report shall include the following information:

e. Language clarified and added *"(6) A confirmation statement that the permittee electronically reported stormwater management facilities inspected using the DEQ BMP Warehouse in accordance with Part III B 5"* in order to capture BMP inspection data in the BMP Warehouse.

6. Pollution prevention and good housekeeping for facilities owned or operated by the permittee

Following 9VAC25-870-400 D.2.f and 40 CFR 122.34(b) (6), MS4 permittees are required to continue implementation of a pollution prevention and good housekeeping program. The title of the section has been revised to reflect that the conditions of this MCM apply to those facilities that are owned or operated by the permittee. Pollution prevention and good housekeeping are key elements for minimizing the impact from any activity exposed to stormwater that has the potential to discharge to surface waters. The minimum control measure requires the small MS4 permittee to evaluate and revise, as appropriate, standard operating procedures to help ensure a reduction in the amount and type of pollution that collects at municipal facilities and is discharged into local waterways.

In the 2018 permit required permittees maintain written good housekeeping procedures for a variety of objectives and activities listed in Part I E.6.a; however, this permit condition was unclear on what activities needed to be included in generalized procedures based on MCM 6 objectives (e.g. prevent illicit discharges, improper disposal, etc.). Through permittee audits and inspections DEQ has found that following MCM 6 good housekeeping procedures is a common compliance issue. This can be for a variety reasons such as written procedures may meet permit requirements but are too vague to be useful to applicable permittee staff or contractors. Another common issue is that elements applicable to the permittee's MS4 can be scattered through-out a comprehensive environmental manual making it difficult and sometimes very unlikely that permittee staff and contractors will piece together the common threads of procedures applicable to the MS4.

The written procedures for MCM 6 good housekeeping were overhauled and split into two sections (a. and b.). a. lays-out the objectives each procedure shall meet and b. lays out each activity requiring written good housekeeping procedures. This restructuring was done in order to give permittees clearer permit conditions and set expectations for clear and concise written procedures that are easily followed by permittee staff and contractors.

In order to promote contractor implementation of permittee good housekeeping procedures requirements for contract language have been moved to directly follow written procedure requirements (Part I E.6.c.). MCM 6 staff training requirements have also been moved to Part I E.6.d. for cohesion of written procedures with contract language and training plans to promote further integration of Part I E.6.a., b., c., and d.

This permit was also reformatted to include MCM 6 provisions that lacked integration with good housekeeping procedures such as incorporation of the provision prohibiting the use of anti-icing and deicing agents containing

urea or other forms of nitrogen and phosphorus and following nutrient management plans. This permit also reduces redundancies of SWPPP requirements and good housekeeping procedures and distinguishes between long-term bulk material storage; an activity that defines high-priority facilities that may need a SWPPP and temporary landscaping storage which should be covered under good house-keeping procedures. This permit also encourages incorporating applicable good housekeeping procedures into SWPPPs to avoid redundant effort to achieve permit conditions. Effective implementation of good housekeeping procedures and training may in some cases eliminate the need for some facility SWPPPs. This permit also removes the term "*high potential to discharge pollutants"* from several provisions on SWPPP applicability and requirements as this qualifier has been misconstrued and has led to compliance actions stemming from differences in opinion on what may be a "high potential to discharge pollutants." This revision should promote compliance certainty for permittees.

Lastly, this permit clarifies that DCR is the nutrient management plan approval and renewal authority and provisions have been included for requiring approval from DCR for new plans and renewal of plans prior to expiration.

a. - Reformatted to "*The permittee shall maintain and implement written good housekeeping procedures for those activities listed in Part I E 6 b at facilities owned or operated by the permittee*" to specify the objectives of each good housekeeping procedure required under Part I E 6 b.

a. - Moved elements of the following language: *"such as road, street, and parking lot maintenance; equipment maintenance; and the application, storage, transport, and disposal of pesticides, herbicides, and fertilizers."* Road, street, and parking lot maintenance required written procedures are established in Part I E 6 b (1). Equipment maintenance required written procedures are established Part I E 6 b (5) and equipment maintenance is an activity meeting definition of a high priority facility. Written procedures for the application of pesticides, herbicides, and fertilizer are established in Part I E 6 b (6) and (7) and pesticides, herbicides, and fertilizer storage is an activity meeting the definition of a high priority facility.

(4) - *"Minimize the pollutants in stormwater runoff"* was removed from several listed activities and added to Part I E.6.a. procedure objectives to reduce redundancy.

b. - Reformatted to *"The permittee shall develop and implement written good housekeeping procedures that meet the objectives established in Part I E 6 a for the following activities"* to specify the activities requiring written procedures that meet the objectives of Part I E 6 a.

(1) – Added "*sidewalk*" to road, street, and parking lot procedures for clarification.

(a) - Added *"Within 24 months of permit issuance, the permittee shall update and implement procedures in accordance with this subsection to include implementation of best management practices for anti-icing and deicing agent application, transport, and storage"* to ensure best management practices for anti-icing and deicing agents are incorporated into road, street, sidewalk, and parking lot procedures.

(b) - Incorporated *"Procedures developed in accordance with this subsection shall prohibit the application of any anti-icing or deicing agent containing urea or other forms of nitrogen or phosphorus"* into road, street, sidewalk, and parking lot procedures (prohibition formerly in Part I E 6 k).

(2) - Added *"Renovation and significant exterior maintenance activities (e.g., painting, building power-washing, roof resealing, and HVAC coil cleaning) not covered under a separate VSMP construction general permit. The permittee shall develop and implement procedures no later than 36 months of permit issuance."* These activities have been found by DEQ to be common compliance issues.

(3) - Removed *"utility"* to include pumped water from all construction and maintenance activities. DEQ has developed *Guidelines for Management of Street Wastes Collected During Stormwater Conveyance System Cleaning* to be posted on the DEQ MS4 webpage.

(4) – Added *"Temporary storage of landscaping materials"* to recognize illicit discharge potential from landscaping materials and distinguish from long-term bulk material storage which is an activity that defines high priority facilities. Removed "salt storage" since anti-icing storage is covered under Part I E 6 b (1).

(5) - Replaced "municipal automobiles" with "permittee owned or operated vehicles" recognizing nontraditional permittees are not municipal.

(6) – Revised to *"Application of materials, including pesticides, and herbicides shall not exceed manufacturer's recommendations*" for clarification recognizing that permittees may apply less than manufacturer's recommendation.

(7) – Revised to *"Application of fertilizer shall not exceed maximum application rates established by applicable nutrient management plans. For areas not covered under nutrient management plans where fertilizer is applied, application rates shall not exceed manufacturer's recommendations"* in order to integrate nutrient management plans with good housekeeping procedures.

c. - Moved from Part I E 6 l to emphasize link between established procedures and contract language.

d., e., and f. - Moved from Part I E 6 m, n, and o to emphasize link between established procedures and training plan.

g: Revised for clarification and removed "*high potential for discharging pollutants*" language to reduce subjective misinterpretation of the objective criteria established in Part I E.6.g (1), (2), (3), (4), (5), (6), (7), (8), and (9).

h. Each SWPPP as required in Part I E 6 c Part I E 6 g shall include the following:

Added (4) and (5):

"(4) *A description of all structural control measures such as stormwater management facilities and other pollutant source controls applicable to SWPPP implementation (e.g., permeable pavement or oil-water separators that discharge to sanitary sewer are not applicable to the SWPPP) such as oil-water separators, and inlet protection designed to address potential pollutants and pollutant sources at risk of being discharged to the MS4"*

(5) A maintenance schedule of all stormwater management facilities and other pollutant source controls applicable to SWPPP implementation described in Part I E 6 h (4)."

(4) and (5) were added to capture pertinent information for SWPPP implementation.

Formerly (6): Removed *"Procedures to conduct an annual comprehensive site compliance evaluation"* since annual inspections are already required in Part I E.6.h (8).

Added (10) and (11):

"(10) A log of modifications to the SWPPP made as the result of any unauthorized discharge, release, or spill in accordance Part I E 6 j or changes in facility activities and operation requiring SWPPP modification; and

(11) The point of contact for SWPPP implementation."

(10) and (11) were added to capture pertinent information for SWPPP implementation and in order for permittee staff and DEQ to be informed on staff responsible for SWPPP implementation.

i. – Added "*The permittee shall maintain a list of all high-priority facilities owned or operated by the permittee not required to maintain a SWPPP in accordance with Part I E 6 g and this list shall be available upon request"* for tracking high priority facilities that shall be reviewed to determine if SWPPP coverage is needed.

l. - Replaced "*criteria*" with "*definition*" of a high-priority facility since it is a defined term and the criteria in Part I E 6 g determine if a high priority facility needs SWPPP coverage.

m. Added "*If activities change at a facility such that the facility no longer meets the criteria requiring SWPPP coverage as described in Part I E 6 g, the permittee may remove the facility from the list of high-priority facilities that require SWPPP coverage,"* to distinguish changes in activities that no longer meet the definition of a high priority facility described in Part I E.6.l from activity changes that no longer meet the criteria for SWPPP coverage described in this section.

o. - Added "*For newly established turf where nutrients are applied to a contiguous area greater than one acre, the permittee shall implement a nutrient management plan no later than six months after the site achieves final stabilization,"* to establish timeframe to implement nutrient management plans on newly established turf greater than one acre.

p. - Added "*Nutrient management plans developed in accordance with Part I E 6 n shall be submitted to the Department of Conservation and Recreation (DCR) for approval,"* to establish DCR as the nutrient management plan approval authority.

q. - Added "*Nutrient management plans that are expired as of the effective date of this permit shall be submitted to DCR for renewal no later than six months after the effective date of this permit. Thereafter, all nutrient management plans shall be submitted to DCR at least 30 days prior to nutrient management plan expiration. Within 36 months of permit coverage, no nutrient management plans maintained by the permittee in accordance with Part I E 6 n shall be expired due to DCR documented noncompliance with 4VAC50-85-130 provided to the permittee,"* to clarify nutrient management plans must be renewed by DCR and establish a timeframe renewing expired nutrient management plans.

Former sections k. through o. integrated into various sections of MCM 6, MCM 5, and MCM 4.

r. - Added "*Nutrient management plans may be maintained as a hard copy or electronically as long as the documents are available to employees at the applicable site,"* to clarify nutrient management plan record keeping requirements.

t. The MS4 program plan shall include:

(1) - Changed to require *"list of written good housekeeping procedures"* so the program plan doesn't have to be updated with every procedure update.

(2) - Added the following data elements to the list of high priority facilities with SWPPP coverage, *"facility name, facility location, and the location of the SWPPP hardcopy or electronic document being maintained"* for tracking purposes.

(3) – Changed *"lands"* to *"locations"* for clarification.

(a) – Changed "*on which nutrients are applied*" to "*covered by each nutrient management plan*" for clarification.

(b) – Changed *"The date of the most recently approved nutrient management plan for the property"* to "*The DCR approval date and expiration date for each nutrient management plan*" for clarification.

(c) – Changed *"The location in which the individual turf and landscape nutrient management plan is located*" to "*The location of the nutrient management plan hardcopy or electronic document being maintained*" for clarification.

u. The annual report shall include the following:

(1) – Changed "*operational"* to "*written"* for consistency.

(2) – Changed "*A summary of any new SWPPPs developed in accordance Part I E 6 c during the reporting period*" to "*A confirmation statement that all high-priority facilities were reviewed to determine if SWPPP coverage is needed during the reporting period*" in order to improve value of annual reporting element and reduce reporting burden.

(3) – Changed "summary" to " list" to promote itemization annual reporting elements for e-reporting purposes and limit narratives to providing rationale modification of SWPPPs and delisting of any high-priority facilities.

Formerly (4) - Removed "*location, total acreage, and date approved for nutrient management plans"* as these data elements are captured in the program plan.

(4) and (5):

"(4) A summary of any SWPPPs modified in accordance with Part I E 6 j, l, or m.

(5) The rationale of any high-priority facilities delisted in accordance with Part I E 6 l or m during the reporting period."

(4) and (5) were split to distinguish modified SWPPPs to from SWPPPs no longer needed.

(6) – Changed *"summary of new nutrient management plans"* to *"The status of each nutrient management plan as of June 30 of the reporting year (e.g., approved, submitted and pending approval, and expired)"* to promote annual reporting itemization and streamlining reporting elements as well as to ensure nutrient management plans are renewed in a timely manner.

(7) - Changed *"training event"* to "*training activity"* recognizing permittee utilization of online training modules and recorded webinars for training requirements.

Part II TMDL Special Conditions

A. Chesapeake Bay TMDL Special Condition

MS4 permittees are required to reduce the loadings of nutrients from existing sources (pervious and impervious regulated urban lands developed prior to July 1, 2009) equivalent to the Level 2 (L2) scoping run reductions simulated in the Chesapeake Bay Watershed Model. Level 2 implementation equates to an average reduction of 9% of nitrogen loads and 16% of phosphorus loads from impervious regulated acres and 6% of nitrogen loads and 7.25% of phosphorus loads from pervious regulated acres beyond 2009 progress loads and beyond urban nutrient management reductions for pervious regulated acreage. Calculations are based on an average tributary loading rate.

In the Phase I and II Watershed Implementation Plans (WIPs) and the Chesapeake Bay TMDL, the Commonwealth and EPA committed to using a phased approach for the MS4 sector affording MS4 permittees three full five year permit cycles to implement necessary reductions as follows:

- 5% of L2 achieved by the end of the first permit term;
- 35% of the necessary reductions in the second permit term (totaling at least 40% of the necessary reductions no later than the end of the second permit term); and
- 60% of the necessary reductions from the third permit term (totaling 100% of the necessary reductions no later than the end of the third permit term).

Due to multiple delays in permit reissuance, three full permit terms now extends beyond the Chesapeake Bay Program partnership's 2025 goal for implementation of all controls necessary to meet the TMDL. Under the Phase I and II WIPs, Virginia has recognized the right to adjust this plan and take different approaches to meet the 2025 goal. Virginia is committed to a phased approach that allows multiple permit terms for MS4 permittees to fully implement nutrient reductions necessary to meet the Chesapeake Bay TMDL wasteload allocations.

The "first permit term" in which the 5% reduction is required became effective on July 1, 2013 and expired on June 30, 2018. During the 2013 permit cycle ("first permit cycle"), each MS4 permittee was required to develop and submit for approval a Chesapeake Bay TMDL Action Plan that included BMPs and strategies to reduce existing source loadings of total nitrogen, total phosphorus, and total suspended solids by 5% of the required L2 reductions no later than the permit's expiration of June 30, 2018. DEQ received and approved Chesapeake Bay Action Plans from each existing small MS4 permittee for the proposed reductions to meet the 5% of L2 reduction requirement or greater. The "second permit term" in which the 35% reductions and the cumulative 40% reductions (addition of the first term 5% and the second term 35% requirements) became effective November 1, 2018 and expires October 31, 2023. The "third permit term" in which the final 60% reductions and the cumulative 100% (addition of the first term 5%, second term 35% and third term 60% requirements) is covered by this permit. Tables 3a-3d have been updated to show the required cumulative 100% reductions.

Nutrient loadings associated with construction and post-construction from new sources are addressed through the implementation of the ESC Law, the Stormwater Management Act, the Chesapeake Bay Preservation Act and their attendant regulations and compliance with MCMs 4 and 5 (Part I.E.4 and 5) in this permit. These regulatory programs represent a framework that will provide the State and EPA with reasonable assurance that the pollutant reductions necessary to address the Chesapeake Bay TMDL will be met. By implementing the requirements for the control of post-construction runoff from new and redevelopment, this general permit implements the Commonwealth's strategies for addressing increased loads associated with growth.

Since July 1, 2009, the Commonwealth has implemented post development criteria considered to be nutrient neutral. Until July 1, 2014, localities had the option of implementing the state's criteria of 0.45 lbs. of total phosphorus per acre per year based on the states average land cover condition of 16% impervious cover or adopting an alternative criterion that was reflective of their local land cover conditions. While many localities implemented the Commonwealth's post development criteria, some MS4 localities choose to adopt an alternative land cover condition greater than 16% as allowed. As of July 1, 2014, the Commonwealth established that all new sources meet a post development criterion of 0.41 pounds per acre per year of total phosphorus for new development. Use of an adopted land cover condition to determine loading from new sources is no longer allowed except under two specific circumstances allowed in the VSMP regulations as projects that are "grandfathered" or meet "time limits of applicability" requirements. Both of these project circumstances have associated sunset dates. Additionally, any increased loads from projects associated with these two circumstances, must be offset by the MS4 permittee as described above. As part of the Chesapeake Bay TMDL Special Condition, MS4 permittees that authorized new source pollutant loads between July 1, 2009 and June 30, 2014 at rates higher than the 16% average land cover condition must offset the increased load calculated as the difference between the pollutant load generated at 16% average land cover condition and pollutant load generated at the adopted land cover condition for the source.

Additionally, by the expiration of this permit, permittees must also provide for reductions from any adjustments as a result of changes to the MS4 service area within the 2010 Census. Compliance with reductions in loading rate will be measured based on the total required reductions as calculated using the tables in Parts II.A of the general permit and the reported implementation of BMPs.

Removal of Sediment Reduction Requirements

As explained in the above Considerations section on the Virginia Chesapeake Bay TMDL Phase III WIP (Page 5), sediment reduction requirements have been removed from Part II A of this general permit and permittees will not be required to achieve 60% of L2 sediment reductions. This revision is consistent with Virginia's Phase III WIP as well as the Principals' Staff Committee's August 12, 2019 final decision. BMP implementation in order to achieve 100% of L2 nutrient reductions will achieve additional sediment reductions, however sediment reduction requirements will no longer drive BMP implementation. Sediment reductions achieved by permittee BMP implementation will continue to be tracked in accordance with BMP Warehouse reporting requirements under Part III.

1. - Updated to include Phase III WIP and 100% of L2 reductions to be achieved by October 31, 2028.

3. – Updated to include *"the third phase reduction of least 60% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas required by October 31, 2028"* to achieve a cumulative 100% of L2 reductions.

Tables 3a, b, c, and d - Updated to calculate 100% of L2 reductions.

4. and 5. – Updated to require offset for 100% from projects resulting in total phosphorous loads greater than 0.45 lb/acre/year for new sources and grandfathered projects no later than October 31, 2028.

6. – Added "*November 1, 2018"* permit term for cumulative total reduction requirements.

Added 7. "*Forty percent (40%) of L2 reductions for total nitrogen, total phosphorous, and total suspended solids shall at a minimum be maintained by the permittee during the permit term."* The addition of this language will ensure that, at a minimum the required reductions achieved by the first and second permit terms are maintained and do not fall below the minimum required cumulative reductions.

12. Chesapeake Bay TMDL action plan requirements.

Added a.

a. Permittees applying for initial coverage under this general permit shall submit a draft first phase Chesapeake Bay TMDL action plan to the department no later than October 31, 2028, unless the department grants a later date. The required reduction shall be calculated using Tables 3a, 3b, 3c, and 3d as applicable. The first phase action plan shall achieve a minimum reduction of least 40% of the L2 Scoping Run based on lands within the 2000 and 2010 expanded Census urbanized areas no later than October 31, 2033. The action plan shall include the following information:

(1) The load and cumulative reduction calculations for each river basin calculated in accordance with Part II A 3, A 4, and A 5.

(2) The BMPs to be implemented by the permittee to achieve 40% of the reductions calculated in Part II A 13 a:

(a) Type of BMP;

(b) Project name;

(c) Location;

(d) Percent removal efficiency for each pollutant of concern; and

(e) Calculation of the reduction expected to be achieved by the BMP calculated and reported in accordance with the methodologies established in Part II A 9 for each pollutant of concern."

a. was added to provide expectations for new permittees to submit a draft first phase Chesapeake Bay TMDL action plan by October 31, 2028 to achieve 40% of L2 reductions by the end of the next permit term or October 31, 2033.

Added 14. Chesapeake Bay TMDL implementation annual status report.

"a. Permittees previously covered under the General VPDES Permit for the Discharge of Stormwater from MS4 effective November 1, 2018 shall submit a Chesapeake Bay TMDL implementation annual status report in a method, (i.e. how the permittee must submit) and format (i.e. how the report shall be laid out) as specified by the department no later than October 1 of each year. The report shall cover the previous year from July 1 to June 30.

b. Following notification from the department of the start date for the required electronic submission of Chesapeake Bay TMDL implementation annual status 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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically.

c. The year two Chesapeake Bay TMDL implementation annual status report shall contain a summary of any public comments on the Chesapeake Bay TMDL Action Plan received and how the permittee responded.

d. Each Chesapeake Bay TMDL implementation annual status report shall include the following information:

(1) A list of Chesapeake Bay TMDL action plan BMPs (not including annual practices) implemented prior to the reporting period that includes the following information for reported BMP;

(a) The number of BMPs for each BMP type;

(b) The estimated reduction of pollutants of concern achieved by each BMP type and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported Chesapeake Bay TMDL action plan BMPs inspected using BMP Warehouse in accordance with Part III B 5.

(2) A list of newly implemented BMPs including annual practices implemented during the reporting period that includes the following information for each reported BMP or a statement that no BMPs were implemented during the reporting period

(a) The BMP type and a description of the location for each BMP;

(b) The estimated reduction of pollutants of concern achieved by each BMP and reported in pounds of pollutant reduction per year; and

(c) A confirmation statement that the permittee electronically reported BMPs using the DEQ BMP Warehouse in accordance with Part III B 3.

e. If the permittee acquired credits during the reporting period to meet all or a portion of the required reductions in Part II A 3, A 4, or A 5, a statement that credits were acquired;

f. Pollutant load reductions generated by annual practices such as street and storm drain cleaning shall only be applied to the compliance year in which the annual practice was implemented.

g. The progress, using the final design efficiency of the BMPs, toward meeting the required cumulative reductions for total nitrogen, total phosphorus, and total suspended solids.; and

h. Any revisions made to the Chesapeake Bay TMDL action plan.

i. A list of BMPs that are planned to be implemented during the next reporting period."

The annual report will no longer include a status update for Chesapeake Bay TMDL implementation. Chesapeake Bay TMDL implementation annual status reports are now required to be maintained as separate document in accordance with Part I D.6. and shall be posted to the permittee's stormwater webpage in accordance with Part I E.2.b.(5) to promote transparency and allow both DEQ and other interested parties to easily track Chesapeake Bay TMDL progress towards achieving 100% reductions by October 31, 2028. The required contents of each Chesapeake Bay TMDL implementation annual status report are located in Part II.A.13.

B. Local TMDL Special Condition.

Permittees are required to update previously developed TMDL action plans for those pollutants for which they were given a wasteload allocation in a TMDL approved by EPA prior to July 1, 2018 and develop TMDL action plans for those pollutants for which they were given a wasteload allocation in a TMDL approved by EPA between

July 1, 2018 and June 30, 2023. Permittees are not required to develop action plans during this permit term for TMDLs approved by EPA after July 1, 2023 as requiring such would be a self-modifying permit condition. Permittees may obtain a list of EPA approved TMDLs and the associated approvals dates from the Department's website: (http://www.deq.virginia.gov/Programs/Water/WaterQualityInformationTMDLs/TMDL/TMDLDevelopment/ApprovedTMDLReports.aspx) or by contacting Department staff.

Permittees may use the adaptive, iterative process to achieve wasteload allocations over multiple permit terms. However, permittees are required to provide the Department an estimate of the date by which wasteload allocations for sediment, nitrogen, and phosphorus will be achieved.

The 2018 permit required permittees to develop TMDL action plans and included a list of items to be addressed in the action plan, but did not specify BMPs acceptable for implementation. The 2023 permit includes a section of requirements to be included in all TMDL action plans as well as requirements for specific pollutants for which a TMDL has been developed as follows: bacteria, nutrients, sediment, PCBs, and Chloride. Each pollutant specific section identifies the acceptable BMPs that permittees may implement as part of the TMDL action plan.

For TMDLs for bacteria impairments, a table of sources and related reduction strategies is included in the permit. For those permittees that are an approved VSMP authority, at least three of the strategies must be implemented. It is expected that through a robust IDDE program and public education efforts the contribution of anthropogenic sources of bacteria in impaired waters from the MS4s will be reduced. For permittees that are not an approved VSMP authority, at least one strategy must be implemented. The Department decided to create differing requirements based on whether a permittee is an VSMP authority due to varying extend of authorities of the two categories of permittees. Permittees that are not an approved VSMP authority include those non-traditional MS4 permittees such as state agencies, federal entities, and institutes of higher education. These non-traditional MS4 permittees have limited legal authorities, are not able to implement ordinances, and usually constitute a relatively small footprint compared to the traditional (local government) MS4 permittees.

For local TMDLs for nitrogen, phosphorus, and sediment impairments, permittees are able to pick a variety of BMPs previously reviewed and approved for use through the Virginia BMP Clearinghouse or the Chesapeake Bay Program. BMPs approved under both the Clearinghouse and Bay Program have to undergo a rigorous review and approval process. The Virginia BMP Clearinghouse included those BMPs approved for use to meet Virginia's post development stormwater quality criteria which are reviewed by technical experts. As part of the Clearinghouse approval specifications, an associated nitrogen and phosphorus reduction efficiency is assigned. The Bay Program uses an expert panel to review and recommend BMPs for approval to achieve reduction of loads to the Chesapeake Bay watershed. Under the Bay Program, reduction efficiencies for nitrogen, phosphorus and sediment are typically assigned to BMPs. When sediment reduction efficiencies are not available permittees may use the Chesapeake Bay Program retrofit curves using runoff storage to establish a reduction efficiency for sediment.

To address WLAs for PCBs, permittees are required to identify potentially significant sources of PCBs owned or operated by the permittee that drain to the MS4. As part of the identification process, permittees must determine if the activities have been terminated and identify any measures being implemented or planned to be implemented to limit exposure to stormwater. Additionally, if during the term of the permit, the permittee discovers a source of PCBs draining within the MS4 service area that is not owned or operated by the permittee, the permittee is required to notify the Department.

To address WLAs for Chloride, traditional permittees are required to develop an anti-icing and de-icing agent education and outreach strategy. This strategy must contain a schedule that implements two or more of the

strategies listed in Part I.E.1.d Table 1. Permittees shall also review standard operating procedures for ant-icing and de-icing agent application, handling, storage and transport activities and identify enhanced BMPs to make efficient management decisions regarding the use and storage of anti-icing and de-icing agents while promoting public safety.

1. - Added *"Permittees applying for initial coverage under this general permit shall develop a draft local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) prior to October 31, 2023, and in which an individual or aggregate wasteload has been allocated to the permittee. The permittee shall develop action plans to meet the conditions of Part II B 4, B 5, B 6, B 7, and B 8 as applicable. Each local TMDL action plan shall be provided to the department no later than October 31, 2028, unless the department grants a later date"* to distinguish new permittee conditions from existing permittee conditions.

2. – Modified to *"Permittees previously covered under the General VPDES Permit for Discharges of Stormwater from MS4 effective November 1, 2018 shall develop and maintain a local TMDL action plan designed to reduce loadings for pollutants of concern if the permittee discharges the pollutants of concern to an impaired water for which a TMDL has been approved by the U.S. Environmental Protection Agency (EPA) as described in Part II B 2 a and 2 b"* to distinguish new permittee conditions from existing permittee conditions.

a. – Added *"Updated action plans shall include:*

(1) An evaluation of the results achieved by the previous action plan; and

(2) Any adaptive management strategies incorporated into updated action plans based on action plan evaluation."

(1) and (2) added to demonstrate progress for updated local TMDL action plans.

5. Bacterial TMDLs.

a. – Changed *"If the permittee is an approved VSMP authority, the permittee"* to "*Traditional permittees"* for clarification.

b. – Changed "*If the permittee is not an approved VSMP authority, the permittee"* to *"nontraditional permittees"* for clarification.

6. Local sediment, phosphorus, and nitrogen TMDLs.

a.(2) – Added "*Pollutant load reductions generated by annual practices such as street and storm drain cleaning shall only be applied to the compliance year in which the annual practice was implemented"* for clarification.

b. – Revised to "*The permittee may meet the local TMDL requirements for sediment, phosphorus, or nitrogen through BMPs implemented or sediment, phosphorus, or nitrogen credits acquired. BMPs implemented and nutrient and sediment credits acquired to meet the requirements of the Chesapeake Bay TMDL in Part II A may also be utilized to meet local TMDL requirements as long as the BMPs are implemented or the credits are generated in the watershed for which local water quality is impaired."* For clarification.

7. Polychlorinated biphenyl (PCB) TMDLs.

Added c. - *"Results of any action plan PCB monitoring or product testing conducted and any adaptive management strategies that have been incorporated into the updated action plan based upon monitoring or product testing results."* This language ensures a reporting element if such testing or monitoring is undertaken.

Added 8. Chloride TMDLS.

"a. Traditional permittees shall develop an anti-icing and deicing agent education and outreach strategy that identifies target audiences for increasing awareness of anti-icing and deicing agent application impacts on receiving waters and encourages implementation of enhanced BMPs for application, handling, and storage of anti-icing and de-icing agents used for snow and ice management.

b. Traditional permittee anti-icing and deicing agent education and outreach strategies shall contain a schedule to implement two or more of the strategies listed in Part I E 1 d Table 1 per year to communicate to target audiences the importance of responsible anti-icing and deicing agent application, transport, and storage.

c. No later than 36 months after permit issuance, the permittee shall review good housekeeping procedures for anti-icing and deicing agent application, handling, storage, and transport activities required under Part I E 6 b (1) (a) and identify a minimum of two strategies for implementing enhanced BMPs that promote efficient management and application of anti-icing and deicing agents while maintaining public safety."

On May 23, 2018 EPA approved Virginia's first Chloride TMDL for Accotink Creek in Fairfax County. This TMDL assigned a wasteload allocation to MS4s in the Accotink Creek watershed which requires MS4s permittees to develop a TMDL action plan in accordance with Past II B. This permit establishes chloride TMDL action plan requirements. In addition to requirements under Part I E 6 b (1) (a) permittees that must develop a chloride TMDL action plan for implementation of additional BMPs for anti-icing and deicing agent application, storage, and transport. The Virginia Salt Management Strategies (SaMS) guidance document may be utilized by permittees to determine which strategies best suit their system. Traditional permittees must also develop an anti-icing and deicing agent education and outreach strategy and implement this strategy recognizing potential for residential and commercial anti-icing and deicing agent over-application. Nontraditional permittees were not considered for action plan public education requirements due to the lack of residential and commercial properties that drain to nontraditional MS4s.

<u>Added C. Inspection and maintenance of ecosystem restoration projects used for TMDL compliance.</u>

"1. Within 36 months of permit issuance the permittee shall develop and maintain written inspection and maintenance procedures in order to ensure adequate long-term operation and maintenance of ecosystem restoration projects as defined in 9VAC25-890-1 and implemented as part of a TMDL action plan developed in accordance with Part II A, B, or both. The permittee may utilize inspection and maintenance protocols developed by the Chesapeake Bay Program or inspection and maintenance plans developed in accordance with the department's Stormwater Local Assistance Fund (SLAF) guidelines.

2. The permittee shall inspect ecosystem restoration projects owned or operated by the permittee and implemented as part of a current TMDL action plan developed in accordance with Part II A or B no less than once every 60 months."

Added C. to establish ecosystem restoration project inspection and maintenance requirements for projects implemented for TMDL action plans. The 2018 permit only required inspection and maintenance procedures for stormwater management facilities as defined in 9VAC25-870-10. Inspection and maintenance of ecosystem restoration projects implemented as part of a TMDL action plan is crucial for permittees to maintain reductions

achieved by these projects in order to maintain compliance with Part II TMDL Special Conditions and Part III BMP Warehouse reporting requirements.

Added Part III DEQ BMP Warehouse Reporting.

"A. For the purpose of Part III of this permit, best management practice or BMP means a practice that achieves quantifiable nitrogen, phosphorus, or total suspended solids reductions including stormwater management facilities, ecosystem restoration projects, annual practices, and other practices approved by the department for reducing nitrogen, phosphorus, and total suspended solids pollutants.

B. No later than October 1 of each year the permittee shall electronically report BMPs implemented and inspected as applicable between July 1 and June 30 of each year using the DEQ BMP Warehouse.

1. Traditional permittees specified in Part I E 5 a (1) shall use the DEQ Construction Stormwater Database or other application as specified by the department to report each stormwater management facility installed after July 1, 2014, to address the control of post-construction runoff from land disturbing activities for which the permittee is required to obtain a General VPDES Permit for Discharges of Stormwater from Construction Activities.

2. The permittee shall use the associated reporting template for stormwater management facilities not reported in accordance with Part III B 1 including stormwater management facilities installed to control post-development stormwater runoff from land disturbing activities less than one acre in accordance with the Chesapeake Bay Preservation Act regulations (9VAC25-830) if applicable and for which a General VPDES Permit for Discharges of Stormwater from Construction Activities was not required.

3. The permittee shall use the DEQ BMP Warehouse to report BMPs that were not reported in accordance with Part III B 1 or 2 and were implemented as part of a TMDL action plan to achieve nitrogen, phosphorus, and total suspended solids reductions in accordance with Part II A or B.

4. The permittee shall use the DEQ BMP Warehouse to report any BMPs that were not reported in accordance with Part III B 1, 2, or 3.

5. The permittee shall use the DEQ BMP Warehouse to report the most recent inspection date for BMPs in accordance with Part I E 5 b or c, or in accordance with Part II C and the most recent associated TMDL action plan.

C. The following information for each BMP reported in accordance with Part III B 1, 2, 3, or 4 shall be reported to the DEQ BMP Warehouse as applicable:

1. The BMP type;

2. The BMP location as decimal degree latitude and longitude;

3. The acres treated by the BMP, including total acres and impervious acres;

4. The date the BMP was brought online (MM/YYYY). If the date brought online is not known, the permittee shall use 06/2005;

5. The 6th Order Hydrologic Unit Code in which the BMP is located;

6. Whether the BMP is owned or operated by the permittee or privately owned;

7. Whether or not the BMP is part of the permittee's Chesapeake Bay TMDL action plan required in Part II A or local TMDL action plan required in Part II B, or both;

8. If the BMP is privately owned, whether a maintenance agreement exists;

9. The date of the permittee's most recent inspection of the BMP; and

10. Any other information specific to the BMP type required by the DEQ BMP Warehouse (e.g., linear feet of stream restoration).

D. No later than October 1 of each year the DEQ BMP Warehouse shall be updated if an existing BMP is discovered between July 1 and June 30 that was not previously reported to the DEQ BMP Warehouse."

The 2018 permit required all permittee "BMPs" to be reported to the BMP Warehouse; however, the definition of "BMP" in 9VAC25-870-10 does not provide needed context for this condition and since this requirement was in Part I E 5 d (post-construction stormwater management) it is unclear whether the term "BMP" is limited to stormwater management facilities or if "BMP" applies to a broader scope of pollutant reduction practices. BMP is defined within the context of Part III to include stormwater management facilities, ecosystem restoration projects, and annual practices such as street cleaning. The requirements of the 2018 permit were moved to Part III since both practices implemented for new development in accordance with Part I E 5 as well as practices implemented for TMDL purposes in accordance with Part II should be tracked in the BMP Warehouse and reported to the Chesapeake Bay Program for modeling purposes.

Part IV Applicable to all State and VPDES Permits.

C.2. – Added "*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 three months' notice provided between the notification from the department and the date after which such forms and reports must be submitted electronically*" to satisfy e-reporting requirements.

Administrative

The general permit has a fixed term of five years. Every authorization under this general permit will expire at the same time and all authorizations will be renewed on the same date, provided a complete registration statement has been filed prior to the general permit's expiration date.

All operators desiring to be covered by this general permit must register with the Department by filing a registration statement and paying applicable fees. Small MS4s that are discharging to surface waters on the effective date of this general permit, and which have not been issued an individual VPDES permit, may submit the registration statement. During the term of this general permit, any small MS4s identified by the Department as regulated or that become regulated based on newly designated urbanized areas as part of the 2020 census shall submit a registration statement within 180 days of notice of designation or a later date a designated by the Board.

This general permit does not cover the discharge of stormwater associated with industrial activities or construction activities. Additionally, this general permit does not authorize non-stormwater discharges except those authorized under 9VAC25-890-20 D.3. Any operator not wishing to be covered or limited by this general permit may make application for an individual VSMP/VPDES permit, in accordance with VSMP/VPDES procedures, stating the reasons supporting the request.

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. Compliance with this general permit will maintain the Water Quality Standards adopted by the Board.

All facilities that the board determines are eligible for coverage under this general permit will be authorized to discharge under the terms and conditions of the permit after a complete registration statement is submitted, the applicable permit fee is paid, and the Department sends a copy of the general permit to the applicant. If this general permit is inappropriate, the applicant will be so notified.

Office of Regulatory Management

Economic Review Form

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9 VAC 25-890
VAC Chapter title(s)	General VPDES Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems
Action title	CH 193 Amend and Reissue Existing Regulation 2023
Date this document prepared	10/27/2022

Cost Benefit Analysis

Table 1a must be completed for all actions. Tables 1b and 1c must be completed for actions (or portions thereof) where the agency is exercising discretion, including those where some of the changes are mandated by state or federal law or regulation. Tables 1b and 1c are not needed if **all** changes are mandated, and the agency is not exercising any discretion. In that case, enter a statement to that effect.

(1) Direct Costs & Benefits: Identify all specific, direct economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (A direct impact is one that affects entities regulated by the agency and which directly results from the regulatory change itself, without any intervening steps or effects. For example, the direct impact of a regulatory fee change is the change in costs for these regulated entities.) When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo. One bullet has been provided, add additional bullets as needed.

(2) Quantitative Factors:
   (a) Enter estimated dollar value of total (overall) direct costs described above.
   (b) Enter estimated dollar value of total (overall) direct benefits described above.
   (c) Enter the present value of the direct costs based on the worksheet.
   (d) Enter the present value of the direct benefits based on the worksheet.

(3) Benefits-Costs Ratio: Calculate d divided by c OR enter it from the worksheet.

(4) Net Benefit: Calculate d minus c OR enter it from the worksheet.

(5) Indirect Costs & Benefits: Identify all specific, indirect economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (An indirect impact is one that results from responses to the regulatory change, but which are not directly required by the regulation. Indirect impacts of a regulatory fee change on regulated entities could include a change in the prices they charge, changes in their operating procedures or employment levels, or decisions to enter or exit the regulated profession or market. Indirect impacts also include responses by other entities that have close economic ties to the regulated entities, such as suppliers or partners.) If there are no indirect costs or benefits, include a specific statement to that effect.

(6) Information Sources: Describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.
(7) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

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.

The purpose of the proposed action is to amend and reissue the existing general permit, which expires on October 31, 2023. The general permit governs local governments and state and federal agencies that discharge stormwater from municipally owned separate storm sewer systems (MS4s) located within the Census Urbanized Area as determined by the Bureau of Census. The general permit establishes the minimum control measures to reduce the potential discharge of pollutants in municipal stormwater as well as requirements for demonstration of compliance with total maximum daily load wasteload allocations for local watersheds and the Chesapeake Bay. The general permit protects water quality in the Commonwealth of Virginia and authorizes municipal owners or operators of MS4s to discharge stormwater to waters of the state.

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

(1) Direct Costs & Benefits	• Updating the effective dates of the general permit o Direct Costs: No direct economic cost to regulated entities expected beyond the additional administrative time permittees may spend to familiarize themselves with the new permit citations within the regulations. o Direct Benefits: The direct benefit of this proposed amendment and reissuance is a savings of $14,000, ($8,000 Municipal Stormwater / MS4 Individual new state permit issuance + $6,000 Municipal Stormwater / MS4 Individual state permit maintenance fees) as the regulated entities will not be required to obtain a MS4 Individual permit. • Clarifying permit requirements o Direct Cost: The direct cost of these proposed changes is 0. o Direct Benefits: The direct benefit of these proposed changes is a reduction in the regulatory burden on those entities who maintain a valid MS4 General Permit. • Correcting typographical errors. o Direct Cost: The direct cost of these proposed changes is 0.

	○ Direct Benefits: The direct benefit of these proposed changes is the overall reduction in the regulatory burden on the affected entities who are regulated by the agency.		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) 0	(c) 1.0	
Direct Benefits	(b) $14,000	(d) 1.0	
(3) Benefits-Costs Ratio	$14,000	(4) Net Benefit	$14,000
(5) Indirect Costs & Benefits	• By clarifying the permit requirements the regulated entities will operate more efficiently and should diminish the sophistication needed by the entity's senior staff to fully understand the minimum requirements necessitated by the permit. • By updating the effective dates of the general permit regulated entities can continue to remain within the regulated space, thereby allowing other entities that have close economic ties to the regulated entities, to remain and invest their recourses as needed.		
(6) Information Sources	9VAC25-870 -800. Fee schedules for municipal separate storm sewer system new state permit issuance. 9VAC25-870-810. Fee schedules for major modification of MS4 individual permits requested by the operator. 9VAC25-870-820. Fees for an individual permit or coverage under the General Permit for Discharges of Stormwater from Construction Activities. 9VAC25-870-825. Fees for the modification or transfer of individual permits or of registration statements for the General Permit for Discharges of Stormwater from Construction Activities. 9VAC25-870-830. State permit maintenance fees.		
(7) Optional			

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)
This table addresses current requirements and the implications of not making any changes. In other words, describe the costs and benefits of maintaining the current regulatory requirements as is.
The regulatory action is to amend and reissue the existing general permit in accordance with § 62.1-44.15:28 of the Code of Virginia. The current general permit, expires on October 31, 2023.

(1) Direct Costs & Benefits	• **Updating the effective dates of the general permit. The current general permit, expires on October 31, 2023.**

	○ Direct Costs: The direct cost of maintaining the current requirement is to cause all regulated entities who maintain a valid MS4 permit to cease being able to discharge point source stormwater discharges from regulated small municipal separate storm sewer systems to surface waters of the Commonwealth of Virginia. Thereby necessitating all MS4 permit holders to seek an individual general permit and thereby incurring a higher fee. ○ Direct Benefit: 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 owners to obtain coverage under this general permit is $3000. If this general permit were not available, these owners would be required to obtain a new individual Municipal Stormwater / MS4 permit, and the initial application fee would be $8,000. An annual permit maintenance fee of $4,000 would also apply (total $14,000 per permittee for a 5-year permit term). • **Clarifying permit requirements.** ○ Direct Costs: The direct cost to the regulated entities includes the cost of spending substantial amounts of time to fully understand and follow the minimum regulatory requirements. ○ Direct Benefit: There is no direct benefit for keeping the current permit requirements without clarifying the permit requirements. • **Correcting typographical errors. Correction of certain terms and punctuation is needed for clarity.** ○ Direct Costs: The direct cost to the regulated entities includes the cost of spending time to understand and follow the minimum regulatory requirements in spite of inexact terms and punctuation. ○ Direct Benefit: There is no direct benefit for keeping the current permit requirements without correcting typographical errors.

(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) See above	(c) n/a	
Direct Benefits	(b) See above	(d) n/a	
(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a

(5) Indirect Costs & Benefits	n/a
(6) Information Sources	9VAC25-870 -800. Fee schedules for municipal separate storm sewer system new state permit issuance. 9VAC25-870-830. State permit maintenance fees.
(7) Optional	n/a

Table 1c: Costs and Benefits under an Alternative Approach

This table addresses an alternative approach to accomplishing the objectives with different requirements. These alternative approaches may include the use of reasonably available alternatives in lieu of regulation, or information disclosure requirements or performance standards instead of regulatory mandates.

(1) Direct Costs & Benefits	N/A – There are no alternatives to the proposed action which is being made to amend and reissue the existing general permit, that is expiring on October 31, 2023. Direct Costs: There are no direct costs of this proposed change. Direct Benefits: The direct benefits of this proposed change includes allowing all MS4 permit holders, such as cities, counties, incorporated towns, unincorporated towns, colleges or universities, local school boards, military installations, transportation systems, federal or state facilities, or other similar entities to continue operation without any disruption to their business.		
(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) n/a	(c) n/a	
Direct Benefits	(b) n/a	(d) n/a	
(3) Benefits-Costs Ratio	n/a	(4) Net Benefit	n/a
(5) Indirect Costs & Benefits	n/a		
(6) Information Sources	n/a		

(7) Optional	n/a

Impact on Local Partners

(1) Describe the direct costs and benefits (as defined on page 1) for local partners in terms of real monetary costs and FTEs. Local partners include local or tribal governments, school divisions, or other local or regional authorities, boards, or commissions. If local partners are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of total (overall) direct costs described above.
  (b) Enter estimated dollar value of total (overall) direct benefits described above.
(3) Indirect Costs & Benefits: Describe any indirect benefits and costs (as defined on page 1) for local partners that are associated with all significant changes. If there are no indirect costs or benefits, include a specific statement to that effect.
(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.
(5) Assistance: Identify the amount and source of assistance provided for compliance in both funding and training or other technical implementation assistance.
(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 2: Impact on Local Partners

(1) Direct Costs & Benefits	Cities, counties, incorporated towns, unincorporated towns, colleges and universities, local school boards, military installations, transportation systems, federal and state facilities, and other similar entities will incur new costs if the MS4 permit is not amended and reissued before their current permit expires on October 31, 2023. Cities, counties, incorporated towns, unincorporated towns, colleges and universities, local school boards, military installations, transportation systems, federal and state facilities, and other similar entities will incur no benefit if the MS4 permit is not amended and reissued before their current permit expires on October 31, 2023.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a

Direct Benefits	(b) $0
(3) Indirect Costs & Benefits	n/a
(4) Information Sources	n/a
(5) Assistance	n/a
(6) Optional	n/a

Economic Impacts on Families

(1) Describe the direct costs and benefits (as defined on page 1) to a typical family of three (average family size in Virginia according to the U. S. Census) arising from any proposed regulatory changes that would affect the costs of food, energy, housing, transportation, healthcare, and education. If families are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of direct costs.
  (b) Enter estimated dollar value of direct benefits.
(3) Indirect Costs & Benefits: Describe any indirect costs and benefits (as defined on page 1) to a typical family of three that are most likely to result from the proposed changes.
(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
(5) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 3: Impact on Families

(1) Direct Costs & Benefits	Cities, counties, incorporated towns, unincorporated towns, colleges and universities, local school boards, military installations, transportation systems, federal and state facilities, and other similar entities will be forced to immediately pass along any new costs to families if the current existing general permit is not amended and reissued.

(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) $0
(3) Indirect Costs & Benefits	
(4) Information Sources	
(5) Optional	

Impacts on Small Businesses

(1) Describe the direct costs and benefits (as defined on page 1) for small businesses. For purposes of this analysis, "small business" means the same as that term is defined in § 2.2-4007.1. If small businesses are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of direct costs.
  (b) Enter estimated dollar value of direct benefits.
(3) Indirect Costs & Benefits: Describe the indirect benefits and costs (as defined on page 1) for small businesses that are most likely to result from the proposed changes.
(4) Alternatives: Add a qualitative discussion of any equally effective alternatives that would make the regulatory burden on small business more equitable compared to other affected business sectors, and how those alternatives were identified.
(5) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 4: Impact on Small Businesses

(1) Direct Costs & Benefits	Cities, counties, incorporated towns, unincorporated towns, colleges and universities, local school boards, military installations, transportation systems, federal and state facilities, and other similar entities will pass along

	any new costs to small businesses that use their services, if the current existing general permit is not amended and reissued.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) n/a
Direct Benefits	(b) none
(3) Indirect Costs & Benefits	
(4) Alternatives	
(5) Information Sources	
(6) Optional	

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.

Table 5: Total Number of Requirements

	Number of Requirements			
Chapter number	**Initial Count**	**Additions**	**Subtractions**	**Net Change**
9VAC25-890	220	102	51	+51

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Travis A. Voyles
Acting Secretary of Natural and Historic Resources

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

TO: Members of the State Water Control Board

FROM: Jutta Schneider, Director, Water Planning Division

DATE: 10/28/2022

SUBJECT: Proposed water audit and leak detection and repair plan amendments to the Virginia Water Protection Permit Program Regulation (9 VAC 25-210) and the Groundwater Withdrawal Regulation (9 VAC 25-610)

At the November 29, 2022 meeting of the State Water Control Board (Board), the Board will consider the approval of proposed amendments to the Virginia Water Protection Permit Program Regulation (9 VAC 25-210) and the Groundwater Withdrawal Regulation (9 VAC 25-610). The proposed amendments were developed in response to the directive created by Chapter 100 (SB 1291) of the 2021 Special Session I Acts of Assembly. This act requires the Board to adopt regulations to establish requirements for water auditing plans and leak detection and repair plans. The act requires every application for a Virginia Water Protection Permit for a surface water withdrawal and applications for a ground water withdrawal permit to include these plans. As required by the act, once approved these plans will become enforceable provisions of each permit.

This memorandum provides a brief background on the two water withdrawal permit programs and the regulatory process to date. Consistent with the statutory and regulatory changes made previously in response to Chapter 356 (SB 657) of the 2022 Acts of Assembly of the General Assembly, the term "Board" means the Department of Environmental Quality when implementing the proposed regulation in the review of permits that include water audit and leak detection and repair plans.

BACKGROUND

Virginia's water resources are under increasing pressure because of population growth, economic development, and climate change. The Local and Regional Water Supply Planning Regulations (9 VAC 25-780) have been in place since 2005. A requirement of this regulation is for localities to report water loss by facility. According to information provided by localities pursuant to the Local and Regional Water Supply Planning Regulation, many localities in Virginia are not achieving industry standards for water loss. Some localities could not account for as much as 25 percent of their

potable water supplies. This loss can be due to leaks in the distribution system, within the individual customer's system, or a problem with metering. These high levels of water loss raise concerns about the efficiency and effectiveness of public water use. References to this information was included in DEQ's Annual Reports and the State Water Resources Plan developed with the local data required by the Local and Regional Water Supply Planning Regulation.

In order to establish stronger conservation measures that ensure state waters are available for future human, economic, and environmental purposes, § 62.1-44.15:22 A 2 of the Code of Virginia, as amended by Chapter 100 (SB 1291) of the 2021 Special Session I Acts of Assembly, provides that every application for a Virginia Water Protection Permit for a surface water withdrawal shall include a (i) water auditing plan and (ii) leak detection and repair plan. Both plans shall comply with requirements established by the Board in regulations. The Board shall approve every water auditing plan and leak detection and repair plan that complies with such regulatory requirements. Once approved by the Board, such water auditing plans and leak detection and repair plans shall be incorporated by reference as a condition in the Virginia Water Protection Permit. The Board shall not issue a Virginia Water Protection Permit for a surface water withdrawal without an approved water-auditing plan and an approved leak detection and repair plan.

Similarly, statutory changes were also made to the Ground Water Management Act of 1992. However, there are already existing statutory and regulatory requirements for submission of a water conservation and management plan with an application for a groundwater withdrawal permit. These existing requirements do not include specific criteria for "water loss reduction program," which historically have been viewed as similar to what are now known as "water audits." In order to provide greater specificity in how these provision would be expected to be implemented, § 62.1-262 of the Code of Virginia, as amended by Chapter 100 (SB 1291) of the 2021 Special Session I Acts of Assembly, provides that any application for a groundwater withdrawal permit, except as provided in § 62.1-260 or 62.1-261 or subsection H of § 62.1-266, shall include a water conservation and management plan approved by the Board. The water conservation and management plan shall include (i) the use of water-saving plumbing as provided under the Uniform Statewide Building Code; (ii) a water-loss reduction program; (iii) a water-use education program; (iv) a water auditing plan that complies with requirements established by the Board in regulations; (v) a leak detection and repair plan that complies with requirements established by the Board in regulations; and (vi) mandatory reductions during water-shortage emergencies, including, where appropriate, ordinances prohibiting waste of water generally and providing for mandatory water-use restrictions, with penalties, during water-shortage emergencies. The Board shall approve any water conservation plan that complies with clauses (i) through (vi). Once approved by the Board, such water conservation and management plan shall be incorporated by reference as a condition in the groundwater withdrawal permit. The Board shall not issue a groundwater withdrawal permit, except as provided in § 62.1-260 or 62.1-261 or subsection H of § 62.1-266, without an approved water conservation and management plan.

The Notice of Intended Regulatory Action (NOIRA) for this action was published in the Virginia Register on January 31, 2022. A public comment period ran through March 2, 2022. DEQ received two comments during the comment period, one each from Mission H20 and the Virginia Manufacturer's Association. There were also four requests to participate on the Regulatory Advisory Panel (RAP). DEQ did not receive any requests for a public hearing during the comment period. The Director appointed a RAP that included the four nominations received as well as

additional members selected by the Director. The membership list is included as Attachment A. The RAP met a total of four times before concluding business on August 23, 2022. The RAP did reach consensus on the proposed amendments. Meeting summaries can be found on the Virginia Regulatory Town Hall website.

The Office of the Attorney General will be sent the regulation for certification of authority to adopt the amendments.

A detailed summary of changes resulting from the proposed amendments are included in Table 1 of the Agency Background Document (Attachment C). A brief summary of the changes is provided below. Where section titles are amended in the proposed amendments, the amended title is provided below. Additional detail can be found in Attachments B and C.

SUMMARY OF PROPOSED AMENDMENTS TO THE VIRGINIA WATER PROTECTION PERMIT PROGRAM REGULATION (9 VAC 25-210)

9 VAC 25-210-300. Definitions for surface water withdrawals – With the assistance of the RAP, definitions were developed for "water loss" and "water loss audit."

9 VAC 25-210-340. Application requirements for surface water withdrawals – The majority of the proposed amendments were added to the existing surface water withdrawal application requirements, subsection B. Recognizing the differences in how water is "used" and "lost" based on the type of water use, specific criteria for public water supply, commercial and industrial, and agricultural applications were identified. For each use type, the expectations for the water audit, the frequency of implementation, the frequency of reporting data developed from the audit were added. The same conceptual approach, by use type, was used to establish new language describing the expectations for the leak detection and repair plan.

SUMMARY OF PROPOSED AMENDMENTS TO THE GROUNDWATER WITHDRWAL REGULATION (9 VAC 25-610)

9 VAC 25-610-10. Definitions – With the assistance of the RAP, definitions were developed for "public water supply," "water loss" and "water loss audit."

9 VAC 25-610-100. Water conservation and management plans – The majority of the proposed amendments were added to the existing water conservation and management plan requirements, subsection B. Due to the existing regulatory language related to the water conservation and management plans, additional reorganization was necessary to implement a similar framework for the different use types while also retaining and providing context to the existing requirements unaffected by the statutory change. (Note: With the retention of the existing water loss reduction program language in the Groundwater Withdrawal Regulations, one may conclude that groundwater withdrawals have a higher number of requirements to meet. However, with respect to the water audit plan and leak detection and repair plan, the requirements are still comparable in substance.)

STAFF RECOMMENDATION

Staff recommend that the State Water Control Board approve the proposed water audit and leak detection and repair plan amendments to the Virginia Water Protection Permit Program Regulation (9 VAC 25-210) and the Groundwater Withdrawal Regulation (9 VAC 25-610) and authorize staff to proceed to notice of public comment.

ATTACHMENTS

A. Regulatory Advisory Panel Membership Roster
B. Agency Background Document (TH-02)
C. Draft Amendments to the Virginia Water Protection Permit Program Regulation (9 VAC 25-210) and to the Groundwater Withdrawal Regulation (9 VAC 25-610)
D. ORM Interim Economic Review Form

PRESENTER CONTACT INFORMATION

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Attachment A
A REGULATORY ADVISORY PANEL
FOR AMENDMENTS TO THE VIRGINIA WATER PROTECTION PERMIT PROGRAM REGULATION AND THE GROUNDWATER WITHDRAWAL REGULATIONS

1. Drew Blackwell (self-nominated)
   Cavanaugh & Associates, P.A.
   530 Trade St NW #302
   Winston-Salem, NC 27101

   Steve Cavanaugh – Designated Alternate
   Cavanaugh & Associates, P.A.
   530 Trade St NW #302
   Winston-Salem, NC 27101

2. Mike McEvoy (nominated by Virginia Municipal Drinking Water Association)
   Western Virginia Water Authority
   601 S. Jefferson Street
   Roanoke, VA 24011

   Chris Pomeroy – Designated Alternate
   AquaLaw
   6 South 5th Street
   Richmond, VA 23219

3. Ron Harris (nominated by Mission H2O)
   Newport News Waterworks
   700 Town Center Drive
   Newport News, VA 23606

   Jen Cobb, PE – Designated Alternate
   Newport News Waterworks, Assistant Director
   700 Town Center Drive
   Newport News, VA

4. Jennifer Rogers (nominated by Virginia Manufacturers Association)
   Dominion Energy
   600 E Canal Street
   Richmond, VA 23219

5. Bill Mawyer
   Rivanna Water and Sewer Authority
   695 Moores Creek Lane
   Charlottesville, VA 22902

6. Michael Kearns
   Sussex Service Authority
   4385 Beef Steak Road
   Waverly, VA 23890

7. Alan Johnson
   City of Danville Water and Wastewater Treatment
   311 Memorial Drive
   Danville, VA 24541

8. Andy Crocker
   Southeast Rural Community Assistance Project
   347 Campbell Avenue
   Roanoke, VA 24016
   (540) 345-1184
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9. Steve Herzog, P.E.
   Director, Hanover County Public Utilities
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10. Dr. Julie Shortridge
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    155 Ag Quad Lane
    Blacksburg, VA 24061

11. David Jurgens, P.E.
    Director, City of Chesapeake Public Utilities
    306 Cedar Road
    Chesapeake, VA 23322

    Erin Trimyer, P.E. -Designated Alternate
    Deputy Director, City of Chesapeake Public Utilities
    306 Cedar Road
    Chesapeake, VA 23322

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Proposed Regulation
Agency Background Document

Agency name	State Water Control Board
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-210 (Primary) 9VAC25-610 (Secondary)
VAC Chapter title(s)	**"Virginia Water Protection Permit Program Regulation" (Primary)** **"Groundwater Withdrawal Regulations" (Secondary)**
Action title	**Amendments establishing criteria for (i) water auditing plans and (ii) leak detection and repair plans, and requiring any water withdrawal permit application to include (i) a water auditing plan and (ii) a leak detection and repair plan.**
Date this document prepared	October 26, 2022

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.

This regulatory proposal will establish requirements as directed by Chapter 100 of the 2021 Special Session I Acts of Assembly. The regulatory change amends the existing Virginia Water Protection Permit Program Regulation (9VAC25-210) and the Groundwater Withdrawal Regulations (9VAC25-610) to require that any application for a permit to withdraw surface water (9VAC25-210) or groundwater (9VAC25-610) include (i) a water auditing plan and (ii) a leak detection plan.

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" means the State Water Control Board. When used outside the context of the promulgation of regulations, including regulations to establish general permits "board" means the Department of Environmental Quality.

"Groundwater" 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.

"Permit" means either: (i) an individual permit issued by the department or a general permit issued as a regulation adopted by the board under § 62.1-44.15:20 of the Code of Virginia that authorizes a surface water withdrawal, or; (ii) a groundwater withdrawal permit issued under the Groundwater Management Act of 1992 permitting the withdrawal of a specified quantity of groundwater under specified conditions in a groundwater management area.

"Surface Water Withdrawal" means a removal or diversion of surface water in Virginia or from the Potomac River for consumptive or non-consumptive use thereby altering the instream flow or hydrologic regime of the surface water. Projects that do not alter the instream flow or that alter the instream flow but whose sole purpose is flood control or stormwater management are not included in this definition.

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, 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."

Chapter 100 of the 2021 Special Session I Acts of the Assembly directs the Board to establish requirements in regulation for (i) water auditing plans and (ii) leak detection and repair plans. This act provides that every application for a Virginia Water Protection Permit for a surface water withdrawal shall include (i) a water auditing plan and (ii) a leak detection and repair plan, that both plans shall comply with requirements established by the Board in regulations, that the Board shall approve such plans that comply with regulatory requirements, that once approved such plans shall be incorporated by reference as a condition in the Virginia Water Protection Permit, and that the Board shall not issue a Virginia Water Protection Permit for a surface water withdrawal without such approved plans. This act further provides that the water conservation and management plan for a groundwater withdrawal permit shall include (i) a water auditing plan and (ii) a leak detection and repair plan that complies with requirements established by the Board in regulations, that the Board shall approve any water conservation and management plan that complies with the applicable requirements, that once approved by the Board the water conservation and management plan shall be incorporated by reference as a condition in the groundwater withdrawal permit, and that the Board shall not issue a groundwater withdrawal permit, except as provided in § 62.1-260 or 62.1-261 or subsection H of § 62.1-266, without an approved water conservation and management plan.

Virginia's water resources are under increasing pressure because of population growth, economic development, and climate change. According to information provided by localities pursuant to the Local and Regional Water Supply Planning Regulation, many localities in Virginia are not achieving industry standards for water loss. Some localities could not account for as much as 25 percent of their potable water supplies. This loss can be due to leaks in the distribution system, within the individual customer's

system, or a problem with metering. In addition to wasting money to treat water that never reaches a beneficial use or a paying customer, inefficient use of water strains limited natural resources. Both surface water and groundwater resources are constrained in various locations around the Commonwealth. The implementation of these requirements by all permitted water users through surface and groundwater withdrawal permits improves the efficiency and effectiveness of water use.

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.

Section 62.1-44.15:22 A 2 of the Code of Virginia, as amended and reenacted by Chapter 100 of the 2021 Special Session I Acts of Assembly, provides that every application for a Virginia Water Protection Permit for a surface water withdrawal shall include a (i) water auditing plan and (ii) leak detection and repair plan. Both such plans shall comply with requirements established by the Board in regulations. The Board shall approve every water auditing plan and leak detection and repair plan that complies with such regulatory requirements. Once approved by the Board, such water auditing plans and leak detection and repair plans shall be incorporated by reference as a condition in the Virginia Water Protection Permit. The Board shall not issue a Virginia Water Protection Permit for a surface water withdrawal without an approved water auditing plan and an approved leak detection and repair plan.

Section 62.1-262 of the Code of Virginia, as amended and reenacted by Chapter 100 of the 2021 Special Session I Acts of Assembly, provides that any application for a groundwater withdrawal permit, except as provided in § 62.1-260 or 62.1-261 or subsection H of § 62.1-266, shall include a water conservation and management plan approved by the Board. The water conservation and management plan shall include (i) the use of water-saving plumbing as provided under the Uniform Statewide Building Code; (ii) a water-loss reduction program; (iii) a water-use education program; (iv) a water auditing plan that complies with requirements established by the Board in regulations; (v) a leak detection and repair plan that complies with requirements established by the Board in regulations; and (vi) mandatory reductions during water-shortage emergencies, including, where appropriate, ordinances prohibiting waste of water generally and providing for mandatory water-use restrictions, with penalties, during water-shortage emergencies. The Board shall approve any water conservation plan that complies with clauses (i) through (vi). Once approved by the Board, such water conservation and management plan shall be incorporated by reference as a condition in the groundwater withdrawal permit. The Board shall not issue a groundwater withdrawal permit, except as provided in § 62.1-260 or 62.1-261 or subsection H of § 62.1-266, without an approved water conservation and management plan.

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.

This regulatory change is explicitly required by the second enactment clause of Chapter 100 of the 2021 Special Session I Acts of Assembly. The provisions of Chapter 100 of the 2021 Special Session I Acts of Assembly have an effective date of 30 days after the adoption by the Board of the regulations to implement the provisions of the act. The development of these amendments will provide for the efficient use and conservation of surface water and groundwater resources for future uses and are necessary to

protect the health, safety, and welfare of citizens. There are significant water losses by permitted water withdrawal users that lack adequate water auditing and leak detection and repair plans. Requiring enforceable water auditing and leak detection and repair plans achieves greater long-term conservation and sustainability of finite water resources.

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.

Amendments to 9VAC25-210 include requirements for (i) water auditing plans and (ii) leak detection and repair plans, as well as amendments to conform the regulation to the requirements in Section 62.1-44.15:22 A 2 of the Code of Virginia, as amended and reenacted by Chapter 100 of the 2021 Special Session I Acts of Assembly.

Amendments to 9VAC25-610 include requirements for (i) water auditing plans and (ii) leak detection and repair plans, as well as amendments to conform the regulation to the requirements in Section 62.1-262 of the Code of Virginia, as amended and reenacted by Chapter 100 of the 2021 Special Session I 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.

The Groundwater Withdrawal Regulations (9VAC25-610) currently contain an application requirement to submit a water conservation and management plan that includes a water loss reduction program. The proposed amendments supplement and provide additional transparency regarding the expectations for the existing water conservation and management plan. The Virginia Water Protection Permit Program Regulation (9VAC25-210), which applies to permitted surface water withdrawals, currently contains application requirements to provide information on existing water conservation measures and projected demand with and without conservation measures. The proposed amendments bolster existing requirements with enforceable specifications to implement water audit plans and leak detection and repair plans that strengthen existing water conservation requirements for all permitted users who withdraw groundwater and surface water.

Advantages of the proposed regulatory change for the public, including private citizens or businesses, include water loss audit plan and leak detection and repair plan requirements for groundwater and surface water withdrawals that will provide for the efficient use and conservation of the resource. Water audit plans that capture water loss in a system will be used to inform leak detection and repair plans, thereby promoting efficiency and addressing needs for infrastructure upgrades before catastrophic leaks occur. Requiring individual groundwater withdrawal permits and surface water withdrawal permits to include these plans will help ensure that both sources of water are conserved for future uses, which is necessary to protect the health, safety, and welfare of citizens. Potential disadvantages of the proposed regulatory change for the public, including private citizens or businesses, could include the need to install meters where they do not currently exist in water systems, the need to hire consultants to conduct water audits, increased time spent on the water withdrawal application process, and time spent reporting water audit results and updating leak detection and repair plans which are informed by the audit results.

Advantages to the agency and Commonwealth include the potential to effectively track the amount of water loss occurring in water withdrawal systems which will enhance water supply planning efforts. Potential disadvantages could be increased staff time spent reviewing water loss audit plans and leak detection and repair plans.

Advantages to the regulated community, including public water supply, commercial and industrial users, and agricultural users, are consistent requirements for all permitted users to address water loss and the need for leak detection and repair. The intent of the water audit process, in addition to addressing water loss, is to inform the leak detection and repair plan which will be updated to address current and future infrastructure repairs. This requirement ensures an on-going cycle of information gathering and plan updating which will achieve greater long-term conservation of the resource.

Requirements More Restrictive than Federal

Identify and describe any requirement of the regulatory change which 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.

Agencies, Localities, and Other Entities Particularly Affected

Consistent with § 2.2-4007.04 of the Code of Virginia, identify any other state agencies, localities, or other entities particularly affected by the regulatory change. Other entities could include local partners such as tribal governments, school boards, community services boards, and similar regional organizations. "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

All permittees that are state agencies will be affected by this regulatory change. There are Department of Corrections' facilities and State Parks (Department of Conservation and Recreation) that have active water withdrawal permits. The Department of Veterans Services and the Virginia Institute of Marine Sciences also currently have water withdrawal permits. If the proposed regulatory amendments are enacted these facilities would have to comply with the requirement to submit a water auditing plan and a leak detection and repair plan with their future water withdrawal applications. These facilities would also have to comply with those plans because the plans would be incorporated into the permit as permit conditions designed to reduce water loss and to increase efficient use of water. This could result in costs necessary to comply with the permit conditions authorized by this regulation.

Localities Particularly Affected

All permittees that are counties, cities, and incorporated towns will be affected by this regulatory change, but none are expected to be particularly affected. Out of approximately 370 active Groundwater Withdrawal permits, there are 165 municipal permittees. Out of approximately 114 active Virginia Water Protection surface water withdrawal permits, there are 55 municipal permittees. If the proposed regulatory amendments are enacted these permittees would have to comply with the requirement to submit a water auditing plan and a leak detection and repair plan with their future water withdrawal applications. These

permittees would also have to comply with those plans because the plans would be incorporated into the permit as permit conditions designed to reduce water loss and to increase efficient use of water. This could result in costs necessary to comply with the permit conditions authorized by this regulation.

Other Entities Particularly Affected

All permittees that are other entities (agricultural, commercial, and industrial) will be affected by this regulatory change, but none are expected to be particularly affected. Out of approximately 370 active Groundwater Withdrawal permits, there are 72 agricultural, 68 commercial, 24 industrial, 33 irrigation, 3 manufacturing, 1 nuclear power, and 4 fossil fuel plant permittees. Out of approximately 114 active Virginia Water Protection surface water withdrawal permits, there are 2 agricultural, 26 commercial, 9 fossil fuel power, 8 hydropower, 4 irrigation, 1 manufacturing, 7 mining, and 2 nuclear power permittees. If the proposed regulatory amendments are enacted these permittees would have to comply with the requirement to submit a water auditing plan and a leak detection and repair plan with their future water withdrawal applications. These permittees would also have to comply with those plans because the plans would be incorporated into the permit as permit conditions designed to reduce water loss and to increase efficient use of water. This could result in costs necessary to comply with the permit conditions authorized by this regulation.

For purposes of "Locality Particularly Affected" under the Board's statutes

There is no locality particularly affected under the Board's statutes.

Economic Impact

Consistent with § 2.2-4007.04 of the Code of Virginia, identify all specific economic impacts (costs and/or benefits) anticipated to result from the regulatory change. When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo.

Impact on State Agencies

For your agency: projected costs, savings, fees, or revenues resulting from the regulatory change, including: a) fund source / fund detail; b) delineation of one-time versus on-going expenditures; and c) whether any costs or revenue loss can be absorbed within existing resources.	It is anticipated that any fiscal impact on the Department as a result of these regulations can be absorbed within existing resources.
For other state agencies: projected costs, savings, fees, or revenues resulting from the regulatory change, including a delineation of one-time versus on-going expenditures.	There are Department of Corrections' facilities and State Parks (Department of Conservation and Recreation) that have active water withdrawal permits. The Department of Veterans Services and the Virginia Institute of Marine Sciences also currently have water withdrawal permits. If the proposed regulatory amendments are enacted these facilities would have to comply with the requirement to submit a water auditing plan and a leak detection and repair plan with their future water withdrawal applications. This could result in costs necessary to comply with the permit conditions authorized by this regulation.

	The requirement to submit a water loss audit plan and a report detailing the results of the water loss audit is an on-going expenditure for state agencies with water withdrawal permits, but it is possible that some facilities currently track the flow of water through their facilities and amending their current practices to the new regulatory requirement will not be burdensome. The American Water Works Association (AWWA) water loss audit software is the water loss audit methodology recommended by the Department and is free to use. The requirement to submit a leak detection and repair plan is an on-going expenditure, however the manner in which the water loss audit results inform the leak detection and repair will vary greatly. There could be immediate costs related to leak detection and repair, or there could be the potential for future costs.
For all agencies: Benefits the regulatory change is designed to produce.	The requirements for water audit plans and leak detection and repair plans should result in increased resource conservation for future uses which is a benefit to all agencies overall.

Impact on Localities

Projected costs, savings, fees, or revenues resulting from the regulatory change.	Out of approximately 370 active Groundwater Withdrawal permits, there are 165 municipal permittees. Out of approximately 114 active Virginia Water Protection surface water withdrawal permits, there are 55 municipal permittees. If the proposed regulatory amendments are enacted these permittees would have to comply with the requirement to submit a water auditing plan and a leak detection and repair plan with their future water withdrawal applications. The requirement to submit a water loss audit plan and a report detailing the results of the water loss audit is an on-going expenditure for localities with water withdrawal permits, but it is likely that some facilities currently track the flow of water through their facilities and amending their current practices to the new regulatory requirement will not be burdensome. The AWWA water loss audit software is the water loss audit methodology recommended by the Department and is free to use. Input provided by members of the Regulatory Advisory Panel (RAP) indicated that estimates for water audit plan development could cost roughly $5,000 and conducting water loss

	audits over the permit term could cost roughly $75,000. An additional cost of hiring a consultant to conduct water loss audits could cost roughly $20,000/year. The requirement to submit a leak detection and repair plan is an on-going expenditure, however the manner in which the water loss audit results inform the leak detection and repair will vary greatly. There could be immediate costs related to leak detection and repair, or there could be the potential for future costs. Input provided by the RAP indicated that rough estimates for the development of the leak detection and repair plan could be $5,000 and initial implementation of the plan could range from $40,000-$50,000.
Benefits the regulatory change is designed to produce.	The requirements for water audit plans and leak detection and repair plans should result in increased water use efficiency and increased water available for future uses which is a benefit to all users overall.

Impact on Other Entities

Description of the individuals, businesses, or other entities likely to be affected by the regulatory change. If no other entities will be affected, include a specific statement to that effect.	Other entities that are likely to be affected by the regulatory change are agricultural, commercial, and industrial users who are permitted to withdraw groundwater and surface water.
Agency's best estimate of the number of such entities that will be affected. Include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that: a) is independently owned and operated, and; b) employs fewer than 500 full-time employees or has gross annual sales of less than $6 million.	Out of approximately 370 active Groundwater Withdrawal permits, there are 72 agricultural, 68 commercial, 24 industrial, 33 irrigation, 3 manufacturing, 1 nuclear power, and 4 fossil fuel plant permittees. Out of approximately 114 active Virginia Water Protection surface water withdrawal permits, there are 2 agricultural, 26 commercial, 9 fossil fuel power, 8 hydropower, 4 irrigation, 1 manufacturing, 7 mining, and 2 nuclear power permittees.
All projected costs for affected individuals, businesses, or other entities resulting from the regulatory change. Be specific and include all costs including, but not limited to: a) projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses; b) specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the regulatory change; c) fees; d) purchases of equipment or services; and e) time required to comply with the requirements.	The requirement to submit a water loss audit plan and a report detailing the results of the water loss audit is an on-going expenditure for localities with water withdrawal permits, but it is likely that some facilities currently track the flow of water through their facilities and amending their current practices to the new regulatory requirement will not be burdensome. The AWWA water loss audit software is the water loss audit methodology recommended by the Department for private water supplies and is free to use. Input provided by members of the RAP indicated that cost estimates to conduct a water loss audit every three years and submit a report of the results of the audits may be $5000 for agriculture and

	potentially as much as $200,000 for a power provider (total over a 15 year permit term) but this would depend on the facility. The requirement to submit a leak detection and repair plan, included in the reporting of the water loss audit plan, is an on-going expenditure, however the manner in which the water loss audit results inform the leak detection and repair will vary greatly. There could be immediate costs related to leak detection and repair, or there could be the potential for future costs. Input provided by the RAP indicated that rough estimates for the leak detection and repair plan may be $5000 for agriculture and potentially as much as $300,000 for a power provider (total over a 15 year permit term) but this would depend on the facility.
Benefits the regulatory change is designed to produce.	The requirements for water audit plans and leak detection and repair plans should result in increased water use efficiency and increased water available for future uses which is a benefit to all users overall.

Alternatives to Regulation

Describe any viable alternatives to the regulatory change that were considered, and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the regulatory change. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in § 2.2-4007.1 of the Code of Virginia, of achieving the purpose of the regulatory change.

The amendments are mandated by Chapter 100 of the 2021 Special Session I Acts of Assembly and no alternative approaches were identified that met the requirements of state law.

This analysis has been reported on the ORM Economic Impact form in Table 1b and Table 4.

Regulatory Flexibility Analysis

Consistent with § 2.2-4007.1 B of the Code of Virginia, 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.

As mandated by Chapter 100 of the 2021 Special Session I Acts of Assembly, the proposed regulation requires every application for a water withdrawal to include a water auditing plan and a leak detection and

repair plan. State law does not provide an exemption for small businesses from the requirement for a water auditing plan and a leak detection and repair plan. In developing the proposed regulation, consideration was given to minimizing requirements on all applicants for water withdrawal permits including small businesses. The agency anticipates that implementation of the requirement to include water audit plans and leak detection and repair plans in applications for water withdrawal permits will have a minimal economic impact on individual small businesses. Out of approximately 370 active Groundwater Withdrawal permits, there are 165 municipal, 72 agricultural, 68 commercial, 24 industrial, 33 irrigation, 3 manufacturing, 1 nuclear power, and 4 fossil fuel plant permittees. Out of approximately 114 active Virginia Water Protection surface water withdrawal permits, there are 55 municipal, 2 agricultural, 26 commercial, 9 fossil fuel power, 8 hydropower, 4 irrigation, 1 manufacturing, 7 mining, and 2 nuclear power plant permittees. The majority of these non-municipal permittees likely are not small businesses as defined in in § 2.2-4007.1 of the Code of Virginia.

This analysis has been reported on the ORM Economic Impact Form in Table 1b and Table 4.

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 the 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 stage.

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.

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Commenter	Comment	Agency response
Mission H2O	Some water systems in Virginia are interconnected, meaning that the water withdrawal permit holder may be delivering water to other water systems owned and operated by different entities. It is unclear how the water auditing and	The requirement to submit a water audit plan and a leak detection and repair plan are application requirements for each permitted entity. The comment may be referencing wholesale water suppliers and there is the opportunity for these issues to be addressed over time through contractual means.

	leak/detection and repair plan requirements would work in this context. It appears that the plans could be required to be submitted by the permittee, even where the permittee does not own or operate the distribution system. There are also questions about how those plans would be implemented, particularly if needed repairs are in the portion of the system that is not controlled by the permittee.	However, there may be customers that are not able to be addressed by the permittee in a practicable way. These issues will be addressed on a case by case manner based on the facts of each situation.
Mission H2O	The legislation suggests that a water withdrawal permit could not be issued until these plans are approved (in contrast to other plans, like the water conservation plan and drought management plan, that are submitted to DEQ for approval after the permit has been issued). It is unclear how this submission and approval process will work.	The description of the existing water conservation and management plan process is not accurate. The Groundwater withdrawal Regulation (9VAC25-610-94 2 h) is clear that a water conservation and management plan is required for a complete application. The instances that DEQ has included permit conditions that allow for approval of a water conservation plan during the permit term relate primarily to the following situations: the application is a historic use first time permit in a new Groundwater Management Area; the applicant is a brand new user that has no data on its operation to inform water conservations; and a fiscally strained applicant that has multiple special conditions that need to be spread out over the permit term. These programmatic decisions are made on a case by case basis. DEQ anticipates similar implementation for water audit and leak detection and repair plans.
Mission H2O	Given that the primary purpose of this legislation is to address system leakage in older drinking water systems, the requirements should differentiate between municipal water withdrawers and other types of water withdrawers that typically have far less pipe, with the withdrawal located in close proximity to the use. The regulation should also differentiate between withdrawals associated with new systems and those associated with older systems. New withdrawers may need time to learn their system and supplement or revise their plans based on the operating experience.	The requirement to conduct a water loss audit implement a leak detection and repair plan applies to all water withdrawal permittees regardless of the user type. The results from the audits will be used to inform the required leak detection and repair plan. This allows users, regardless of water use type, system age, or mileage of water pipe, to develop a leak detection and repair plan that is unique to their specific system and water loss audit results.
Mission H2O	The planning process already requires the submission and approval of a water conservation plan after the water withdrawal permit has been issued. Clarity is	The proposed regulatory changes incorporates the requirement of a water audit plan and a leak detection and repair plan into the existing water conservation and management plan requirement. This

	needed about how these new plans relate to the water conservation plan.	requirement was revised to integrate the new requirements with the existing retained requirements of a water conservation and leak detection plan.
Mission H2O	Mission H2O requests representation on the Regulatory Advisory Panel ("RAP") established for this regulation. Mission H2O nominates Ron Harris with Newport News Waterworks to serve as its representative.	Mr. Harris was appointed as a member.
Virginia Municipal Drinking Water Association	VMDWA requests appointments of Amanda Waters, Aqualaw, and Chris Pomeroy (alternate), Aqualaw, to the RAP. VMDWA later requested to replace Amanda Waters with Mike McEvoy, Executive Director Western Virginia Water Authority.	Amanda Waters was appointed as a RAP member and Chris Pomeroy was approved as an alternate. Mike McEvoy was approved as a replacement for Amanda Waters later in the process
Cavanaugh & Associates	Cavanaugh & Associates nominated Drew Blackwell for RAP membership and nominated Steve Cavanaugh as an alternate.	Drew Blackwell was appointed as a RAP member and Steve Cavanaugh was approved as an alternate.
Virginia Manufacturers Association	It is VMA's understanding that DEQ's primary focus when seeking this legislation was on municipal water systems, which involve lengthy sections of pipe to transport water to drinking water plants and then to customers. If this understanding is correct, the water auditing and leak detection provisions should differentiate between older withdrawals and newer withdrawals. It should also differentiate between systems such as municipal drinking water systems that have large volumes of piping and water withdrawals associated with manufacturing facilities, where there is often far less piping and the location of the withdrawal is often in close proximity to where the water is used.	The changes to the statute that resulted from the legislation apply to all water withdrawal permittees regardless of water user type. The proposed regulation, based on the discussion among the RAP members, does try to account for differences based on water withdrawal user type.
Virginia Manufacturers Association	Virginia Department of Health ("VDH"), which is charged with implementation of the Safe Drinking Water Act and oversees municipal drinking water systems, should be actively involved in the development of this regulation. For example, VDH was charged with studying aging water infrastructure,	The enacting legislation amended DEQ statutes and directed DEQ to develop the water audit and leak detection and repair plan regulations. VDH was asked to participate in the RAP.

	including system leakage, by the General Assembly in 2020. The resulting report (HD13 – A Study on Virginia's Drinking Water Infrastructure and Oversight of the Drinking Water Program) includes a number of recommendations for addressing system leakage.	
Virginia Manufacturers Association	VMA also suggests that DEQ develop a template for the required plans. There could be differing templates depending on the type of water user/amount of piping used by a permittee. Having such a template will streamline the approval process and ensure that this requirement does not lengthen the permitting timeline.	The proposed regulation requires the use of the free American Water Works Association water loss audit software or an alternate methodology approved the DEQ. Submitting water loss audit information using the American Water Works Association (AWWA) methodology results in consistent data development and format should assist in streamlining the permitting process.
Virginia Manufacturers Association	The regulation also needs to clarify how the water auditing and leak detection/repair plans will relate to the water conservation plan that is required to be developed after the permit is issued.	The proposed regulatory changes incorporate the requirement of a water audit plan and a leak detection and repair plan into the existing water conservation and management plan requirement. This requirement was revised to integrate the new requirements with the existing retained requirements of a water conservation and leak detection plan.
Virginia Manufacturers Association	VMA would like to be represented on the Regulatory Advisory Panel ("RAP") established for this regulation. It is important to have all water users, including municipal, industrial, and agricultural, represented on the RAP due to the differing operational, locational and financial considerations that apply to each. VMA requests that DEQ invite Jennifer Rogers with Dominion Energy to serve as VMA's representative.	Representatives were appointed to the RAP representing the identified water withdrawal user types. Jen Rogers was approved as a member of the RAP.

Public Participation

Indicate how the public should contact the agency to submit comments on this regulation, and whether a public hearing will be held, by completing the text below.

The State Water Control Board is providing an opportunity for comments on this regulatory proposal, including but not limited to (i) the costs and benefits of the regulatory proposal, (ii) any alternative approaches, (iii) the potential impacts of the regulation, and (iv) the agency's regulatory flexibility analysis stated in that section of this background document. Also, the State Water Control Board is 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 through the Public Comment Forums feature of the Virginia Regulatory Town Hall web site at: https://townhall.virginia.gov. Comments may also be submitted by mail, email or fax to Elizabeth Gallup Central Office, 1111 East Main St. Suite 1400, Richmond, VA 23218 Phone (804) 432-3581; E-mail: elizabeth.gallup@deq.virginia.gov. 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 not be held following the publication of this stage of this regulatory action.

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. 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. Use all tables that apply, but delete inapplicable tables.

If an existing VAC Chapter(s) is being amended or repealed, use Table 1 to describe the changes between the existing VAC Chapter(s) and the proposed regulation. If the existing VAC Chapter(s) or sections are being repealed and replaced, ensure Table 1 clearly shows both the current number and the new number for each repealed section and the replacement section.

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 new requirements
210-300		Definitions.	Addition of the term “water loss”. Addition of the term “water loss audit”. This definition clarifies what the audit is reviewing.
210-340 B	210-340 B (14)	Application requirements for surface water withdrawals.	Addition of a new requirement for surface water withdrawal applications for public water supply that includes a water auditing plan for an annual water loss audit beginning at permit issuance. The use of the AWWA methodology and free software allows for consistent data collection and added value for most users. DEQ anticipates that most public water supplies will use the AWWA free software. Another methodology can be reviewed and approved by DEQ. The requirement specifies the water loss

			audit must be conducted annually and that reporting of the results is required cumulatively, at a minimum, every three years. The RAP did not support annual reporting of results as a mandate and agreed to the three year reporting frequency. Annual reporting at the discretion of the permittee is not prohibited.
210-340 B	210-340 B (15)	Application requirements for surface water withdrawals.	Addition of a new requirement for surface water withdrawal applications for public water supply that includes a leak detection and repair plan. The requirement specifies what the plan must include and the reporting requirement. The plan is required to indicate how it will be informed by the water loss audit in prioritizing actions to address water loss; and where practicable, include a process for identifying equipment to quantify and reduce water loss and a schedule for inspection of equipment and distribution systems for actual water loss. Reporting is required to include a description of the plan's effectiveness in addressing water loss, including any changes to the plan that can be improved over the short and long term.
210-340 B	210-340 B (16)	Application requirements for surface water withdrawals.	Addition of a new requirement for surface water withdrawal applications for commercial and industrial users that includes a water auditing plan for a water loss audit. The applicant must propose a methodology to determine the water loss for the operation and quantity of water used based on the individual facility. The water audit must be conducted and results reported once every three years. The RAP did not support conducting an annual audit as a mandate and agreed to the three year audit and reporting frequency given the differences of these user facilities and public water supplies.
210-340 B	210-340 B (17)	Application requirements for surface water withdrawals.	Addition of a new requirement for surface water withdrawal applications for commercial and industrial users that includes a leak detection and repair plan. The content requirements for the plan are the same as for public water supply. The reporting is consistent with the water audit for this water user type.
210-340 B	210-340 B (18)	Application requirements for surface water withdrawals.	Addition of a new requirement for surface water withdrawal applications for agricultural users that includes a water auditing plan for an annual or periodic water loss audit based Agricultural

			Management Plans or Irrigation Management Plans. The use of these types of existing agricultural best management plans is anticipated to minimize the burden to agricultural producers by basing the methodologies on crop rotations and livestock needs. The water audit must include an estimate of water loss and a description of the methodology used to determine the quantity of the water used throughout the agricultural operation. Reporting of the results is required every three years. The RAP did not support conducting an annual audit as a mandate unless warranted by existing agricultural plans and agreed to the three year audit and reporting frequency given the differences of these user facilities and public water supplies.
210-340 B	210-340 B (19)	Application requirements for surface water withdrawals.	Addition of a new requirement for surface water withdrawal applications for agricultural users that includes a leak detection and repair plan. The content requirements for the plan are the same as for commercial and industrial users, except the RAP decided to eliminate the expectation to establish a process for the identification of equipment needs to quantify and reduce water loss. The reporting is consistent with the water audit for this water user type.
610-10		Definitions	Addition of the term “public water supply”. Addition of the term “water loss.” Addition of the term “water loss audit.” This definition clarifies what the audit is reviewing.
610-100	610-100 B (1)	Water conservation and management plans.	610-100 B (1) is an existing requirement for the development of water conservation and management plans (WCMP) for municipal and non-municipal public water supplies. The RAP was in favor of creating consistency between the surface water and groundwater withdrawal permit requirements to the extent practicable. The proposed regulation adds a new requirement for groundwater withdrawal public water supply WCMPs that includes a water auditing plan for an annual water loss audit beginning at permit issuance. The use of the AWWA methodology and free software allows for consistent data

			collection and added value for most users. DEQ anticipates that most public water supplies will use the AWWA free software. Another methodology can be reviewed and approved by DEQ. The requirement specifies the water loss audit must be conducted annually and that reporting of the results is required cumulatively, at a minimum, every three years. The RAP did not support annual reporting of results as a mandate and agreed to the three year reporting frequency. Annual reporting at the discretion of the permittee is not prohibited. The proposed regulation adds a new requirement for groundwater withdrawal public water supply WCMPs that includes a leak detection and repair plan. The requirement specifies what the plan must include and the reporting requirement. The plan is required to indicate how it will be informed by the water loss audit in prioritizing actions to address water loss; and where practicable, include a process for identifying equipment to quantify and reduce water loss and a schedule for inspection of equipment and distribution systems for actual water loss. Reporting is required to include a description of the plan's effectiveness in addressing water loss, including any changes to the plan that can be improved over the short and long term. Other changes were made to existing language to reorganize and provide context to the new combined language.
610-100	610-100 B (2)	Water conservation and management plans.	610-100 B (2) is an existing requirement for the development of WCMPs for commercial and industrial users. The RAP was in favor of creating consistency between the surface water and groundwater withdrawal permit requirements to the extent practicable. The proposed regulation adds a new requirement for groundwater withdrawal commercial and industrial WCMPs that includes a water auditing plan for an annual water loss audit. The applicant must propose a methodology to determine the water loss for the operation and quantity of water used based on the individual facility. The water audit must be conducted and results

			reported once every three years. The RAP did not support conducting an annual audit as a mandate and agreed to the three year audit and reporting frequency given the differences of these user facilities and public water supplies. The proposed regulation adds a new requirement for groundwater withdrawal commercial and industrial WCMPs that includes a leak detection and repair plan. The content requirements for the plan are the same as for public water supply. The reporting is consistent with the water audit for this water user type. Other changes were made to existing language to reorganize and provide context to the new combined language.
610-100	610-100 B (3)	Water conservation and management plans.	610-100 B (3) is an existing requirement for the development of WCMPs for agricultural users. The RAP was in favor of creating consistency between the surface water and groundwater withdrawal permit requirements to the extent practicable. The proposed regulation adds a new requirement for groundwater withdrawal agricultural WCMPs that includes a water auditing plan for an annual or periodic water loss audit based Agricultural Management Plans or Irrigation Management Plans. The use of these types of existing agricultural best management plans is anticipated to minimize the burden to agricultural producers by basing the methodologies on crop rotations and livestock needs. The water audit must include an estimate of water loss and a description of the methodology used to determine the quantity of the water used throughout the agricultural operation. Reporting of the results is required every three years. The RAP did not support conducting an annual audit as a mandate unless warranted by existing agricultural plans and agreed to the three year audit and reporting frequency given the differences of these user facilities and public water supplies. The proposed regulation adds a new requirement for groundwater withdrawal agricultural WCMPs that includes a leak detection and repair plan. The content requirements for the plan are the same as for agricultural surface water

			withdrawals. The reporting is consistent with the water audit for this water user type. Other changes were made to existing language to reorganize and provide context to the new combined language.

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.

Project 6942 - NOIRA

State Water Control Board

Amendments Establishing Criteria for Water Auditing Plans and Leak Detection and Repair Plans and Requiring Applications to Include Plans

Chapter 210

Virginia Water Protection Permit Regulation

9VAC25-210-300. Definitions for surface water withdrawals.

The following words and terms when used in this part shall have the following meanings:

"Affected stream reach" means the portion of a surface water body beginning at the location of a withdrawal and ending at a point where effects of the withdrawal are not reasonably expected to adversely affect beneficial uses.

"Agricultural surface water withdrawal" means a withdrawal of surface water in Virginia or from the Potomac River for the purpose of agricultural, silvicultural, horticultural, or aquacultural operations. Agricultural surface water withdrawals include withdrawals for turf farm operations, but do not include withdrawals for landscaping activities, or turf installment and maintenance associated with landscaping activities.

"Consumptive use" means any use of water withdrawn from a surface water other than a nonconsumptive use.

"Drought" means the declaration of a drought stage by the Virginia Drought Coordinator or the Governor of Virginia for a particular area or locality within Virginia. Drought stage declarations include watch, warning, and emergency, depending upon severity, as defined by the Virginia Drought Assessment and Response Plan dated March 28, 2003.

"Drought of record" means the time period during which the most severe drought conditions occurred for a particular area or location, as indicated by the available hydrologic and meteorologic data.

"Emergency Virginia Water Protection Permit" means a Virginia Water Protection Permit issued pursuant to § 62.1-44.15:22 C of the Code of Virginia authorizing a new or increased surface water withdrawal to address insufficient public drinking water supplies that are caused by a drought and may result in a substantial threat to human health or public safety.

"Human consumption" means the use of water to support human survival and health, including drinking, bathing, showering, cooking, dishwashing, and maintaining hygiene.

"Instream flow" means the existing volume of water flowing in a stream or water body including any seasonal variations of water levels and flow.

"Intake structure" means any portion of a surface water withdrawal system used to withdraw surface water that is located within the surface water, such as, but not limited to, a pipe, culvert, hose, tube, or screen.

"Major river basin" means 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, or the Tennessee-Big Sandy River Basin.

"Nonconsumptive use" means the use of water withdrawn from a surface water in such a manner that it is returned to the surface water 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.

"Potomac River Low Flow Allocation Agreement" means the agreement among the United States of America, the State of Maryland, the Commonwealth of Virginia, the District of Columbia, the Washington Suburban Sanitation Commission, and the Fairfax County Water Authority dated January 11, 1978, consented to by the United States Congress in § 181 of the Water Resources Development Act of 1976, Public Law 94-587, as modified on April 22, 1986.

"Public water supply" means a withdrawal of surface water in Virginia or from the Potomac River for the production of drinking water, distributed to the general public for the purpose of, but not limited to, domestic use.

"Public water supply emergency" means a substantial threat to public health or safety due to insufficient public drinking water supplies caused by drought.

"Section for Cooperative Water Supply Operations on the Potomac" means a section of the Interstate Commission on the Potomac River Basin designated by the Water Supply Coordination Agreement as responsible for coordination of water resources during times of low flow in the Potomac River.

"Surface water withdrawal" means a removal or diversion of surface water in Virginia or from the Potomac River for consumptive or nonconsumptive use thereby altering the instream flow or hydrologic regime of the surface water. Projects that do not alter the instream flow or that alter the instream flow but whose sole purpose is flood control or stormwater management are not included in this definition.

"Surface water withdrawal system" means any device or combination of devices used to withdraw surface water such as, but not limited to, a machine, pump, culvert, hose, tube, screen, or fabricated concrete or metal structure.

"Variance" means a mechanism that allows temporary waiver of the generally applicable withdrawal limitation requirements or instream flow conditions of a VWP permit during a drought.

<u>“Water loss” means the difference between the estimated or measured volume of water withdrawn and the estimated or measured volume applied to the beneficial use.</u>

<u>“Water loss audit” means the review of records and data that traces the flow of water from its withdrawal through distribution and application to the beneficial use.</u>

"Water Supply Coordination Agreement" means the agreement among the United States of America, the Fairfax County Water Authority, the Washington Suburban Sanitary Commission, the District of Columbia, and the Interstate Commission on the Potomac River Basin, dated July 22, 1982, which establishes agreement among the suppliers to operate their respective water supply systems in a coordinated manner and which outlines operating rules and procedures for reducing impacts of severe droughts in the Potomac River Basin.

"Water supply plan" means a document developed in compliance with 9VAC25-780.

9VAC25-210-340. Application requirements for surface water withdrawals.

A. Persons proposing to initiate a new or expanded surface water withdrawal not excluded from requirements of this chapter by 9VAC25-210-310, proposing to reapply for a current permitted withdrawal, or a Federal Energy Regulatory Commission (FERC) license or relicense associated with a surface water withdrawal, shall apply for a VWP permit.

B. In addition to informational requirements of 9VAC25-210-80 B and if applicable, 9VAC25-210-80 C, applications for surface water withdrawals or a FERC license or relicense associated with a surface water withdrawal shall include:

1. As part of identifying the project purpose, a narrative describing the water supply issues that form the basis of the proposed project purpose.

2. The drainage area, the average annual flow and the median monthly flows at the withdrawal point, and historical low flows, if available.

3. The average daily withdrawal; the maximum daily, monthly, annual, and instantaneous withdrawals; and information on the variability of the demand by season. If the project has multiple intake structures, provide for each individual intake structure and the cumulative volumes for the entire surface water withdrawal system.

4. The monthly consumptive use volume in million gallons and the average daily return flow in million gallons per day of the proposed project and the location of the return flow, including the latitude and longitude and the drainage area in square miles at the discharge point.

5. Information on flow dependent beneficial uses along the affected stream reach. For projects that propose a transfer of water resources from a major river basin to another major river basin, this analysis should include both the source and receiving basins.

a. Evaluation of the flow dependent instream and offstream beneficial uses. Instream beneficial uses include, but are not limited to, the 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, and commercial and industrial uses.

b. The aquatic life, including species and habitat requirements.

c. How the proposed withdrawal will alter flows.

6. Information on the proposed use of and need for the surface water and information on how demand for surface water was determined (e.g., per capita use, population growth rates, new uses, changes to service areas, and if applicable, acreage irrigated and evapotranspiration effects). If during the water supply planning process, the need for the withdrawal was established, the applicant may submit the planning process information, provided that the submittal addresses all requirements of 9VAC25-210-360. The department shall deem such a submittal as meeting the requirements of this subsection. For surface water withdrawals for public water supply, see also 9VAC25-780-100 and 9VAC25-780-130.

7. Information describing the intake structure, to include intake screen mesh size and intake velocity.

8. For withdrawals proposed from an impoundment, the following:

a. Description of the flow or release control structures, including the minimum rate of flow, in cubic feet per second, size and capacity of the structure, and the mechanism to control the release.

b. Surface area in acres, maximum depth in feet, normal pool elevation, total storage capacity, and unusable storage volume in acre-feet.

c. The stage-storage relationship. For example, the volume of water in the impoundment at varying stages of water depth.

9. Whether the proposed surface water withdrawal is addressed in the water supply plan that covers the area in which the withdrawal is proposed to be located. If the proposed withdrawal is included, provide a discussion as to how the proposed withdrawal is addressed in the water supply plan, specifically in terms of projected demand, analysis of alternatives, and water conservation measures. If all or a portion of the withdrawn water will be transferred to an area not covered by the plan, the discussion shall also include the water supply plan for the area of the receiving watershed.

10. An alternatives analysis for the proposed surface water withdrawal, including at a minimum, the criteria in 9VAC25-210-360.

11. For new or expanded surface water withdrawals proposing to withdraw 90 million gallons a month or greater, a summary of the steps taken to seek public input as required by 9VAC25-210-320 and an identification of the issues raised during the course of the public information meeting process.

12. For new or expanded surface water withdrawals that involve a transfer of water between major river basins that may impact a river basin in another state, a plan describing procedures to notify potentially affected persons, both in and outside of Virginia, of the proposed project.

13. For surface water withdrawals, other than for public water supply, information to demonstrate that alternate sources of water supply are available to support the operation of the facility during times of reduced instream flow.

14. For surface water withdrawals for public water supply, a water auditing plan for an annual water loss audit in accordance with the American Water Works Association (AWWA) methodology for water loss auditing using the most recent version of the AWWA Water Audit Software, or another methodology approved by the department that estimates water loss:

a. A water loss audit using an approved methodology shall be conducted annually. The requirement to conduct an annual water loss audit shall begin upon permit issuance. By the end of the first year of the permit term, the permittee shall submit documentation to the department that the water loss audit has been initiated. This documentation shall include activities completed during the first year of the permit term.

b. Reporting. The applicant shall report the results of the annual water loss audits in a report submitted at a minimum of every three years.

15. For surface water withdrawals for public water supply, a leak detection and repair plan shall be submitted. The leak detection and repair plan shall indicate how its implementation will be informed by the results of the annual water loss audit process and shall be updated during each new permit term. The plan shall include:

a. A description of how the water loss audit results are expected to inform prioritization of actions to address water loss;

b. Where practicable, a process for the identification of equipment needs to quantify and reduce water loss;

c. Where practicable, a schedule for inspection of equipment and distribution systems for actual water losses; and

d. Reporting. In the report required by 14 b of this section, provide a description of the plan's effectiveness in addressing water loss, including revisions to those elements of the leak detection and repair plan that can be improved over the short and long term.

16. For surface water withdrawals for commercial and industrial users, a water auditing plan for a water loss audit to be conducted beginning in the first three years of the permit term. The plan shall include a description of the methodology used to determine the water loss for the operation and the quantity of water used throughout the facility:

a. A water audit using this methodology shall be conducted once every three years. The requirement to conduct a water loss audit shall begin upon permit issuance. The permittee shall submit documentation to include activities completed during the first three years of the permit term.

b. Reporting. The applicant shall conduct a water loss audit and report the results of the water loss audits in a report submitted every three years.

17. For surface water withdrawals for commercial and industrial users, a leak detection and repair plan shall be submitted. The leak detection and repair plan shall indicate how its implementation will be informed by the results of the water loss audit process and shall be updated during each new permit term. The plan shall include:

a. A description of how the water audit results are expected to inform prioritization of actions to address water loss;

b. Where practicable, a process for the identification of equipment needs to quantify and reduce water loss;

c. Where practicable, a schedule for inspection of equipment and piping systems for actual water losses; and

d. Reporting. In the report required by 16 b of this section, provide a description of the leak detection and repair plan's effectiveness in addressing water loss, including revisions to those elements of the leak detection and repair plan that can be improved over the short and long term.

18. For surface water withdrawals for agricultural users, a water auditing plan for an annual water loss audit that shall be conducted annually or periodically based on Agricultural Management Plans or Irrigation Management Plans, including the anticipated crop rotation schedule or livestock growth stages. The water auditing plan shall include an estimate of water loss for the agricultural operation and a description of the methodology used to determine the quantity of water used throughout the agricultural operation:

a. A water audit using this methodology shall be conducted. The requirement to conduct a water loss audit shall begin upon permit issuance. By the end of the first year of the permit term, the permittee shall submit documentation to the department that the water loss audit has been initiated. This documentation shall include activities completed during the first year of the permit term.

b. Reporting. The applicant shall report the results of the water loss audit in a report submitted at a minimum every three years.

19. For surface water withdrawals for agricultural users, a leak detection and repair plan shall be submitted. The leak detection and repair plan shall indicate how its implementation will be informed by the results of the water loss audit process and shall be updated during each new permit term. The plan shall include:

a. A description of how the water audit results are expected to inform prioritization of actions to address water loss;

b. Where practicable, a schedule for inspection of equipment and distribution systems for actual water losses; and

c. Reporting. In the report required by 18 b of this section provide a description of the leak detection and repair plan's effectiveness in addressing water loss, including revisions to those elements of the leak detection and repair plan that can be improved over the short and long term.

C. Applications for an Emergency Virginia Water Protection Permit.

1. Applications for an Emergency Virginia Water Protection Permit to address a public water supply emergency shall include the information noted in subdivisions 1 a through 1 o of this subsection. The JPA may be used for emergency application purposes, provided that all of the information in subdivisions 1 a through 1 o of this subsection is included:

a. The applicant's legal name, mailing address, telephone number, and if applicable, fax number and electronic mail address;

b. If different from applicant, name, mailing address, telephone number, and if applicable, fax number and electronic mail address of property owner;

c. If applicable, authorized agent's name, mailing address, telephone number, and if applicable, fax number and electronic mail address;

d. Name of water body or water bodies, or receiving waters, as applicable;

e. Name of the city or county where the project occurs;

f. Signed and dated signature page (electronic submittals containing the original signature page, such as that contained in a scanned document file are acceptable);

g. Permit application fee in accordance with 9VAC25-20;

h. The drainage area, the average annual flow and the median monthly flows at the withdrawal point, and historical low flows, if available;

i. Information on the aquatic life along the affected stream reach, including species and habitat requirements;

j. Recent and current water use including monthly water use in the previous calendar year and weekly water use in the previous six months prior to the application. The application shall identify the sources of such water and also identify any water purchased from other water suppliers;

k. A description of the severity of the public water supply emergency, including (i) for reservoirs, an estimate of days of remaining supply at current rates of use and replenishment; (ii) for wells, current production; and (iii) for intakes, current streamflow;

l. A description of mandatory water conservation measures taken or imposed by the applicant and the dates when the measures were implemented; for the purposes of obtaining an Emergency Virginia Water Protection Permit, mandatory water conservation measures shall include, but not be limited to, the prohibition of lawn and landscape watering, vehicle washing, watering of recreation fields, refilling of swimming pools, and washing of paved surfaces;

m. An estimate of water savings realized by implementing mandatory water conservation measures;

n. Documentation that the applicant has exhausted all management actions that would minimize the threat to public welfare, safety, and health and will avoid the need to obtain an emergency permit, and that are consistent with existing permit limitations; and

o. Any other information that demonstrates that the condition is a substantial threat to public health or safety.

2. Within 14 days after the issuance of an Emergency Virginia Water Protection Permit, the permit holder shall apply for a VWP permit under the other provisions of this chapter.

Chapter 610

Ground Water Withdrawal Regulations

9VAC25-610-10. Definitions.

Unless a different meaning is required by the context, the following terms as used in this chapter shall have the following meanings:

"Act" means the Ground Water Management Act of 1992, Chapter 25 (§ 62.1-254 et seq.) of Title 62.1 of the Code of Virginia.

"Adverse impact" means reductions in groundwater levels or changes in groundwater quality that limit the ability of any existing groundwater user lawfully withdrawing or authorized to withdraw groundwater at the time of permit or special exception issuance to continue to withdraw the quantity and quality of groundwater required by the existing use. Existing groundwater users include all those persons who have been granted a groundwater withdrawal permit subject to this chapter and all other persons who are excluded from permit requirements by 9VAC25-610-50.

"Agricultural use" means utilizing groundwater for the purpose of agricultural, silvicultural, horticultural, or aquacultural operations. Agricultural use includes withdrawals for turf farm operations, but does not include withdrawals for landscaping activities or turf installment and maintenance associated with landscaping activities.

"Applicant" means a person filing an application to initiate or enlarge a groundwater withdrawal in a groundwater management area.

"Area of impact" means the areal extent of each aquifer where more than one foot of drawdown is predicted to occur due to a proposed withdrawal.

"Beneficial use" includes domestic (including public water supply), agricultural, commercial, and industrial uses.

"Board" means the State Water Control Board. When used outside the context of the promulgation of regulations, including regulations to establish general permits, “board” means the Department of Environmental Quality.

"Consumptive use" means the withdrawal of groundwater, without recycle of said waters to their source of origin.

“Controversial permit” means a water permitting action for which a public hearing has been granted pursuant to 9VAC25-610-270 and 9VAC25-610-275.

"Department" means the Department of Environmental Quality.

"Director" means the Director of the Department of Environmental Quality.

"Draft permit" means a prepared document indicating the department's tentative decision relative to a permit action.

"Geophysical investigation" means any hydrogeologic evaluation to define the hydrogeologic framework of an area or determine the hydrogeologic properties of any aquifer or confining unit to the extent that withdrawals associated with such investigations do not result in unmitigated adverse impacts to existing groundwater users. Geophysical investigations include pump tests and aquifer tests.

"Groundwater" 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 this Commonwealth, whatever the subsurface geologic structure in which such water stands, flows, percolates, or otherwise occurs.

"Human consumption" means the use of water to support human survival and health, including drinking, bathing, showering, cooking, dishwashing, and maintaining hygiene.

"Mitigate" means to take actions necessary to assure that all existing groundwater users at the time of issuance of a permit or special exception who experience adverse impacts continue to have access to the amount and quality of groundwater needed for existing uses.

"Permit" means a groundwater withdrawal permit issued under the Ground Water Management Act of 1992 permitting the withdrawal of a specified quantity of groundwater under specified conditions in a groundwater management area.

"Permittee" means a person that currently has an effective groundwater withdrawal permit issued under the Ground Water Act of 1992.

"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 this Commonwealth or any other state or country.

"Practicable" means available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

"Private well" means, as defined in § 32.1-176.3 of the Code of Virginia, any water well constructed for a person on land that is owned or leased by that person and is usually intended for household, groundwater source heat pump, agricultural use, industrial use, or other nonpublic water well.

"Public hearing" means a fact finding proceeding held to afford interested persons an opportunity to submit factual data, views, and comments to the department.

“Public water supply” means a system that provides water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serves an average of at least 25 people for at least 60 days a year. A public water supply may be publicly or privately owned.

"Salt water intrusion" means the encroachment of saline waters in any aquifer that creates adverse impacts to existing groundwater users or is counter to the public interest.

"Special exception" means a document issued by the department for withdrawal of groundwater in unusual situations where requiring the user to obtain a groundwater withdrawal permit would be contrary to the purpose of the Ground Water Management Act of 1992. Special exceptions allow the withdrawal of a specified quantity of groundwater under specified conditions in a groundwater management area.

"Supplemental drought relief well" means a well permitted to withdraw a specified amount of groundwater to meet human consumption needs during declared drought conditions after mandatory water use restrictions have been implemented.

"Surface water and groundwater conjunctive use system" means an integrated water supply system wherein surface water is the primary source and groundwater is a supplemental source that is used to augment the surface water source when the surface water source is not able to produce the amount of water necessary to support the annual water demands of the system.

"Surficial aquifer" means the upper surface of a zone of saturation, where the body of groundwater is not confined by an overlying impermeable zone.

“Water loss” means the difference between the estimated or measured volume of water withdrawn and the estimated or measured volume applied to the beneficial use.

"Water loss audit" means the review of records and data that traces the flow of water from its withdrawal through distribution and application to the beneficial use.

"Water well systems provider" means any individual who is certified by the Board for Contractors in accordance with § 54.1-1128 et seq. of the Code of Virginia and who is engaged in drilling, installation, maintenance, or repair of water wells, water well pumps, ground source heat exchangers, and other equipment associated with the construction, removal, or repair of water wells, water well systems, and ground source heat pump exchangers to the point of connection to the ground source heat pump.

"Well" means any artificial opening or artificially altered natural opening, however made, by which groundwater is sought or through which groundwater flows under natural pressure or is intended to be withdrawn.

"Withdrawal system" means (i) one or more wells or withdrawal points located on the same or contiguous properties under common ownership for which the withdrawal is applied to the same

beneficial use or (ii) two or more connected wells or withdrawal points which are under common ownership but are not necessarily located on contiguous properties.

9VAC25-610-100. Water conservation and management plans.

A. Any application to initiate a new withdrawal or expand an existing withdrawal in any groundwater management area or the reapplication at the end of a permit cycle for all permits shall require a water conservation and management plan before the application or reapplication is considered complete. The department shall review all water conservation and management plans and assure that such plans contain all elements required in subsection B of this section. The approved plan shall become an enforceable part of the approved permit.

B. A water conservation and management plan is an operational plan to be referenced and implemented by the permittee. Water conservation and management plans shall be consistent with local and regional water supply plans in the applicant's geographic area developed as required by 9VAC25-780. The water conservation and management plan shall be specific to the type of water use and include the following:

1. ~~For municipal and nonmunicipal public water supplies~~ For a public water supply the required water conservation and management plan shall include:

a. ~~Where practicable, the plan should require use of water-saving equipment and processes for all water users including technological, procedural, or programmatic improvements to the facilities and processes to decrease the amount of water withdrawn or to decrease water demand. The goal of these requirements is to assure the most efficient use of groundwater. Information on the water-saving alternatives examined and the water savings associated with the alternatives shall be provided. Water conservation and management plans shall discuss high volume water consumption by users on the system and where conservation measures have previously been implemented and shall be applied. Also, where appropriate, the use of water-saving fixtures in new and renovated plumbing as provided in the Uniform Statewide Building Code (13VAC5-63) shall be identified in the plan;~~ A water auditing plan for an annual water loss audit in accordance with the American Water Works Association (AWWA) methodology for water loss auditing, using the most recent version of the AWWA Water Audit Software, or another methodology approved by the department that estimates water loss:

(1) A water loss audit using an approved methodology shall be conducted annually. The requirement to conduct an annual water loss audit shall begin upon permit issuance. By the end of the first year of the permit term, the permittee shall submit documentation to the department that the water loss audit has been initiated. This documentation shall include activities completed during the first year of the permit term.

(2) Reporting. The applicant shall report the results of the annual water loss audits in a report submitted at a minimum every three years. The report shall also include any revisions to the water auditing plan over the short and long term.

b. ~~A water loss reduction program, which defines the applicant's leak detection and repair program. The water loss reduction program shall include requirements for an audit of the total amount of groundwater used in the distribution system and operational processes during the first two years of the permit cycle. Implementation of a leak detection and repair program shall be required within one year of the date the permit is issued. The program shall include a schedule for inspection of equipment and piping for leaks;~~ A leak detection and repair plan shall be submitted as a component of the water conservation and management plan. The leak detection and repair plan shall indicate how its implementation will be informed by the results of the

annual water loss audit process and shall be updated during each new permit term. The plan shall include:

(1) A description of how the water loss audit results are expected to inform prioritization of actions to address water loss;

(2) Where practicable, a process for the identification of equipment needs to quantify and reduce water loss;

(3) Where practicable, a schedule for inspection of equipment and distribution systems for actual water losses; and

(4) Reporting. In the report required by subdivision 1 a (2) of this subsection, provide a description of the leak detection and repair plan's effectiveness in addressing water loss, including revisions to those elements of the leak detection and repair plan that can be improved over the short and long term.

c. ~~A water use education program that contains requirements for the education of water users and training of employees controlling water consuming processes to assure that water conservation principles are well known by the users of the resource. The program shall include a schedule for information distribution and the type of materials used;~~ Other components of a water conservation and management plan include:

(1) A water use education program that contains requirements for the education of water users and training of employees controlling water consuming processes to assure that water conservation principles are well known by the users of the resource. The program shall include a schedule for information distribution and the type of materials used;

~~d.~~(2) An evaluation of water reuse options and assurances that water shall be reused in all instances where reuse is practicable. Potential for expansion of the existing reuse practices or adoption of additional reuse practices shall also be included;

~~e.~~(3) ~~Requirements for mandatory water use reductions during water shortage emergencies declared by the local governing body or water authority consistent with §§ 15.2-923 and 15.2-924 of the Code of Virginia. This shall include, where appropriate, ordinances in municipal systems prohibiting the waste of water generally and requirements providing for mandatory water use restrictions in accordance with drought response and contingency ordinances implemented to comply with 9VAC25-780-120 during water shortage emergencies. The water conservation and management plan shall also contain requirements for mandatory water use restrictions during water shortage emergencies that restricts or prohibits all nonessential uses such as lawn watering, car washing, and similar nonessential residential, industrial, and commercial uses for the duration of the water shortage emergency. Penalties for failure to comply with mandatory water use restrictions shall be included in municipal system plans.~~ Where practicable, a requirement for the use of water-saving equipment and processes for all water users including technological, procedural, or programmatic improvements to the facilities and processes to decrease the amount of water withdrawn or to decrease water demand. Information on the water-saving alternatives examined and the water savings associated with the alternatives shall be provided. Water conservation and management plans shall discuss high volume water consumption by users on the system and where conservation measures have previously been implemented and shall be applied. Also, where appropriate, the use of water-saving fixtures in new and renovated plumbing as provided in the Uniform Statewide Building Code (13VAC5-63) shall be identified in the plan; and

(4) Requirements for mandatory water use reductions during water shortage emergencies declared by the local governing body or water authority consistent with §§ 15.2-923 and 25.1-924 of the Code of Virginia. This shall include, where appropriate, ordinances in municipal systems prohibiting the waste of water generally and requirements providing for mandatory water use restrictions in accordance with drought response and contingency ordinances implemented to comply with 9VAC25-780-120 during water shortage emergencies. The water conservation and management plan shall also contain requirements for mandatory water use restrictions during water shortage emergencies that restricts or prohibits all nonessential uses such as lawn watering, car washing, and similar nonessential residential, industrial, and commercial uses for the duration of the water shortage emergency. Penalties for failure to comply with mandatory water use restrictions shall be included in municipal system plans.

2. For ~~nonpublic water supply applicants - commercial and industrial users~~ a commercial and industrial user the required water conservation and management plan shall include:

a. ~~Where applicable, the plan should require use of water-saving equipment and processes for all water users including technological, procedural, or programmatic improvements to the facilities and processes to decrease the amount of water withdrawn or to decrease water demand. The goal of these requirements is to assure the most efficient use of groundwater. Information on the water-saving alternatives examined and the water savings associated with the alternatives shall be provided. Also, where appropriate, the use of water-saving fixtures in new and renovated plumbing as provided in the Uniform Statewide Building Code (13VAC5-63) shall be identified in the plan;~~ A water auditing plan for a water loss audit to be conducted beginning in the first three years of the permit term. The plan shall include a description of the methodology used to estimate the water loss for the operation and the quantity of water used throughout the facility.

(1) A water loss audit using this methodology shall be conducted once every three years. The requirement to conduct a water loss audit shall begin upon permit issuance. Documentation shall include activities completed during the first three years of the permit term.

(2) Reporting. The applicant shall conduct a water loss audit and report the results of the water loss audit in a report submitted every three years.

b. ~~A water loss reduction program, which defines the applicant's leak detection and repair program. The water loss reduction program shall include requirements for an audit of the total amount of groundwater used in the distribution system and operational processes during the first two years of the permit cycle. Implementation of a leak detection and repair program shall be required within one year of the date the permit is issued. The program shall include a schedule for inspection of equipment and piping for leaks;~~ A leak detection and repair plan shall be submitted as a component of the water conservation and management plan. The leak detection and repair plan shall indicate how its implementation will be informed by the results of the water loss audit process and shall be updated during each new permit term. The plan shall include:

(1) A description of how the water loss audit results are expected to inform prioritization of actions to address water loss;

(2) Where practicable, a process for the identification of equipment needs to quantify and reduce water loss;

(3) Where practicable, a schedule for inspection of equipment and piping systems for actual water losses;

(4) Where practicable, the plan should require use of water-saving equipment and processes including technological, procedural, or programmatic improvements to the facilities and processes to decrease the amount of water withdrawn or to decrease water demand. The goal of these requirements is to assure the most efficient use of groundwater. Information on the water-saving alternatives examined and the water savings associated with the alternatives shall be provided. Water conservation and management plans shall discuss high volume water processes in the facility and where conservation measures have previously been implemented and shall be applied. Also, where appropriate, the use of water-saving fixtures in new and renovated plumbing as provided in the Uniform Statewide Building Code (13VAC5-63) shall be identified in the plan; and

(5) Reporting. In the report required by subdivision 2 a (2) of this subsection, provide a description of the plan's effectiveness in addressing water loss, including revisions to those elements of the water conservation and management plan that can be improved over the short and long term.

c. ~~A water use education program that contains requirements for the education of water users and training of employees controlling water consuming processes to assure that water conservation principles are well known by the users of the resource. The program shall include a schedule for information distribution and the type of materials used;~~ Other components of a water conservation and management plan include:

(1) A water use education program that contains requirements for the education of water users and training of employees controlling water consuming processes to assure that water conservation principles are well known by users of the resource. The program shall include a schedule for information distribution and the type of materials used;

~~d.~~ (2) An evaluation of water reuse options and assurances that water shall be reused in all instances where reuse is practicable. Potential for expansion of the existing reuse practices or adoption of additional reuse practices shall also be included; ~~and~~

(3) Where practicable, actions to encourage or provide incentives for the use of water-saving fixtures in new and renovated plumbing as provided under the Uniform Statewide Building Code (13VAC5-63) shall be identified in the plan; and

~~e.~~ (4) Requirements for complying with mandatory water use reductions during water shortage emergencies declared by the local governing body or water authority in accordance with §§ 15.2-923 and 15.2-924 of the Code of Virginia. This shall include, where appropriate, ordinances prohibiting the waste of water generally and requirements providing for mandatory water use restrictions in accordance with drought response and contingency ordinances implemented to comply with 9VAC25-780-120 during water shortage emergencies. The water conservation and management plan shall also contain requirements for mandatory water use restrictions during water shortage emergencies that restricts or prohibits all nonessential uses such as lawn watering, car washing, and similar nonessential industrial and commercial uses for the duration of the water shortage emergency.

3. ~~For nonpublic water supply applicants - agricultural users~~ For an agricultural user the required water conservation and management plan shall include:

a. ~~Requirements for the use of water-saving plumbing and processes to decrease the amount of water withdrawn or to decrease water demand. Plans submitted for the use~~

~~of groundwater for irrigation shall identify the specific type of irrigation system that will be utilized, the efficiency rating of the irrigation system in comparison to less efficient systems, the irrigation schedule used to minimize water demand, and the crop watering requirements. Multiple types of irrigation methods may be addressed in the plan. For livestock watering operations, plans shall include livestock watering requirements (per head) and processes to minimize waste of water. These requirements shall assure that the most practicable use is made of groundwater. If these options are not implemented in the plan, information on the water-saving alternatives examined and the water savings associated with the alternatives shall be provided;~~ A water auditing plan for an annual water loss audit that shall be conducted annually or periodically based on Agricultural Management Plans or Irrigation Management Plans, including the anticipated crop rotation schedule or livestock growth stages. The water auditing plan shall include an estimate of water loss for the agricultural operation and a description of the methodology used to determine the quantity of water used throughout the agricultural operation.

(1) A water loss audit using this methodology shall be conducted. The requirement to conduct a water loss audit shall begin upon permit issuance. By the end of the first year of the permit term, the permittee shall submit documentation to the department that the water loss audit has been initiated. This documentation shall include activities completed during the first year of the permit term.

(2) Reporting. The applicant shall report the results of the water loss audit in a report submitted at a minimum every three years.

b. ~~A water loss reduction program, which defines the applicant's leak detection and repair program. The water loss reduction program shall include requirements for an audit of the total amount of groundwater used in the distribution system and operational processes during the first two years of the permit cycle. Implementation of a leak detection and repair program shall be required within one year of the date the permit is issued. The program shall include a schedule for inspection of equipment and piping for leaks;~~ A leak detection and repair plan shall be submitted as a component of the water conservation and management plan. The leak detection and repair plan shall indicate how its implementation will be informed by the results of the water loss audit process and shall be updated during each new permit term. The plan shall include:

(1) A description of how the water loss audit results are expected to inform prioritization of actions to address water loss;

(2) Plans submitted for the use of groundwater for irrigation shall identify the specific type of irrigation system that will be utilized, the efficiency rating of the irrigation system in comparison to less efficient systems, the irrigation management methods used to minimize water demand, and the anticipated crop watering requirements. Multiple types of irrigation methods may be addressed in the plan. For livestock watering operations, plans shall include livestock watering requirements (per head) and processes to minimize waste of water. If these options are not implemented in the plan, information on the water-saving alternatives examined and the water savings associated with the alternatives shall be provided;

(3) Where practicable, a schedule for inspection of equipment and distribution systems for water loss;

(4) Where practicable, the plan should include use of water-saving equipment and processes including technological, procedural, or programmatic improvements to the facilities and processes to decrease the amount of water withdrawn or to decrease

water loss. The goal of these requirements is to assure the most efficient use of groundwater. Information on the water-saving alternatives examined and the water savings associated with the alternatives should be provided. Water conservation and management plans shall discuss high volume water consumption by processes in the agricultural operation and where conservation measures have previously been implemented and shall be applied. Also, where practicable the use of water-saving fixtures in new and renovated plumbing as provided in the Uniform Statewide Building Code (9VAC5-63) shall be identified in the plan; and

(5) Reporting. In the report required by subdivision 3 a (2) of this subsection provide a description of the leak detection and repair plan's effectiveness in addressing water loss, including revisions to those elements of the leak detection and repair plan that can be improved over the short and long term.

c. ~~A water use education program that contains requirements for the training of employees controlling water consuming processes to assure that water conservation principles are well known by the users of the resource. The program shall include a schedule for training employees. This requirement may be met through training employees on water use requirements contained in irrigation management plans or livestock management plans;~~ Other components of a water conservation and management plan include:

(1) A water use education program that contains requirements for the training of employees controlling water consuming processes to assure that water conservation principles are well known by users of the resource. The program shall include a schedule for training employees. This requirement may be met through training employees on water use requirements contained in irrigation management plans or livestock management plans;

~~d.~~ (2) An evaluation of potential water reuse options and assurances that water shall be reused in all instances where reuse is practicable and not prohibited by other regulatory programs; Potential for expansion of the existing reuse practices or adoption of additional reuse practices shall also be included;

~~e.~~ (3) Requirements for mandatory water use reductions during water shortage emergencies and compliance with ordinances prohibiting the waste of water generally. This shall include requirements providing for mandatory water use restrictions in accordance with drought response and contingency ordinances implemented to comply with 9VAC25-780-120 during water shortage emergencies; and

~~f.~~ (4) The permittee may submit portions of Agricultural Management Plans or Irrigation Management Plans developed to comply with requirements of federal or state laws, regulations, or guidelines to demonstrate the requirements of subdivisions B 3 a through ~~d~~ B 3 c (3) of this section are being achieved.

Office of Regulatory Management

Economic Review Form

Agency name	Department of Environmental Quality
Virginia Administrative Code (VAC) Chapter citation(s)	9VAC25-210 9VAC25-610
VAC Chapter title(s)	"Virginia Water Protection Permit Program Regulation" "Groundwater Withdrawal Regulations"
Action title	Amendments establishing criteria for (i) water auditing plans and (ii) leak detection and repair plans, and requiring any water withdrawal permit application to include (i) a water auditing plan and (ii) a leak detection and repair plan.
Date this document prepared	October 18, 2022

Cost Benefit Analysis

Table 1a must be completed for all actions. Tables 1b and 1c must be completed for actions (or portions thereof) where the agency is exercising discretion, including those where some of the changes are mandated by state or federal law or regulation. Tables 1b and 1c are not needed if **all** changes are mandated, and the agency is not exercising any discretion. In that case, enter a statement to that effect.

(1) Direct Costs & Benefits: Identify all specific, direct economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (A direct impact is one that affects entities regulated by the agency and which directly results from the regulatory change itself, without any intervening steps or effects. For example, the direct impact of a regulatory fee change is the change in costs for these regulated entities.) When describing a particular economic impact, specify which new requirement or change in requirement creates the anticipated economic impact. Keep in mind that this is the proposed change versus the status quo. One bullet has been provided, add additional bullets as needed.

(2) Quantitative Factors:
  (a) Enter estimated dollar value of total (overall) direct costs described above.
  (b) Enter estimated dollar value of total (overall) direct benefits described above.
  (c) Enter the present value of the direct costs based on the worksheet.
  (d) Enter the present value of the direct benefits based on the worksheet.

(3) Benefits-Costs Ratio: Calculate d divided by c OR enter it from the worksheet.

(4) Net Benefit: Calculate d minus c OR enter it from the worksheet.

(5) Indirect Costs & Benefits: Identify all specific, indirect economic impacts (costs and/or benefits), anticipated to result from the regulatory change. (An indirect impact is one that results from responses to the regulatory change, but which are not directly required by the regulation. Indirect impacts of a regulatory fee change on regulated entities could include a change in the prices they charge, changes in their operating procedures or employment levels, or decisions to enter or exit the regulated profession or market. Indirect impacts

also include responses by other entities that have close economic ties to the regulated entities, such as suppliers or partners.) If there are no indirect costs or benefits, include a specific statement to that effect.

(6) Information Sources: Describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.

(7) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

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

Agency Note: The Groundwater Withdrawal Regulations (9VAC25-610) and the Virginia Water Protection Permit Program Regulation (9VAC25-210), which applies to permitted surface water withdrawals, both currently contain permit application requirements that address water conservation measures. As required by Chapter 100 of the 2021 Special Session I Acts of Assembly, the proposed amendments bolster existing requirements with enforceable specifications to implement water audit plans and leak detection and repair plans that strengthen existing water conservation requirements for all permitted users who withdraw groundwater and surface water.

(1) Direct Costs & Benefits	• **As mandated by Chapter 100 of the 2021 Special Session I Acts of Assembly, the proposed regulation requires every permit application for a surface water withdrawal, and most applications for a groundwater withdrawal, to include a water auditing plan and a leak detection and repair plan.** Direct Costs: The direct costs of this regulatory change vary greatly. Out of approximately 370 active Groundwater Withdrawal permits, there are 165 municipal, 72 agricultural, 68 commercial, 24 industrial, 33 irrigation, 3 manufacturing, 1 nuclear power, and 4 fossil fuel plant permittees. Out of approximately 114 active Virginia Water Protection surface water withdrawal permits, there are 55 municipal, 2 agricultural, 26 commercial, 9 fossil fuel power, 8 hydropower, 4 irrigation, 1 manufacturing, 7 mining, and 2 nuclear power plant permittees. Some permittees likely already track the flow of water through their facilities and conduct leak detection and repair in which case this change may not impose any new direct cost. Other permittees may have staff who will develop and implement water audit plans and leak detection and repair plans, while still others may need to hire a consultant to assist them. Direct Benefits: Meet the legal mandate of state law. The purpose for the statutorily mandated change is to provide for the efficient use of surface water and groundwater and to conserve the resources for future use. There are significant water losses by permitted water withdrawal users that lack adequate water auditing and leak

	detection and repair plans. Requiring enforceable water auditing and leak detection and repair plans achieves greater long-term conservation and sustainability of finite water resources. This makes more water resources available for population growth and economic development.

(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) No dollar amount available.	(c) No dollar amount available.	
Direct Benefits	(b) No estimate of direction benefits	(d) No estimate of direct benefits	
(3) Benefits-Costs Ratio	No ratio available	(4) Net Benefit	No estimate of net benefit

(5) Indirect Costs & Benefits	The regulated community could incur indirect costs due to the potential need to hire additional staff to implement the regulatory changes.
(6) Information Sources	Discussions with members of the regulated communities. Numbers are not available due to the variability in system sizes, water withdrawal amounts, and beneficial uses.
(7) Optional	State law requires every permit application for a surface water withdrawal, and most applications for a groundwater withdrawal, to include a leak detection and repair plan. State agencies that currently have water withdrawal permits include the Department of Conservation and Recreation, the Department of Corrections, the Department of Veterans Services, and the Virginia Institute of Marine Science.

Table 1b: Costs and Benefits under the Status Quo (No change to the regulation)
This table addresses current requirements and the implications of not making any changes. In other words, describe the costs and benefits of maintaining the current regulatory requirements as is.

(1) Direct Costs & Benefits	• **The proposed amendments are mandated by state law.** Direct Costs: If the regulations are not amended, they will not meet the directive of the General Assembly for the State Water Control Board to adopt regulations to establish requirements for water auditing plans and leak detection and repair plans. Direct Benefits: No direct benefits to maintaining the status quo.

(2) Quantitative Factors	Estimated Dollar Amount	Present Value	
Direct Costs	(a) None	(c) None	
Direct Benefits	(b) None	(d) None	
(3) Benefits-Costs Ratio	No change	(4) Net Benefit	No change
(5) Indirect Costs & Benefits	None		
(6) Information Sources	Discussions with members of the regulated communities.		
(7) Optional			

Table 1c: Costs and Benefits under an Alternative Approach
Not required: Amendments are mandated by changes in statute. No alternative approaches are applicable.

Impact on Local Partners

(1) Describe the direct costs and benefits (as defined on page 1) for local partners in terms of real monetary costs and FTEs. Local partners include local or tribal governments, school divisions, or other local or regional authorities, boards, or commissions. If local partners are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of total (overall) direct costs described above.
  (b) Enter estimated dollar value of total (overall) direct benefits described above.
(3) Indirect Costs & Benefits: Describe any indirect benefits and costs (as defined on page 1) for local partners that are associated with all significant changes. If there are no indirect costs or benefits, include a specific statement to that effect.
(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why they are not.
(5) Assistance: Identify the amount and source of assistance provided for compliance in both funding and training or other technical implementation assistance.

(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 2: Impact on Local Partners

The Groundwater Withdrawal Regulations (9VAC25-610) and the Virginia Water Protection Permit Program Regulation (9VAC25-210), which applies to permitted surface water withdrawals, both currently contain permit application requirements that address water conservation measures. As required by Chapter 100 of the 2021 Special Session I Acts of Assembly, the proposed amendments bolster existing requirements with enforceable specifications to implement water audit plans and leak detection and repair plans that strengthen existing water conservation requirements for all permitted users who withdraw groundwater and surface water.

(1) Direct Costs & Benefits	• **As mandated by Chapter 100 of the 2021 Special Session I Acts of Assembly, the proposed regulation requires every permit application for a surface water withdrawal, and most applications for a groundwater withdrawal, to include a water auditing plan and a leak detection and repair plan.** Direct Costs: The direct costs of this regulatory change vary greatly. Out of approximately 370 active Groundwater Withdrawal permits, there are 165 municipal permittees. Out of approximately 114 active Virginia Water Protection surface water withdrawal permits, there are 55 municipal permittees. Some permittees likely already track the flow of water through their facilities and conduct leak detection and repair in which case this change may not impose any new direct cost. Other permittees may have staff who will develop and implement water audit plans and leak detection and repair plans, while still others may need to hire a consultant to assist them. Direct Benefits: Meet the legal mandate of state law. The purpose for the statutorily mandated change is to provide for the efficient use of surface water and groundwater and conserve the resources for future use. There are significant water losses by permitted water withdrawal users that lack adequate water auditing and leak detection and repair plans. Requiring enforceable water auditing and leak detection and repair plans achieves greater long-term conservation and sustainability of finite water resources. This makes more water resources available for population growth and economic development.
(2) Quantitative Factors	Estimated Dollar Amount

Direct Costs	(a) None
Direct Benefits	(b) None
(3) Indirect Costs & Benefits	The regulated community could incur indirect costs due to the potential need to hire additional staff to implement the regulatory changes.
(4) Information Sources	Discussions with members of the regulated communities. Numbers are not available due to the variability in system sizes, water withdrawal amounts, and beneficial uses.
(5) Assistance	None
(6) Optional	State law requires every permit application for a surface water withdrawal, and most applications for a groundwater withdrawal, to include a leak detection and repair plan. State agencies that currently have water withdrawal permits include the Department of Conservation and Recreation, the Department of Corrections, the Department of Veterans Services, and the Virginia Institute of Marine Science.

Economic Impacts on Families

(1) Describe the direct costs and benefits (as defined on page 1) to a typical family of three (average family size in Virginia according to the U. S. Census) arising from any proposed regulatory changes that would affect the costs of food, energy, housing, transportation, healthcare, and education. If families are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of direct costs.
  (b) Enter estimated dollar value of direct benefits.
(3) Indirect Costs & Benefits: Describe any indirect costs and benefits (as defined on page 1) to a typical family of three that are most likely to result from the proposed changes.
(4) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
(5) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 3: Impact on Families

Agency Note: The Groundwater Withdrawal Regulations (9VAC25-610) and the Virginia Water Protection Permit Regulation (9VAC25-210), which applies to permitted surface water withdrawals, both currently contain permit application requirements that address water conservation measures. As required by Chapter 100 of the 2021 Special Session I Acts of Assembly, the proposed amendments bolster existing requirements with enforceable specifications to implement water audit plans and leak detection and repair plans that strengthen existing water conservation requirements for all permitted users who withdraw groundwater and surface water.

DEQ anticipates that implementation of the requirement to include water audit plans and leak detection and repair plans in applications for water withdrawal permits will have a minimal economic impact on individual families. Individual private wells, such as groundwater wells for a family home, are not required to obtain a water withdrawal permit from DEQ and therefore are not affected by this proposed regulation. The regulatory change seeks to ensure availability of water sources for future uses which ensure that adequate water supply is available for Virginia families over the long term.

(1) Direct Costs & Benefits	Direct Costs: There are no direct costs to families associated with this regulatory change. Individual private wells, such as groundwater wells for a family home, are not required to obtain a water withdrawal permit from DEQ and therefore are not affected by this proposed regulation. Direct Benefits: These regulatory amendments are necessary to conform to changes in state law that are currently in effect by establishing regulatory criteria for permitted water withdrawers to follow. The regulatory change seeks to ensure availability of water sources for future uses which ensure that adequate water supply is available for Virginia families over the long term.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) None
Direct Benefits	(b) None
(3) Indirect Costs & Benefits	No indirect costs or benefits expected for families.
(4) Information Sources	None

(5) Optional	

Impacts on Small Businesses

(1) Describe the direct costs and benefits (as defined on page 1) for small businesses. For purposes of this analysis, "small business" means the same as that term is defined in § 2.2-4007.1. If small businesses are not affected, include a specific statement to that effect and a brief explanation of the rationale.
(2) Quantitative Factors:
  (a) Enter estimated dollar value of direct costs.
  (b) Enter estimated dollar value of direct benefits.
(3) Indirect Costs & Benefits: Describe the indirect benefits and costs (as defined on page 1) for small businesses that are most likely to result from the proposed changes.
(4) Alternatives: Add a qualitative discussion of any equally effective alternatives that would make the regulatory burden on small business more equitable compared to other affected business sectors, and how those alternatives were identified.
(5) Information Sources: describe the sources of information used to determine the benefits and costs, including the source of the Quantitative Factors. If dollar amounts are not available, indicate why not.
(6) Optional: Use this space to add any further information regarding the data provided in this table, including calculations, qualitative assessments, etc.

Note: If any of the above information was included in Table 1, use the same information here.

Table 4: Impact on Small Businesses

Agency Note: The Groundwater Withdrawal Regulations (9VAC25-610) and the Virginia Water Protection Permit Regulation (9VAC25-210), which applies to permitted surface water withdrawals, both currently contain permit application requirements that address water conservation measures. As required by Chapter 100 of the 2021 Special Session I Acts of Assembly, the proposed amendments bolster existing requirements with enforceable specifications to implement water audit plans and leak detection and repair plans that strengthen existing water conservation requirements for all permitted users who withdraw groundwater and surface water.

DEQ anticipates that implementation of the requirement to include water audit plans and leak detection and repair plans in applications for water withdrawal permits will have a minimal economic impact on individual small businesses. Out of approximately 370 active Groundwater Withdrawal permits, there are 165 municipal, 72 agricultural, 68 commercial, 24 industrial, 33 irrigation, 3 manufacturing, 1 nuclear power, and 4 fossil fuel plant permittees. Out of approximately 114 active Virginia Water Protection surface water withdrawal permits, there are 55 municipal, 2 agricultural, 26 commercial, 9 fossil fuel power, 8 hydropower, 4 irrigation, 1

manufacturing, 7 mining, and 2 nuclear power plant permittees. The majority of these non-municipal permittees likely are not small businesses as defined in in § 2.2-4007.1.

(1) Direct Costs & Benefits	• **As mandated by Chapter 100 of the 2021 Special Session I Acts of Assembly, the proposed regulation requires every permit application for a surface water withdrawal, and most applications for a groundwater withdrawal, to include a water auditing plan and a leak detection and repair plan.** Direct Costs: The direct costs of this regulatory change vary greatly. Some small businesses with water withdrawal permits may already track the flow of water through their facilities and conduct leak detection and repair in which case this change may not impose any new direct cost. Other small businesses may have staff who will develop and implement water audit plans and leak detection and repair plans, while still others may need to hire a consultant to assist them. Direct Benefits: Meet the legal mandate of state law. The purpose for the statutorily mandated change is to provide for the efficient use of surface water and groundwater and conserve the resources for future use. There are significant water losses by permitted water withdrawal users that lack adequate water auditing and leak detection and repair plans. Requiring enforceable water auditing and leak detection and repair plans achieves greater long-term conservation and sustainability of finite water resources. This makes more water resources available for population growth and economic development.
(2) Quantitative Factors	Estimated Dollar Amount
Direct Costs	(a) None
Direct Benefits	(b) None
(3) Indirect Costs & Benefits	No indirect costs or benefits expected for small businesses.
(4) Alternatives	None, this change is required by state law.

(5) Information Sources	None
(6) Optional	

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.

Table 5: Total Number of Requirements

Agency Note:

The Virginia Water Protection Permit Program Regulation (9VAC25-210), which applies to permitted surface water withdrawals, currently contains 4 requirements for the regulated community to provide information in applications relating to existing water conservation measures and projected demand with and without conservation measures. As mandated by Chapter 100 of 2021 Special Session I Acts of Assembly, the regulatory change to Chapter 210 provides specific enforceable requirements to include a water loss audit plan and a leak detection and repair plan which is a strengthening of the current requirements related to water conservation.

The Groundwater Withdrawal Regulations (9VAC25-610) currently contains 37 requirements for the regulated community to include a water conservation and management plan, including a water loss reduction program in permit applications. As mandated by Chapter 100 of 2021 Special Session I Acts of Assembly, the regulatory change to Chapter 610 provides specific enforceable requirements to include a water loss audit plan and a leak detection and repair plan which is a strengthening of the current requirement to include a water loss reduction program in the required water conservation and management plan.

	Number of Requirements			
Chapter number	**Initial Count**	**Additions**	**Subtractions**	**Net Change**
9VAC25-210	4	23	0	+23
9VAC25-610	37	25	3	+22

Commonwealth of Virginia

VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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Acting Secretary of Natural and Historic Resources

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Director
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MEMORANDUM

TO: State Water Control Board Members

FROM: Karen M. Doran, Clean Water Financing and Assistance Program Manager

DATE: October 21, 2022

SUBJECT: FY 2023 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 6, 2022, 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 29, 2022 was established as the deadline for receiving applications. DEQ received 69 wastewater improvement applications requesting $457,045,977 (including 15 Southwest Virginia Pilot Program construction projects), two (2) stormwater applications requesting $11,000,000, and two (2) land conservation applications requesting $27,910,000. In total, DEQ received 73 applications for $495,955,977.

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 nine (9) projects from the funding list based on project eligibility, compliance with Virginia Code, and previously established project bypass

procedures. Additionally, the Hampton Roads Sanitation District (HRSD) programmatic loan request for $100,000,000 was reduced to $50,000,000. By memorandum dated September 14, 2022, the Director of DEQ tentatively approved the list of 64 projects for a total of $307,577,537 in loan assistance from available and anticipated FY 2023 resources and authorized staff to proceed to public comment. 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 21, 2022. 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 2023. As such, we are unsure as to the amount, if any, that could be made available as principal forgiveness in FY 2023. 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 2023 Proposed Interest Rates and Loan Term Authorizations			
	Applicant	***Loan Amount***	***Rates and Loan Terms***
1	BVU Authority	$5,253,700	0%, up to 30 years
2	Town of Lebanon	$2,921,700	0%, up to 30 years
3	Town of Big Stone Gap	$11,869,198	0%, up to 30 years
4	Town of Abingdon	$9,502,000	0%, up to 30 years
5	Bland County	$810,000	0%, up to 30 years
6	Town of Rural Retreat	$430,224	0%, up to 30 years
7	Buchanan County PSA	$1,811,380	0%, up to 30 years
8	Town of Chilhowie	$1,248,531	0%, up to 30 years
9	Lee County PSA	$739,200	0%, up to 30 years
10	Town of Saltville	$1,476,000	0%, up to 30 years
11	Town of Marion	$1,300,488	0%, up to 30 years
12	Smyth County	$500,600	0%, up to 30 years
13	Tazewell County PSA	$3,520,690	0%, up to 30 years
14	Town of St. Paul	$892,300	0%, up to 30 years
15	Town of Hillsville	$1,265,000	0%, up to 30 years
16	City of Martinsville	$3,033,390	0.5%, up to 30 years
17	City of Richmond	$8,550,000	0.5%, up to 30 years
18	Buchanan County PSA	$21,185,446	0.5%, up to 25 years
19	City of Richmond	$6,150,000	0.5%, up to 30 years
20	Henry County PSA	$5,970,100	0.5%, up to 30 years
21	Town of Pennington Gap	$2,341,709	0.5%, up to 25 years
22	HRSD	$50,000,000	PR, up to 25 years
23	Washington County SA	$11,381,096	0.5%, up to 30 years
24	Henry County PSA	$1,222,000	0.5%, up to 25 years
25	Henry County PSA	$3,971,000	0.5%, up to 25 years
26	Dickenson County PSA	$1,810,094	0.5%, up to 30 years
27	City of Winchester	$14,000,000	PR, up to 30 years
28	City of Norton	$693,750	0.5%, up to 30 years
29	Wise County PSA	$1,731,728	0.5%, up to 30 years
30	Lee County PSA	$14,886,859	0.5%, up to 30 years
31	Russell County PSA	$8,130,655	0.5%, up to 30 years
32	City of Richmond	$750,000	0.5%, up to 30 years
33	Town of Front Royal	$5,437,000	PR, up to 25 years
34	Town of Marion	$611,000	0.5%, up to 25 years
35	Sussex Service Authority	$828,000	0.5%, up to 30 years
36	City of Norfolk	$13,000,000	0.5%, up to 30 years
37	City of Norton	$1,526,246	0.5%, up to 30 years
38	City of Richmond	$125,000	0.5%, up to 30 years
39	Westmoreland County	$800,000	PR, up to 25 years
40	Town of Boydton	$2,246,000	PR, up to 30 years
41	City of Richmond	$1,250,000	0.5%, up to 25 years
42	Town of Christiansburg	$9,013,000	0.5%, up to 25 years
43	Town of Pennington Gap	$922,130	0.5%, up to 30 years
44	Town of Marion	$1,050,500	0.5%, up to 30 years
45	Town of Lebanon	$1,049,400	PR, up to 30 years

FY 2023 Proposed Interest Rates and Loan Term Authorizations			
	Applicant	***Loan Amount***	***Rates and Loan Terms***
46	Town of Altavista	$5,500,000	0.5%, up to 25 years
47	Town of Big Stone Gap	$5,186,000	0.5%, up to 25 years
48	Town of Stuart	$3,665,800	0.5%, up to 30 years
49	City of Richmond	$225,000	0.5%, up to 30 years
50	City of Richmond	$1,000,000	0.5%, up to 30 years
51	Smyth County	$3,874,500	0.5%, up to 30 years
52	Town of Kilmarnock	$6,472,700	PR, up to 25 years
53	Wythe County	$1,352,415	0.5%, up to 30 years
54	Wise County PSA	$1,562,830	0.5%, up to 30 years
55	Scott County PSA	$395,793	0.5%, up to 30 years
56	Town of Pearisburg	$13,781,729	0.5%, up to 25 years
57	City of Richmond	$250,000	0.5%, up to 30 years
58	Middlesex County	$13,484,224	PR, up to 30 years
59	Middlesex County	$1,144,491	PR, up to 30 years
60	Middlesex County	$1,837,908	PR, up to 30 years
61	Blacksburg-Tech SA	$6,284,000	PR, up to 25 years
62	City of Richmond	$250,000	0.5%, up to 30 years
63	Town of Fries	$1,471,000	0.5%, up to 25 years
64	Carroll County	$2,632,033	0.5%, up to 30 years
	TOTAL	**$307,577,537**	
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 23 Virginia Clean Water Revolving Loan Fund Solicitation

FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Wastewater - Southwest Virginia Pilot Program Phase 1 Step 2 Projects				
BVU Authority	$ 5,253,700.00	BC-1568 Sewer Shed Improvements Project: The project includes rehabilitation and replacement work within the BC-1568 sewershed of BVU's system to reduce RDII entering the existing sewershed and increase available capacity in the system. By decreasing the sewershed's demand on the interceptor, there will be increased capacity downstream of the existing overflow point, reducing the likelihood of sanitary sewer overflows.	421.76	Fall 2023
Town of Lebanon	$ 2,921,700.00	Lebanon System-Wide Sewer System Improvements: The project includes CIPP liner installation within the Gypsum Avenue and Carroll Street sewersheds, the point-repair of sewer/storm drain interconnections along Fincastle Road, manhole rehabilitations throughout the existing system, as well as manhole replacements for brick manholes. The project will improve the Town's existing system in terms of reducing RDII that is currently leading to sanitary sewer overflows and exceeding permitted capacity limits at the WWTP.	419.05	Fall 2023
Town of Big Stone Gap	$ 11,869,198.00	Cadet Sewershed Improvements Project: This project will replace 75 manholes and install UV-cured CIPP liner for approximately 6,000 LF of 10-inch gravity line, 31,600 LF of 8-inch gravity line, and 1,800 LF of 6-inch gravity line. Increasing capacity and efficiency of this portion of the system will improve flow conditions for the remaining system on the way to the WWTP and will reduce sanitary sewer overflows.	416.91	Fall 2023
Town of Abingdon	$ 9,502,000.00	Town of Abingdon System-Wide Sewer Improvements Project Phase II: This project includes the rehabilitation of defective manholes, including cleaning work, CCTV inspection, and CIPP lining of approximately 12,000 linear feet of 8- to 10-inch diameter line, as well as approximately 7,000 linear feet of 8-inch pipe bursting. The project is needed to reduce RDII from entering the system, which has experienced sanitary sewer overflows.	396.84	Fall 2023
Bland County	$ 810,000.00	Sanitary Sewer Collection System Improvement Project: This project will reduce the amount of RDII that enters the sanitary sewer system by replacing manhole frames and covers, rehabilitation of defective pre-cast manholes, and rehabilitation of several pipe assets. The reduction in RDII entering the system will reduce or eliminate the SSO volumes that occur and enter Wolf Creek.	388.79	Summer 2023

VCWRLF FY23 PPL - Attachment A

FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Town of Rural Retreat	$ 430,224.00	Northern Rural Retreat Sewer System Improvements Project: This project includes CIPP lining of the existing vitrified clay pipe gravity line along Chinquapin Avenue, as well as the frame and cover replacement of various manholes within the sewer system. Repair of these manholes and lining of the existing clay line will improve Rural Retreat's sewer system by reducing RDII currently entering the system.	377.77	Summer 2023
Buchanan County PSA	$ 1,811,380.00	Buchanan County PSA Sewer Rehabilitation and Replacement Project: This project funds Phase I of the Buchanan County PSA's Sewer Rehabilitation and Replacement project, specifically the following upgrades in the Slate Creek area to address inflow and infiltration: 47 sewer lateral replacements (up to 60 linear feet), 17,162 linear feet of CCTV inspection to confirm lateral connections to the main and identifying further issues contributing to I&I, and the installation of a manhole at the wye situated in the vicinity of hospital and YMCA.	375.43	Spring 2024
Town of Chilhowie	$ 1,248,531.00	Chilhowie Sewer System Evaluation Survey Phase 2 Design and Construction: This project will provide rehabilitation measures to correct inflow and infiltration issues in the town's sanitary sewer overflows and treatment plant bypass occurrences. The project will specifically address CIPP lining/manhole rehabilitation or replacing portions of the existing collection system within the existing trenches/rights-of-way.	375.35	Spring 2023
Lee County PSA	$ 739,200.00	Dryden & Rosehill Sewershed Improvements: This project will rehabilitate the southwestern portion of the Dryden sewer system, downstream of Dryden PS and force main portion where the manholes have seen increased deterioration from exposure to the septic fumes related to the pumped sewage. The Rose Hill sewershed portion of the proposed project rehabilitates 16 vertical feet of manhole walls, replacement of manhole frames and covers, cleanout repairs, and a stormdrain/sewer disconnection. These projects were recommended in Lee County PSA's 2022 SSES funded through the SW Pilot Step 1.	351.75	Summer 2023
Town of Saltville	$ 1,476,000.00	Saltville Government Road Sewershed Improvements Project: This project rehabilitates the Government Road sewershed of the Town's sewer system. It will entail CIPP lining of existing asbestos cement pipe, and locating, raising, and rehabilitating various manholes, in addition to the installation of a new sewer line to the Cedar Branch Road area.	350.35	Fall 2023

VCWRLF FY23 PPL - Attachment A

FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Town of Marion	$ 1,300,488.00	Marion Rt 16 Sewershed Improvements: This project will replace existing 8-inch gravity sewer line and manholes with 10-inch or 12-inch gravity sewer and new manholes with rims and covers throughout the portion of Marion's southwestern system along Route 16. These improvements will reduce RDII and increase capacity to better receive and convey flows from the Smyth County interconnection. The project also includes further field investigations for a residential area to determine point sources for recorded RDII.	350.35	Fall 2023
Smyth County	$ 500,600.00	Staley Creek Sewershed Sanitary Sewer Evaluation: This project will complete projects from the County's SSES completed through the SW Pilot Step 1 process. In particular, it will fund emergency repairs, all priority 1 projects, some priority 2 projects, and the stream relocation and bank armoring projects in priority 3.	350.35	Winter 2023
Tazewell County PSA	$ 3,520,690.00	Falls Mills Pump Station Rehabilitation, Force Main Replacement, Manhole Rehabilitation and Wetwell Rehabilitation Project: This project addresses areas of the Falls Mills Sewer System in need of rehabilitation and replacement. A SSES report identified several portions of the system which continue to peak influent at the Falls Mills WWTP, which discharges to the Bluestone River (on Virginia's 2020 303(d) Impaired Waters list. This project includes Phase I improvements recommended in the SSES report, including rehabilitation of three pump stations, the WWTP wetwell, and 200 manholes, and replacement of 3,120 linear feet of force main.	348.99	Spring 2024
Town of St. Paul	$ 892,300.00	St. Paul Sewer System Improvements Project: This project will install CIPP liner in 3,370 LF of existing 8-inch gravity sewer line, rehabilitate 421 vertical feet of manhole walls, replace 6 manhole frames and covers, and replace two manholes. These improvements will reduce rainfall derived infiltration and inflow (RDII) from entering the system.	329.05	Fall 2023
Town of Hillsville	$ 1,265,000.00	Town of Hillsville Phase 1 Sewer Rehab Project: This project finances the rehabilitation of large portions of the Hillsville sanitary sewer system that contribute to peak influent at the WWTP due to inflow and infiltration. The average daily influent for the Town's WWTP is approximately 429,000 gpd over 2019 and 2020. The peak influent over that time averaged approximately 1,140,000 gpd and reached up to 1,875,000 gpd. Peak influent flows are expected to reduce by 10-20% as a result of the project.	304.71	Fall 2023

VCWRLF FY23 PPL - Attachment A

FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
SWVAPP Phase 1 Step 2 Projects Subtotal:	$ 43,541,011.00			
Wastewater Projects				
City of Martinsville	$ 3,033,390.00	Doe Run, Smith Lake Road and Martinsville Industrial Park Sewer Project: This project will rehabilitate sections of these three sewer line collector systems. All three have evidence of surface deterioration, corrosion in ductile iron sections, and cracking in some clay sections, which if not addressed will result in increasing I&I and manhole overflows. Therefore this project will entail upgrades such as point repairs, removal of roots and debris, line replacement, and CIPP lining. Manhole work will include root cutting, cleaning, and epoxy resurfacing.	475.72	Spring 2023
City of Richmond	$ 8,550,000.00	CSO 4 & Chimborazo Phase 3: This project will replace the CSO 4 regulator with a new one further upstream to reduce CSO volumes by an average of approximately 5.1 MG per year. This project is listed in the City's CSO Interim Plan.	456.62	Fall 2022
Buchanan County PSA	$ 21,185,446.00	Buchanan County PSA WWTP Upgrades: This project is intended to address consent orders for raw sewage discharge from the existing wastewater collection system due to an overwhelmed influent pump station at the Big Rock/Conaway WWTP. Loan funding will finance the replacement of the Big Rock/Conaway WWTP with a new moving bed biological reactor and ballasted sedimentation WWTP, increasing its capacity in order to address collection system overflows.	430.43	Winter 2024
City of Richmond	$ 6,150,000.00	CSO Interim Plan Projects - Regulators 19A, 19B, 20, 21, 24, 39 &40 #1: This project entails upgrades to and replacements for seven combined sewer regulators. The projects combined will reduce CSO volumes by an average of approximately 57.3 MG per year. All of these projects are listed in the City's CSO Interim Plan.	426.62	Winter 2022
Henry County PSA	$ 5,970,100.00	Villa Heights Sewer Improvements Project: This project will replace sewer lines in the Villa Heights subdivision, where existing terra cotta collection lines serving approximately 260 residential customers are experiencing pipe blockages, overflows, and related issues. Construction is anticipated to include approximately 18,000 linear feet of 8" gravity sewer line and manholes to replace the existing system.	424.56	Winter 2024

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FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Town of Pennington Gap	$ 2,341,709.00	Town of Pennington Gap Wastewater Treatment Plant Improvements: This project focuses on replacement of pump station facilities and the installation of a pump station emergency generator to convey wastewater during power outages. This project also includes the following WWTP upgrades to: grit removal equipment, Influent flow meters, oxidation ditch No. 2 drive with VFD, new oxidation ditch shaft, clarifier weir leveling & bridge caulking, sludge return pump station, digester No. 2 aeration system, blower building roof and vent, sludge dewatering press and feed pumps, sulfur dioxide system, chlorine system, plant drain pump and upgraded laboratory equipment.	421.75	Fall 2023
HRSD	$ 100,000,000.00	Programmatic Loan: 37 projects within HRSD's CIP. Includes the James River and Nansemond River SWIFT facilities.	412.59	Winter 2023
Washington County SA	$ 11,381,096.00	Lee Highway Corridor Sewer Improvements Project: This project will construct four new pump stations in order to redirect sewer flows from the BVUA sewer system to the Town of Abingdon Water Reclamation Plant for treatment. The project will also extend sewer service to approximately 140 residents currently on septic systems.	406.84	Spring 2023
Henry County PSA	$ 1,222,000.00	Bassett-Walker Lagoon Closure Project: This project will close the Bassett-Walker Wastewater Lagoon, which has not been in operation since the early 1990s. The project is necessary to prevent it from collecting leaves and rainwater, and protect the Smith River and Roanoke River Basin from any unintended discharges.	399.56	Summer 2023
Henry County PSA	$ 3,971,000.00	Piedmont Estates Lagoon Closure Project: This project will close the Piedmont Estates Wastewater Lagoon and replace it with a wastewater pump station and force main connecting to existing public gravity sewer and treated by regional wastewater treatment facilities. The project is needed to support regionalization and consolidation of wastewater treatment and increase protections for the waterway the lagoon discharges to, and, ultimately, the Roanoke River Basin.	399.56	Summer 2023
Dickenson County PSA	$ 1,810,094.00	Haysi Sewer Replacement Project: This project consists of replacement of 3,119 linear feet of 10-inch ductile iron pipe with PVC pipe and 13 manholes from the intersection of Route 63 and 80 to the Haysi Sewage Treatment Plant that has deteriorated causing backup into nearby manholes resulting in overflows into the Russell Fork River and infiltration into the treatment plant.	396.93	Spring 2024

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FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
City of Winchester	$ 14,000,000.00	City of Winchester Sanitary Sewer Projects: This project will fund three projects: pump station replacements (Capitol and Superior), sewer main and manhole rehabilitation, and interceptor main replacement. All three projects are necessary to remedying sewer overflows caused by high volumes of I&I. Due to these overflows, DEQ has issued the City a Consent Order that is still in effect requiring the City to construct system improvements.	392.87	Summer 2023
City of Norton	$ 693,750.00	Hawthorne Drive Utility Improvements Projects: This project will replace approximately 1,000 linear feet of 12" collector sewer line that is buried up to 25 feet deep in several locations along Hawthorne Drive. The replacement line will be constructed at an appropriate depth to allow the City to properly maintain this section of line while ensuring continuous sewer service to the area.	392.06	Spring 2023
Wise County PSA	$ 1,731,728.00	Upper Guest River Sewer Extension Project - Phase I: This project is Phase 1 of 3 in the Upper Guest River Sewer Extension Project, which will provide public sewer service to approximately 167 households (estimated population of 395 people), currently relying on septic systems, alternative discharging system, and possibly straight pipes to adjacent streams. Phase I will install approximately 5,300 linear feet of 8-inch gravity sewer, 700 linear feet of 4-inch sewer service line, 28 manholes, 17 sewer connections, and one connection to an existing WWTP (currently serving 24 households).	391.91	Fall 2023
Lee County PSA	$ 14,886,859.00	Cross Creek to Hickory Flats Interceptor Project: This project will provide new sewer service to the Woodway Dot Community of Lee County, which is currently relying on private septic systems and in some cases, straight pipes discharges to caves and nearby waterways. The new sewer line will connect to the Hickory Flats WWTP, and also interconnect all of the Lee County PSA system.	391.75	Spring 2024
Russell County PSA	$ 8,130,655.00	Castlewood Sewer Project Phase II (Mew Road): This project will extend public sewer service to the west along Mew Road (Route 65) and include 1 pump station and four grinder stations with approximately 19,000 linear feet of gravity sewer and 6,500 linear feet of force main to provide sanitary sewer to 145 residential connections.	389.05	Spring 2024
City of Richmond	$ 750,000.00	Hampton PS Motor Control Center (MCC) Replacement Project: This project will replace a 1960's MCC due to extreme difficulty finding replacement parts and the age of the equipment.	381.62	Spring 2023

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FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Town of Front Royal	$ 5,437,000.00	Centrifuge Conversion Project: This project will convert the Town's dewatering operations to a centrifuge dewatering operation. This project will enable the Town to reduce operational costs as well as ensure that solids can be removed efficiently from the facility. The project will also increase the reliability of the dewatering operations which will enable the Town to maintain permit compliance.	377.74	Summer 2023
Town of Marion	$ 611,000.00	Wastewater Treatment Plant Improvements Phase 8: This project includes repairs to various equipment and components of the plant. The original equipment is over 29 years in age and needs repairing to keep it in operation. The clarifier brushes represent new equipment that is needed to mitigate algae buildup that interferes with the UV disinfection system.	375.35	Winter 2023
Coalfield Water Development Fund	$ 20,000,000.00	Expanding Wastewater Grant Funding for Southwest Virginia: Establish a wastewater endowment employed as a project accelerator to overcome grant shortfalls by providing annual, sustainable, "non-federal" grant funding for construction of wastewater projects.	368.35	Fall 2023
Sussex Service Authority	$ 828,000.00	Bank Street Pump Station Upgrade Project: This project will utilize the existing wet well at the Bank Street pump station and install a new pump vault, two new pumps and associated piping and valve in order to restore that station to normal operation. The pump station has been running in bypass mode since January 2020.	366.14	Summer 2023
City of Norfolk	$ 13,000,000.00	Norfolk Department of Utilities Wastewater Projects: This project involves 18 wastewater improvement projects, including pump station replacements and gravity sewer main line replacements.	362.85	Winter 2024
City of Norton	$ 1,526,246.00	10th Street Sanitary Sewer Replacement Project: This project is for the 10th Street Sanitary Sewer System Improvements. It entails replacement of existing sewer lines, manholes and laterals, the installation of cleanouts for the laterals, and the installation of a portable emergency generator with an upgrade of the electrical service at the existing Josephine Pump Station. These improvements will provide a reliable sewer system, reduce the potential for public contact with wastewater and reduce the amount of I/I entering the City's sewer system.	362.06	Spring 2023
Town of Glasgow	$ 5,020,000.00	Town of Glasgow WWTP Rehabilitation Project: This project will rehabilitate the Town's wastewater treatment plant, which has several assets which are over their service life. The replacement of these components in the next few years is critical for the facility to continue to remain in compliance with its permit.	360.99	Summer 2024

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FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
City of Richmond	$ 125,000.00	Dock Street Pump Station Electrical Upgrades: This project will upgrade and replace the controls for the Dock Street Pump Station due to the age of the equipment.	356.62	Summer 2023
Westmoreland County	$ 800,000.00	Coles Point Sludge Drying Bed Project: This project will construct a second section of drying beds at the Coles Point WWTP. Since 2005, the plant's average flows have doubled to around 50,000 gpd. The plant is able to treat the sewer flows adequately, but is struggling to dry out sludge in a timely fashion. A second section of drying beds will help meet the increased flows.	353.96	Winter 2022
Town of Boydton	$ 2,246,000.00	Town of Boydton Sewer Rehabilitation Project: This project will replace approximately 2,200 linear feet of reinforced concrete pipe that is over 90 years old. An additional 11,500 linear feet will be slip lined, 7 manholes replaced, and 40 rehabilitated. These assets are at the end of their projected life and if not addressed could result in untreated wastewater being released into local waterways. This project will address these deficiencies and address I&I flows in order to increase the sewer capacity and decrease the WWTP's power consumption.	353.66	Summer 2023
City of Richmond	$ 1,250,000.00	Shockoe Retention Basin Aeration Replacement: This project will replace the mixing and aeration system at the Shockoe Retention Basin. Increased capacity at the WWTP has decreased basin detention times allowing for the aeration and mixing system to be replaced with a less complex system. This project will also reduce electrical costs the WWTP.	351.62	Summer 2023
Town of Christiansburg	$ 9,013,000.00	Wastewater Treatment Facility - Biosolids Upgrades Project: This project has three components: Centrifuge Dewatering Conversion, Electrical Updates, and Waterline. These projects are necessary to make the WWTP more reliable, efficient, and safe.	348.44	Summer 2023
Town of Pennington Gap	$ 922,130.00	Wallen Creek Sewerline Stream Crossing Improvements Project: This project will replace approximately 1,100 linear feet of gravity sewer line and 10 manholes. The project will lower the existing gravity line to eliminate an aerial stream crossing. As a result, additional modifications at the WWTP pump station and wet well are necessary are included in the project.	346.75	Winter 2024
Town of Marion	$ 1,050,500.00	Marion Sewer Collector System Improvements Phase 8: This project will replace existing terracotta sewer lines on five streets where inflow and infiltration are resulting in high flows at the WWTP. The project will improve WWTP efficiency with the sewer line replacements and reductions in I&I sources, thereby improving water quality in the Middle Fork Holston River.	345.35	Spring 2023

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FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Town of Lebanon	$ 1,049,400.00	Lebanon Pump Station Improvements: The project includes improvements to two sewer system pump stations within the system, including replacement of Industrial Park pump station and Big Cedar pump station. The project will include the installation of emergency generators at both locations.	344.05	Fall 2023
Town of Altavista	$ 5,500,000.00	WWTP Pump Station Improvements: This project involves aeration, hydraulic, and wastewater treatment plant pump station improvements. All aeration equipment and tanks need replacement and structural rehabilitation. Both plant pump stations need equipment and structural replacement and rehabilitation.	341.11	Winter 2024
Town of Blackstone	$ 8,767,440.00	Town of Blackstone Sewage Pump Facilities & Hurricane Creek Interceptor Conveyance System Improvements Project: This project will rehabilitate several parts of the sanitary sewer system, including pump station and force main repairs, I&I correction, and replacement of terra cotta sewer lines. The size of the lines that are being replaced will be increased due to continued growth in the drainage area.	339.77	Summer 2024
Town of Buchanan	$ 5,681,000.00	Town of Buchanan Wastewater Treatment Facility Rehabilitation Project: This project will rehabilitate the aging assets of the Town's wastewater treatment facility. The assets identified for rehabilitation are over their service life. The rehabilitation is necessary to update the system components to maintain permit compliance.	338.44	Summer 2024
Town of Big Stone Gap	$ 5,186,000.00	Wastewater Treatment Plant Improvements Project: This project entails various improvements necessary to the WWTP including, replacing sludge dewatering press and feed pumps, improvements to oxidation ditch channel and secondary clarifiers, and flow equalization basin modifications.	336.91	Spring 2024
Town of Stuart	$ 3,665,800.00	Glenwood Terrace/Ashby Drive Sewer Extensions Project: This project will extend gravity sewer line service to two residential areas within the Town's limits that aren't presently served by public sewer. Construction will include approximately 19,400 linear feet of sewer lines and related improvements to serve approximately 74 residential homes.	328.87	Summer 2023
City of Richmond	$ 225,000.00	Brown Regulator Mechanism Replacements Project: This project will replace Brown & Brown regulator mechanisms in 6 combined sewer regulators not otherwise being replaced as part of the Interim Plan projects. Replacement will consist of installation of adjustable orifice plates.	326.62	Summer 2023

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FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
City of Richmond	$ 1,000,000.00	Sewer System Generators: This project will install generators at four sewer pump stations and the Shockoe Retention Basin. Currently only one of the four pump stations has backup power. Generator backup is especially important at Shockoe Retention Basin as it will be the central control hub for a CSO SCADA system.	326.62	Summer 2023
Smyth County	$ 3,874,500.00	Groseclose Sewer Project: This project entails sewer system improvements to provide public sewer service to the Groseclose area of Smyth County, generally including the Route 11 corridor. The project will construct approximately 9,000 linear feet of 12" and smaller gravity sewer line, 9,200 linear feet of 6" force main line, and one sewage pump station and related improvements. Making public sewer service available will enable 10 +/- existing businesses to expand their operations and also serve approximately 10 +/- existing homes.	325.35	Summer 2023
Town of Kilmarnock	$ 6,472,700.00	Town of Kilmarnock Wastewater Treatment Plant Improvements Project: This project will replace equipment that is reaching or past its useful life and increase operator control to increase efficiency and decrease chemical usage. These updates will ensure that the operators can reliably meet plant effluent requirements as the influent flow rate continues to increase.	324.27	Winter 2023
Wythe County	$ 1,352,415.00	Austinville Wastewater Collection and Treatment Systems Improvements: This project will replace/rehabilitate approximately 4,170 linear feet of existing gravity sewer and 17 manholes.	314.77	Winter 2023
Wise County PSA	$ 1,562,830.00	Appalachia Elementary School WWTP Forcemain Project: This project will decommission the Appalachia Elementary School WWTP and construct a pump station and force main which will deliver flow from the school to the Town of Appalachia's wastewater system and ultimately to the Big Stone Gap WWTP for treatment. The school's existing WWTP is 40 years old and experiencing severe deterioration. The WWTP ceased operations in 2017 when the school closed, but the PSA has maintained the facility as a pump and haul system as there is one adjacent residence still tied to the system. Wise County has re-opened the building as an extension of a local community college system to offer trade training classes.	311.91	Fall 2023
Scott County PSA	$ 395,793.00	Pump Stations Improvements Project: This project entails the rehabilitation of three grinder pump stations in the system. These pump stations have reached the end of their useful life and are in desperate need of renovations to prevent overflows as a result of pump station failures.	311.71	Summer 2023

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FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Town of Pearisburg	$ 13,781,729.00	Town of Pearisburg WWTP Upgrades: This projects includes several improvements to renovate and increase the capacity of the Mill Road Facility and the Town's WWTP. The project is needed to address the health (safety), sanitation, security, aging infrastructure, and reasonable growth needs. The majority of the needs relate to aging infrastructure and reasonable growth.	305.28	Spring 2024
City of Richmond	$ 250,000.00	Shockoe Retention Basin Elevator Upgrades: This project will upgrade/replace the elevator inside the Shockoe Retention Basin control building. The elevator's existing controls are outdated and the emergency phone is not functioning.	301.62	Summer 2023
Middlesex County	$ 13,484,224.00	Wastewater Collection System - Deltaville Service Area: This project will construct a new sewer system in Deltaville needed to support the Middlesex sewer system extension to eliminate residential septic tanks and drain fields. The wastewater collected by the new system will be transported by HRSD infrastructure to the York River Treatment Plant for treatment and discharge.	294.84	Summer 2023
Middlesex County	$ 1,144,491.00	Hartfield - Low Pressure Sewer (LPS) Collection System: This project will install a new sewer system in the Hartfield area of Middlesex County in order to eliminate residential septic tanks and drainfields.	294.84	Summer 2023
Middlesex County	$ 1,837,908.00	Saluda Low Pressure Sewer Collection System: This project will install a new sewer system in the Saluda service area to eliminate residential septic tanks and drainfields.	294.84	Summer 2023
Blacksburg-Tech SA	$ 6,284,000.00	Lower Stroubles Creek Wastewater Treatment Plant, Capital Improvements Project: This project will replace aging assets at the WWTP that are critical to ensure smooth operations and keep the facility in permit compliance. Specific improvements include: grit system parts replacements, flights and drive gear replacement for primary clarifiers, replacement of sluice gates seals, SCADA integration, and re-grouting of manholes.	280.44	Spring 2024
Prince William County	$ 60,000,000.00	Advanced Water Reclamation Facility (AWRF) Rehabilitation Project: This project will refurbish and provide resiliency to the AWRF, which includes 15 work components and is a continuation of their FY22 project. During the design phase, the plant headworks has been identified as a hydraulic restriction and there is additional work necessary to add to the project in order to address the deficiency.	263.94	Fall 2023

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FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
City of Richmond	$ 250,000.00	Shockoe Retention Basin Roof Rehabilitation Project: This project will repair concrete seam seals that have pulled loose and caused concrete sections to dislodge inside. Repair work will consist of resealing joints from the interior and exterior, as well as concrete repair.	251.62	Spring 2023
Town of Fries	$ 1,471,000.00	Town of Fries WWTP Improvements Project: This project will rehabilitate components at the WWTP in need of major improvements, including the influent pump station, aeration basins, secondary clarifiers, and chlorination system. The project will also rehabilitate the Fender's Cove pump station on the Town's collection system. These facilities have not been upgraded or improved since the plant was constructed in 1987.	251.43	Summer 2023
Carroll County	$ 2,632,033.00	Exit 1 Wastewater System Project: The wastewater treatment plant improvements project is a regional project between the Carroll County Public Service Authority, the North Carolina Department of Transportation, and the Virginia Department of Transportation to close three separate existing WWTPs and convey sewage to the City of Mount Airy for treatment.	247.72	Summer 2023
Wastewater Projects Subtotal:	$ 413,504,966.00			

Stormwater Projects				
City of Norfolk - DPW	$ 9,000,000.00	St. Paul's Blue-Greenway Phase II: 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.	537.23	Spring 2024
City of Norfolk - DPW	$ 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.	512.23	Spring 2024

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FY 2023 Applicants	Amount Requested	Project Description	Points	Projected Project Start
Stormwater Projects Subtotal:	$ 11,000,000.00			
Land Conservation Projects				
Capital Region Land Conservancy	$ 11,500,000.00	Acquisition of Mayo Island Project: This project would finance the acquisition of 14.5 acre Mayo Island in the City of Richmond. The property is located within the FEMA Floodway and privately owned. Acquisition of the property will facilitate restoration of the property to nature-based green infrastructure by removing 8-acres of asphalt and turning the property into a public park.	430	Fall 2023
Enduring Ecosystems	$ 16,410,000.00	Land Protection in Piney Run Watershed Project: This project will acquire up to 728.5 acres and hold them for transfer for Loudoun County as a County Park and/or to the VA Department of Conservation and Recreation for addition to the undeveloped Sweet Run State Park; restore stream channels and riparian habitat, and test the modified NASA water treatment system to remove nitrogen and phosphorus from the water in five impoundments on the property.	220	Summer 2024
Land Conservation Projects Subtotal:	$ 27,910,000.00			
Total Requested	**$ 495,955,977.00**			

Unfunded projects are shaded grey