

**TENTATIVE AGENDA
STATE WATER CONTROL BOARD MEETING
THURSDAY, SEPTEMBER 20, 2018**

**HOUSE COMMITTEE ROOM, FIRST FLOOR
POCAHONTAS BUILDING
900 EAST MAIN STREET
RICHMOND, VIRGINIA**

CONVENE – 9:30 A.M.

	TAB
I. Minutes (August 21, 2018)	A
II. Regulation – Final	
Groundwater Withdrawal Regulations (9VAC25-610) and Fees for Permits and Certificates (9VAC25-20) - Chapter 424 of the 2018 Acts of Assembly	Porterfield B
Groundwater Withdrawal Regulations (9VAC25-610) - Chapter 427 of the 2018 Acts of Assembly	Kudlas C
Water Withdrawal Reporting (9VAC25-200) Amendments	Porterfield D
Stormwater Reg - 2018 Legislation	Robb E
Virginia Water Protection Program Regulations (9VAC25-210, 9VAC25-670 and 9VAC25-690) - 2018 Legislation	Harris F
Virginia Pollutant Discharge Elimination System Permit Regulation (9VAC25-31)	Adamson G
General VPDES Permit for Concrete Products Facilities (9VAC25-193)	Daub H
III. Regulations - Proposed	
General VPDES Permit for Discharges of Stormwater from Construction Activities (9VAC25-880)	Robb I
General VPDES Permit for Nonmetallic Mineral Mining (9VAC25-190)	Sherman J
General VPDES Permit for Discharges of Stormwater Associated with Industrial Activity	Richardson K
Water Quality Standards (9VAC25-260) - Chlorophyll a	Kennedy/ Robertson L
IV. Enforcement Program Overview	Williams
V. Significant Noncompliance Report	Sadler M
VI. Consent Special Orders - VPDES	Sadler N
Crop Production Services, Inc. (Botetourt Co.) King George County Service Authority (King George Co.)	
VII. Consent Special Orders - VWP	Crowell O
Cambria 2014 LLC (Chesterfield Co.) Harbor Station Communities, LLC for the Potomac Shores Development Project (Prince William Co.)	
VIII. Consent Special Orders - Groundwater	Crowell P
Poultry Houses (Eastern Shore) (Groundwater Withdrawals)	
IX. Other Business	
Division Director's Report Future Meetings (December 13)	Schneider/Davenport

XI. Public Forum (time for this item not to exceed 45 minutes)

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 arising as to the latest status of the agenda should be directed to the staff contact listed below.

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 actions and for case decisions. These procedures establish the times for the public to provide appropriate comment to the Board for its 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 of Environmental Quality 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 (issuance and amendment of permits), the Board adopts public participation procedures in the individual regulations which establish the permit programs. As a general rule, public comment is accepted on a draft permit for a period of 30 days. If a public hearing is held, there is an additional comment period, usually 45 days, during which the public hearing is held.

In light of these established procedures, the Board accepts public comment on regulatory actions and case decisions, 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. Persons are allowed up to 3 minutes to address the Board on the emergency regulation under consideration.

Case Decisions: Comments on pending case decisions at Board meetings are accepted only when the staff initially presents the pending case decision to the Board for final action. At that time the Board will allow up to 5 minutes for the applicant/owner to make his complete presentation on the pending decision, unless the applicant/owner objects to specific conditions of the decision. In that case, the applicant/owner will be allowed up to 15 minutes to make his complete presentation. The Board will then allow others who commented during the public comment period (i.e., those who commented at the public hearing or during the public comment period) up to 3 minutes to respond to the summary of the prior public comment period presented to the Board. No public comment is allowed on case decisions when a FORMAL HEARING is being held.

Pooling Minutes: 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 will not be accepted at the meeting. The Board expects comments and information on a regulatory action or pending case decision 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 of Environmental Quality (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. In the case of a regulatory action, 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, pending regulatory actions or pending case decisions. Those 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.

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.

STAFF CONTACT: Cindy M. Berndt, Director, Regulatory Affairs, Department of Environmental Quality, 1111 East Main Street, Suite 1400, P.O. Box 1105, Richmond, Virginia 23218, phone (804) 698-4378; e-mail: cindy.berndt@deq.virginia.gov.

Final Exempt Action: Amendment to change groundwater withdrawal permit term and permit fee in response to Chapter 424 of the 2018 Acts of Assembly: At the next meeting of the State Water Control Board, the Department will request the Board adopt final amendments to the following regulations: Groundwater Withdrawal Regulations (9VAC25-610) and Fees for Permits and Certificates (9VAC25-20). The regulatory amendments are exempt from the state administrative procedures for adoption of regulations because they are necessary to conform to Virginia statutory law. (§ 2.2-4006 of the Code of Virginia) These changes are being made in response to Chapter 424 of the 2018 Acts of Assembly. The amendments change the groundwater withdrawal permit term from a maximum of 10 years to a maximum of 15 years and change the permit application fees for groundwater withdrawal permits to \$9,000 effective January 1, 2019.

Final Exempt Action: Amendment to add a new section to implement Chapter 427 of the 2018 Acts of Assembly: At the next meeting of the State Water Control Board (Board), the Department will request the Board adopt final amendments to the Groundwater Withdrawal Regulations (9VAC25-610). The regulatory amendments are exempt from the state administrative procedures for adoption of regulations because they are necessary to conform to Virginia statutory law. These changes are being made in response to Chapter 427 of the 2018 Acts of Assembly. This amendment adds a new section requiring a technical evaluation of aquifers underlying subdivisions of 30 or more lots in a designated Groundwater Management Area. The technical evaluation consists of an analysis of hydrogeologic data collected at the site that is input into a groundwater model to determine the ability of the aquifer to provide the desired amount of water without pulling the water level below a predetermined level or negatively impacting existing withdrawers. The technical evaluation will recommend to the developer the aquifer or aquifers that achieve this goal. A mitigation plan is required if the developer chooses not to abide by the recommendation. A fee, not to exceed \$5000, will be charged to recover the cost of preparing the technical evaluation.

Request to Adopt A Final Exempt Amendment to the Water Withdrawal Reporting regulation (9VAC25-200): The staff will bring to the State Water Control Board (Board) at the next meeting, a request to adopt a final amendment to the Water Withdrawal Reporting regulation (9VAC25-200 et seq.) to correct the citation of a referenced regulation. This regulatory amendment will be processed using the final exempt regulatory process.

Stormwater Management Regulations (9VAC25-870) Amendments: Staff is proposing amendments to the regulation to reflect the changes made to the Code of Virginia by the General Assembly through Chapters 154, 155, and 630 of the 2018 Acts of Assembly. Chapter 154 (House Bill 1307) authorizes any rural Tidewater locality, as defined in the Stormwater Management Act, to adopt a tiered approach based on the percentage of impervious cover in the watershed to manage water quantity for land-disturbing activities that disturb an area of 2,500 square feet or more but less than one acre to comply with the water quantity technical criteria in § 62.1-44.15:27 of the Stormwater Management Act and attendant regulations.

Chapter 155 (House Bill 1308) authorizes for land-disturbing activities that disturb 2,500 square feet or more but less than one acre of land that a rural Tidewater locality may 1) require a licensed professional retained by the applicant to submit a set of plans and supporting calculations that bear a certification and are signed and sealed by the licensed professional; and 2) accept such plans in satisfaction of the local plan review requirements.

Chapter 630 (Senate Bill 741) requires a VSMP authority to recommend that the Department of Environmental Quality terminate coverage under a General Permit for Discharges of Stormwater from Construction Activities within 60 days of receiving a complete notice of termination from the operator of the construction activity. The bill 1) provides that such permit coverage shall be deemed terminated 90 days after the receipt by the VSMP authority of a complete notice of termination, and 2) requires any VSMP authority receiving incomplete notice to inform the operator within a reasonable time and provide a detailed list of the missing elements.

The Department is proposing to revise existing language in the VSMP regulation (9 VAC 25-870) to address these new provisions of the Stormwater Management Act and create a new section in the regulation specific to “*Rural Tidewater Localities*” to incorporate Chapters 154 and 155 of the 2018 Acts of the Assembly.

Virginia Water Protection Program Amendments Final Exempt Action - Amendment 2018 Acts of Assembly Chapter 636 and 114: This regulatory amendment to the Virginia Water Protection Permit Program Regulation, 9VAC25-210, and its general permits under 9VAC25-670 and 9VAC25-690, is presented to the Board for your consideration as final regulation. During the 2018 General Assembly, changes were made to the State Water Control Law (Chapter 3.1 of Title 62.1 of the Code of Virginia) regarding the Virginia Water Protection (VWP) program. Many of these changes were for the construction of any natural gas transmission pipeline greater than 36 inches inside diameter pursuant to a certificate of public convenience and necessity under § 7c of the federal Natural Gas Act (15 U.S.C. § 717f(c)). This final exempt regulatory action will amend the State Water Control Board’s Chapters 210, 670 and 690 in order to incorporate the changes to state law made by Chapters 636 and 114 of the 2018 Virginia Acts of Assembly. The amendment is exempt from the Administrative Process Act (APA) as it is necessary to conform to the changes in Virginia statutory law (§2.2-4006.A.4.a). The conforming changes made include: (i) adding the requirement that issuance of both a VWP Permit and an additional water quality certification for upland conditions together constitute the §401 certification for construction of certain natural gas pipelines; (ii) adding requirements for an individual VWP Permit for construction of certain natural gas pipelines; (iii) adding a permit exclusion for impacts to a stormwater management facility on dry land; and, (iv) adding a limitation to the Board’s authority for issuance of VWP general permits.

VPDES Permit Regulation 9VAC25-31, Final Exempt Action: The current VPDES Permit Regulation must be amended to incorporate 2018 legislation of the General Assembly which amended and reenacted § 62.1-44.16 of the Code of Virginia, relating to discharge of industrial wastes; notice of application. The staff is bringing this final regulation before the Board to request adoption. The amendments to the existing VPDES permit regulation authorizes, if the permit applicant so elects, the newspaper publication of an abbreviated public notice for minor industrial VPDES permits, containing a link to the full public notice on the Department of Environmental Quality’s website. Current law requires the publication of a full public notice in a newspaper once a week for two successive weeks for all major and minor permitted facilities. The cost of the newspaper public notices is paid for by the owner of the permitted facility.

VPDES General Permit Regulation for Concrete Products Facilities 9VAC25-193: The current VPDES Concrete Facilities General Permit will expire on September 30, 2018 and the regulation establishing this general permit is being amended to reissue another five-year permit. The staff is bringing this final regulation before the Board to request adoption. This regulation took into consideration the recommendations of a technical advisory committee (TAC) formed for this regulatory action. The Board's authorization of the proposal was received at the April 12, 2018 meeting. A Notice of Public Comment Period (NOPC) was held

May 14, 2018 to July 13, 2018 with a public hearing on June 14, 2018. One person attended the public hearing but did not provide comment. Public comments were received from Vulcan Construction Materials, Inc., Deyo and Associates, LLC and Jay Lipscomb, Branscome, Inc. Substantive changes to the existing regulation are:

- Moving the effective and expiration dates ahead because permit coverage will be administratively continued past the current expiration date;
- Requiring Municipal Separate Storm Sewer owner notification with the registration statement;
- Requiring State Corporation Commission identification number to attain the proper legal owner name of the company for permitting and enforcement purposes;
- Removing the limits and requirements for noncontact cooling water as this industry does not use these systems;
- Clarifying that any waste concrete and any dredged solids from the settling basins are two different types of waste and any associated wastewater or stormwater must be collected for recycle or treated prior to discharge as this was always the intent;
- Clarifying that the O&M manual requirements for wastewater treatment process units do not apply to facilities that do not operate such units in response to public comment;
- Removing the one foot freeboard log reporting requirement for the settling basins in response to public comment;
- Requiring reports per Part III H of an unusual or extraordinary discharge for facilities designed to operate as ‘no discharge’ when or if they discharge during 25-year, 24-hour storm events and reporting of unauthorized discharge per Part III G if a discharge occurs outside of 25-year, 24-hour storm event. This provides some type of notification for discharge since DMRs are not required for these systems. The same requirement is in the non-metallic mineral mining permit since that industry also often operates in a no discharge mode;
- Adding that dust suppression spraying shall not occur during measureable rain events as it is unnecessary and more likely to result in a discharge from the site;
- Adding a requirement to conduct an annual routine facility inspection at inactive sites in accordance with the EPA MSGP;
- Removing sampling waivers for benchmark monitoring as it was generally agreed upon in the TAC that one annual stormwater sample can easily be collected during a calendar year with proper planning. The sampling waivers for quarterly visual examinations were moved to the next section. Deleting this waiver also removes the requirement for a substitute sample the following period;
- Clarifying that when visual monitoring indicates stormwater pollution, stormwater controls must be updated. This follow-up for corrective action was missing from this requirement;
- Removing the requirement to collect and treat pavement wash water because it is an allowable nonstormwater discharge. However, a requirement was added to the allowable nonstormwater discharges that pavement wash waters shall be managed to prevent the discharge of pollutants to control solids discharges and deposition off site;
- Added documentation of routine facility inspections as this was missing from this requirement;
- Removing the requirement for a signed certification for routine facility inspections;
- Adding a waiver for routine facility inspections for facilities that maintain an active Virginia Environmental Excellence Program E3/E4 status to be consistent with the VPDES Industrial Stormwater General Permit;
- Removing comprehensive annual inspections to correspond with the EPA MSGP;
- Moving the nonstormwater SWPPP documentation requirements into the SWPPP subsection;
- Where appropriate, changing language to match the EPA MSGP for Stormwater Discharges Associated with Industrial Activity; and
- Throughout the regulation, where appropriate, making due dates for various requirements 60 days (registration, outfall changes and stormwater plan updates and corrections) for consistency.

General VPDES Permit Regulation for Discharges of Stormwater from Construction Activities (VAR10) Amendments to 9VAC25-880 and Reissuance of the General Permit: The current General VPDES Permit

Regulation for Discharges of Stormwater from Construction Activities will expire on June 30, 2019, 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 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 formed for this regulatory action. The technical advisory committee consisted of representatives of local governments, state agencies, building industry representatives, consultants, planning district commissions, non-profit environmental groups, and DEQ staff. A Notice of Intended Regulatory Action (NOIRA) for the amendment was issued on October 16, 2017. Global changes to the existing general permit include changing the permit effective dates of the general permit to July 1, 2019 through June 30, 2024 and revisions to clarify to permit requirements. Substantive changes are as follows:

- (1) Section 9VAC25-880-45 titled *Applicability of technical criteria for land disturbing activities* was added to the general permit regulation to clarify to operators of construction sites applying for permit coverage the appropriate stormwater management technical design criteria from the VSMP regulation (9VAC25-870) apply to a given project.
- (2) Added to the registration statement requirements in 9VAC25-880-50 that when nutrient credits are proposed to demonstrate compliance with water quality requirements that a letter of availability be provided with the registration statement and that prior to permit issuance an affidavit of sale be submitted by the operator.
- (3) Requirements have been added to the general permit prohibiting the discharge of stormwater from construction activities associated with the demolition of a structure greater than 10,000 square feet of floor space built or renovated prior to July 1980 to surface water identified as impaired for polychlorinated biphenyls (PCB) and for which a TMDL for PCBs has been developed prior to July 1, 2019 unless the Stormwater Pollution Prevention Plan (SWPPP) includes controls to minimize the exposure of PCB containing building materials. This revision is incorporated in Part I B 4 and Part II B 6. This requirement was added for consistency with EPA's 2017 Construction General Permit.
- (4) A requirement was added to the permit in Part II B 4 e (9) requiring that waste containers be closed during precipitation events and at the end of the business day to minimize the discharge of pollutants in stormwater coming in contact with building materials in the contains. This requirement was added for consistency with EPA's 2017 Construction General Permit.
- (5) Inspection frequency: Part II F 2 b was revised to change the SWPPP inspection frequency performed by the permittee to once every 10 days and no later than 24 hours following a storm event, rather than within 48 hours established in the 2014 permit. This inspection frequency only applies if the operator does not opt to perform a SWPPP inspection at a frequency of once every 5 business days or is required to conduct inspection more frequently because of discharging to an impaired, TMDL, or exceptional water. This change was made as a result of the discussion of the Technical Advisory Committee to ensure runoff controls are inspected soon after a storm event so that any issues can be promptly addressed.

A condition was added to the permit (Part II F 2 e) that provides if adverse weather causes concern for the safety of the operator's inspection staff, the inspection can be delayed until the next business day on which it is safe to perform the inspection. This condition is similar to conditions in other VPDES stormwater permits that address adverse weather events.

VPDES General Permit Regulation for Nonmetallic Mineral Mining (VAG 84); Amendments to 9VAC25-190 and Reissuance of General Permit: The current VPDES General Permit Regulation for Nonmetallic Mineral Mining will expire on June 30, 2019, and the regulation establishing this general permit is being amended to reissue this general permit for another five-year term. The staff is bringing this proposed regulation amendment before the 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 formed for this regulatory action. The technical advisory committee consisted of representatives of industry, state agencies and DEQ staff. A Notice of Intended Regulatory Action (NOIRA) for the amendment

was issued on April 16, 2018. No public comments were received in response to the NOIRA. Proposed changes to the general permit regulation include:

- Removing monitoring for total petroleum hydrocarbons for outfalls that contain process wastewater from vehicle or equipment degreasing activities based on low levels in reported data,
- Adding a requirement to include with the registration statement safety data sheet information and dosing rate for treatment chemicals added to wastewater or stormwater and that could be discharged,
- Adding a new provision that restricts permit coverage for the use of cationic flocculants unless approved by the department based on a demonstration of no aquatic toxicity,
- Removing the special condition addressing special water quality standards in the Chickahominy watershed based on revisions to the applicability of those standards,
- Adding BMP requirements for blasting,
- Adding a list of authorized non-stormwater discharges,
- Merging the comprehensive site compliance evaluation with the routine inspection provisions consistent with our ISW general permit and U.S. EPA's 2015 MSGP, and
- Waiving routine facility inspection requirements for Virginia Environmental Excellence program E3 and E4 facilities.

Other changes clarify and update the general permit.

General Virginia Pollutant Discharge Elimination System (VPDES) Permit For Discharges of Storm Water Associated With Industrial Activity - Amendments to 9VAC25-151 and Reissuance of General Permit: The current VPDES General Permit for Discharges of Stormwater Associated with Industrial Activity will expire on June 30, 2019, and the regulation establishing this general permit is being amended to reissue for another five-year permit term. The staff is bringing this proposed regulation amendment before the 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 formed for this regulatory action. The technical advisory committee consisted of industry representatives, consultants, local government representatives, environmental groups, and DEQ staff. A Notice of Intended Regulatory Action (NOIRA) for the amendment was issued on February 19, 2018. The new substantive provisions and substantive changes to existing sections are:

- Reorganize sectors to simplify regulation which includes moving SIC Codes with no analytical sampling requirements to a new Sector AE and facilities with only TSS sampling requirements to new Sector AF;
- Require permittees to notify MS4s of discharges at time of registration;
- Removal of a benchmark parameters that are not required in the EPA MSGP and where data analysis from the current permit term determine that these constituents are not a water quality concern;
- Require all dischargers with the Chesapeake Bay TMDL to submit calculations to regional permit staff. Those who are above TSS, TN, TP loading values must submit and implement an action plan with annual reporting requirements. Reductions must be met by June 30, 2024. Added new waiver conditions for an annual reporting requirement. Waivers are for installing and maintaining Bay program or BMP clearing house BMPs, purchasing perpetual credits, or other BMPs where 4 samples are used to demonstrate facility has met required reductions.
- Add new E-reporting requirements to meet 9VAC25-31-1020
- Require new housekeeping language in conformance with the 2015 EPA MSGP (waste disposal, material storage, minimize material exposure to stormwater, eliminate discharge of plastics);
- Add new control measures language in conformance with the 2015 EPA MSGP (prevent or divert run-on, spills shall be contained or diverted before discharge, clean up spills immediately, store leaking equipment under cover, use overflow protection, perform vehicle maintenance under cover);
- Remove comprehensive site compliance evaluation per 2015 EPA MSGP which was found to be redundant and added additional language to routine site inspection; and,
- Remove redundant Part IV language which consists mostly of sector specific housekeeping and SWPPP requirements. This was done for simplicity and to minimize confusion for permittees. Some sector specific language was in place, even though it was redundant, for some sectors. These sectors were

identified by regional staff as higher risk and larger industry sectors and needed the extra emphasis (ship yards, landfills, scrap yards and metal recyclers).

Request to Proceed to Public Comment and Hearing on Proposed Amendments to the Water Quality Standards Regulation (9VAC25-260): Numeric Chlorophyll-*a* Criteria for the Tidal James River and their Assessment Methodology: Staff will ask the Board for approval to go to public hearing and comment on amendments to the Water Quality Standards Regulation (9 VAC25-260-310 (bb)), regarding the numeric chlorophyll-*a* criteria applicable to the tidal James River. The proposed amendments are the outcome of the Department of Environmental Quality's (DEQ) seven-year-long effort to update the regulation with best available science, evaluating the protectiveness of the current criteria and determining if revisions were appropriate, as well as modifying the methods used to assess criteria attainment. In addition, an enhanced water quality model was developed to simulate chlorophyll concentrations in response to varying levels of point source nutrient reduction. Preliminary modeling scenarios have been run and results will be presented; however, more refined scenarios are still being processed to estimate the potential impact on the significant dischargers in the basin and their nutrient waste load allocations for total nitrogen and total phosphorus. The proposed amendments take into consideration the recommendations of a scientific advisory panel (SAP) and a regulatory advisory panel (RAP).

Low dissolved oxygen (DO) is a problem found in much of the Chesapeake Bay and its tributaries. Excessive nitrogen and phosphorus pollution are well-established causes of algal blooms, which can then lead to low DO. In 1999, EPA identified most of the waters of the Bay as impaired due to inadequate DO for aquatic life. This action spurred efforts to manage nutrient loads throughout the entire Bay watershed. The tidal James River poses a challenge since its physical characteristics make it resistant to low DO, yet it has experienced frequent and intense algal blooms that are occasionally comprised of potentially toxic phytoplankton. During development of the Chesapeake Bay Total Maximum Daily Load (TMDL), EPA urged Virginia to adopt chlorophyll-*a* criteria for the tidal James River so that nutrient loads in the James basin could be managed in a similar fashion as loads in other Bay tributary basins. Chlorophyll-*a* is the primary pigment of phytoplankton and is thus highly correlated with both phytoplankton biomass and nutrient levels. DEQ developed James River chlorophyll-*a* criteria in collaboration with the EPA-Chesapeake Bay Program Office and the Board adopted these criteria in 2005. Along with Bay-wide DO criteria and water clarity acreage goals for underwater grasses, the James River chlorophyll-*a* criteria were used as endpoints in EPA's Chesapeake Bay TMDL, which was finalized in December 2010.

The 2011 General Assembly directed DEQ to use up to \$3 million from the Water Quality Improvement Fund (WQIF) to conduct the James River Chlorophyll-*a* Study, which was launched in response to concerns over the stringent nutrient allocations for the James River basin set by the Bay TMDL. The modeling framework used to develop the Bay TMDL determined that these allocations would be necessary to attain the chlorophyll-*a* criteria. Compliance with these allocations was estimated to add \$0.5 to 1.0 billion over previous cost estimates of James River chlorophyll-*a* criteria attainment. The primary purpose of the James River Chlorophyll-*a* Study was to verify whether the potential impact on significant dischargers was justified by assessing the scientific defensibility of the criteria and their assessment methodology and developing alternatives if deemed necessary. DEQ's intention to review the regulation for this purpose was announced in a Notice of Intended Regulatory Action (NOIRA) published September 12, 2011. The Governor approved a waiver from the normal regulatory schedule to provide time to conduct a thorough study of the regulation.

Through the WQIF allocation, DEQ funded a number of scientific research projects to fill in knowledge gaps pertaining to estuarine nutrient dynamics, spatial and temporal distributions of James River chlorophyll-*a*, phytoplankton composition and dynamics, and harmful algal bloom toxicity. Another critical component of the study was the development of a water quality model specific to the James River, so that the full implications of the existing regulation and any amendments to it could be communicated to stakeholders. DEQ also convened a scientific advisory panel (SAP) comprised of university, private sector, and state/federal government scientists and experts to review this research and provide recommendations regarding the technical aspects of the criteria

and assessment methodology. The regulatory advisory panel (RAP) formed for this regulatory action reviewed the SAP's recommendations and provided their own input on the criteria amendments. The RAP has also reviewed draft proposals presented by DEQ staff. DEQ staff has reasonably considered all the recommendations of the SAP and the RAP when developing the proposed amendments. EPA-Chesapeake Bay Program Office staff participated on both panels and engaged its Scientific and Technical Advisory Committee and Bay partner jurisdictions to provide additional input in the review process.

The James River Chlorophyll-*a* Study revealed some substantial weaknesses in both the existing criteria and assessment methodology. First, the existing criteria were developed from datasets that were relatively limited in scope and that were drawn from areas of the Chesapeake Bay that may not be representative of the James River. In contrast, the proposed amendments provide criteria that were developed from larger, more refined datasets almost entirely developed within the tidal James. Secondly, while the existing criteria were developed to promote a balanced phytoplankton assemblage that is relatively free from harmful taxa, the absence of clear relationships between chlorophyll-*a* and phytoplankton composition necessitated some subjective decision-making in the selection of thresholds. In contrast, toxicity tests and robust statistical models were used to objectively inform all aspects of the proposed criteria. Furthermore, both physicochemical factors (dissolved oxygen, water clarity, and pH) and phytoplankton metrics were considered in the development of the proposed criteria, as opposed to just phytoplankton metrics. Thirdly, the study found that the existing criteria must be assessed as geometric means (as directed by implementation guidance referenced in subsection D of 9 VAC 25-260-185) even though they were developed as arithmetic means. Research conducted by EPA-Chesapeake Bay Program Office in 2010 determined that the geometric mean is the more appropriate statistic for characterizing James River chlorophyll-*a* central tendency. The proposed seasonal mean criteria were developed with this understanding. Finally, the existing assessment methodology and the rules used to delineate allowable exceedence frequency, described in references cited in subsection D of 9 VAC 25-260-185, were developed separately from the existing criteria and were found to be ill-suited for a parameter like chlorophyll-*a*, which can vary considerably in space and time even under ideal conditions. The mismatch between these elements and the existing criteria likely accounts for some of the stringency of the nutrient load reductions determined under the Bay TMDL by EPA to be necessary for criteria attainment. Another factor was that the modeling framework used at the time had limitations in its ability to accurately predict chlorophyll concentrations resulting from simulated nutrient reduction scenarios. An enhanced model is now being used in the analysis with improved calibration and validity. The proposed amendments provide a procedure for analyzing data that is tailored to James River chlorophyll-*a* and is fully consistent with the way data were analyzed in the development of the proposed criteria. The proposed amendments stipulate allowable exceedence frequencies that are also consistent with the design of the proposed criteria.

9VAC 25-260-310 (bb) provides the criteria for site-specific chlorophyll-*a* levels in the tidal James River (excluding tributaries) and contains a table listing two seasonal mean criteria (spring and summer) for each of the five James River segments (delineated by salinity regime), for a total of ten paired sets of criteria. The proposal would amend each of the listed values, with eight values being lowered and two values being raised. Additionally, the proposal would insert another table of short-duration criteria that apply only during the summer. A James River segment would not be allowed to exceed these criteria more than 10% of the time. Compliance with the new criteria should minimize short-term effects of harmful algal blooms to aquatic life. The proposal also deletes the reference to subsection D of 9VAC25-260-185. Finally, the proposal would also insert new language stipulating the following:

- Seasonal mean criteria should be calculated as geometric means.
- The allowable exceedence frequency and length of assessment period over which criteria should be evaluated, along with the duration of those criteria.
- The manner in which chlorophyll-*a* data should be aggregated and how two of the segments should be subdivided for the purposes of data aggregation.
- A reference to the EPA technical document that provides the boundaries of the James River segments.

Report On Facilities In Significant Noncompliance: Four new permittees were reported to EPA on the Quarterly Noncompliance Report as being in significant noncompliance (SNC) for the quarter ending March 31, 2018. The permittees, the facilities and the reported instances of noncompliance are as follows:

1. Permittee/Facility: Bedford Regional Water Authority/Bedford WWTP
Type of Noncompliance: Failure to Meet Permit Effluent Limits (5-day Biochemical Oxygen Demand-BOD5)
City/County: Bedford, Virginia
Receiving Water: Little Otter River
Impaired Water: Little Otter River is listed as impaired for recreational use (bacteria) and aquatic life use (benthic macroinvertebrate bioassessments). TMDLs have been developed for the aforementioned impairments and Bedford WWTP received wasteload allocations for fecal coliform bacteria, total suspended solids, and total phosphorus. The Little Otter River is also impaired for PCBs and mercury. Mercury is the only impairment that has not been addressed by a TMDL.
River Basin: Upper Roanoke River Basin
Dates of Noncompliance: January and February 2018
Requirements Contained In: VPDES Permit
DEQ Region: Blue Ridge Regional Office
The Authority attributed the violations to errors with its sample methodology. In addition, high plant flow combined with cold weather contributed to the February violations. Staff of the agency's Blue Ridge Regional Office issued two warning letters in response to the violations. The Facility changed its sampling methodology to address the sampling errors and there have been no further BOD5 violations reported.
2. Permittee/Facility: Town of Lawrenceville/Lawrenceville WWTP
Type of Noncompliance: Failure to Meet Permit Effluent Limits (Total Suspended Solids- TSS)
City/County: Lawrenceville, Virginia
Receiving Water: Roses Creek
Impaired Water: Roses Creek is listed as impaired due to water quality sampling showing exceedances of the E. coli water quality standard. The Roses Creek Bacterial TMDL was approved by the Board in 2004. The Town received a wasteload allocation and subsequent E. coli permit effluent limits as a result of the TMDL. The Town is meeting those limits.
River Basin: Chowan River and Dismal Swamp Basin
Dates of Noncompliance: December 2017, January 2018 and February 2018
Requirements Contained In: VPDES Permit
DEQ Region: Piedmont Regional Office
The Town attributed the violations to an adjustment period that followed the construction and implementation of cloth filters and belt presses. The installation of the additional controls was required by a consent order the Town entered with DEQ that was effective August 24, 2017. The existing consent order contains a six month monitoring period following installation of the filters and presses. In response to the TSS violations, the Town made adjustments and there were no further TSS violations during the consent order's monitoring period.
3. Permittee/Facility: Town of Abingdon/Wolf Creek Water Reclamation Facility
Type of Noncompliance: Failure to Meet Permit Effluent Limits (Ammonia as N)
City/County: Lawrenceville, Virginia
Receiving Water: Wolf Creek
Impaired Water: Wolf Creek is listed as impaired due to water quality sampling showing exceedances of the E.coli water quality standard. The aquatic life use is impaired. The Bacteria and Benthic TMDL for Wolf Creek was approved by the Board in 2010. The Facility received a wasteload allocation for both bacteria and sediment and E.coli and TSS permit limit exceedances as a result of the TMDL.
River Basin: Tennessee Big Sandy River Basin
Dates of Noncompliance: December 2017 and January 2018
Requirements Contained In: VPDES Permit

DEQ Region: Southwest Regional Office

The Town attributed the violations to an industrial discharger's use of a biocide in its cooling towers which resulted in a toxic discharge into the sewerage collection system. In addition, there were prolonged periods of very cold weather during the months of December and January which increased the recovery period after the biocide was discharged into the system. There have been no further ammonia as N violations reported and the Facility has had no violations of any other final effluent permit limit in 2018.

4. Permittee/Facility: E. I. DuPont de Nemours and Company/DuPont Teijin Films ("DTF" or "DuPont")

Type of Noncompliance: Failure to Meet Permit Effluent Limits (Total Phosphorus)

City/County: Chesterfield, Virginia

Receiving Water: James River

Impaired Water: The James River is listed as impaired for aquatic life use due to inadequate submerged aquatic vegetation, chlorophyll a criteria exceedances, and an altered benthic community. The recreation use is impaired due to E.coli exceedances. The fish consumption use is also impaired. DTF was included in the Chesapeake Bay TMDL, which allocates loads for total nitrogen, total phosphorus, and total suspended solids and was approved by EPA in 2010.

River Basin: Lower James River Sub Basin

Dates of Noncompliance: January and February 2018

Requirements Contained In: VPDES Permit

DEQ Region: Piedmont Regional Office

DuPont attributed the violations to increased phosphorus concentrations from an unknown upstream source, and is sampling upstream locations for source location. To reduce incoming phosphorus during the source investigation, DuPont is using chemical treatment. DEQ's Piedmont Regional Office issued a Notice of Violation to DuPont, and will be meeting with DuPont representatives to discuss the violations. No further total phosphorus violations have been reported.

Crop Production Services, Inc., Botetourt County - Consent Special Order - Issuance: The Crop Production Services, Inc. (CPS) facility at Cloverdale, Virginia sells agriculture products and services, including fertilizers, adjuvants, seeds, seed treatments, and herbicides. On July 29, 2017, Cloverdale residents reported to County staff that Tinker Creek had a foamy or sudsy appearance. Investigation by state and local agencies indicated that the foam resulted from a release from the CPS Cloverdale facility. A 275-gallon tote stored outdoors at the CPS facility containing Termix 5301, a surfactant product used in herbicide applications, had leaked on the evening of July 28 or early morning of July 29 and approximately 165 to 169 gallons of product was released to a paved area. From there the product flowed down a clay/gravel slope to a drainage ditch, which discharges into an on-site stormwater pond. The stormwater pond discharges to a dry ditch and then to an unnamed tributary of Tinker Creek. A storm the previous evening had evidently washed the spilled material out of the stormwater pond downstream through the dry ditch to the Tinker Creek tributary. Visible impacts from the discharge, including foam on the creek's water surface and dead fish were observed for distance of more than five miles downstream from the CPS facility. A cause of the leak from the tote has not been determined. Within a short time of learning of the release, CPS hired WEL, an environmental response contractor, to handle response and remediation. WEL excavated all contaminated soil from the ditch and the stormwater pond on facility property, took multiple stream and soil samples, vacuumed all free product from the storm drain system, flushed the system, and contained and removed the flush water. As of the evening of July 29, DEQ staff observed that there was a near total kill of aquatic life in Tinker Creek for several miles, with a preliminary estimate of tens of thousands of dead fish downstream from the point of product discharge into Tinker Creek. As of noon on July 30, DEQ staff observed that most of the visible foam on the Creek had abated and that there appeared to be little or no additional fish killed, presumably due to dilution of the release. Sampling and analysis of water from Tinker Creek corroborates this observation in that the levels of the active ingredients of Termix 5301 (nonylphenol and nonylphenol ethoxylates) were measured at 7 ppm as of July 29, had declined to 0.02 to 0.06 ppm on July 31, and were nondetectable on August 7. On October 4, 2017 the Department issued Notice of Violation ("NOV") No. 17-10-BRRO-002 to CPS for an unpermitted discharge to

state waters. This order requires CPS to pay a civil charge and reimburse DEQ for environmental pollution incident response costs of \$28,064.36. The order also requires CPS to perform sampling and analysis of well water from the Town of Troutville Drinking Water Well #5 for certain constituents in February and May 2018 and to reimburse DEQ for the cost of analysis of those samples. These samples have been taken. The constituents were not detected. The total cost to CPS for this requirement was \$700.00. DEQ is coordinating with the US Fish and Wildlife Service (USFWS) on a Natural Resource Damage Assessment (NRDA), including recovery for fish kill investigation response costs and natural resources damages pursuant to Va. Code § 62.1-44.15(11). Civil Charge: \$58,500.

King George County Service Authority (Hopyard Farm WWTP- State Route 607; Fairview Beach WWTP- 6268 Riverview Drive; Dahlgren WWTP- 16383 Dahlgren Road; Oakland Park WWTP- 1015 French Court; and Purkins Corner WWTP- 11224 Henry Griffin Road) - Consent Special Order - Issuance: The King George County Service Authority owns and operates five wastewater treatment plants in King George County. This consent order captures violations at each of the five wastewater treatment plants. The Hopyard WWTP exceeded discharge limitations contained in its permit for total phosphorus and *E.coli*. The Authority reported exceedances of the monthly concentration average limit for total phosphorus for June 2015, June 2016, July 2016, September 2016, October 2016, December 2016, April 2018, and May 2018. The Authority reported an exceedance of the monthly concentration average limit for *E.coli* for December 2017 and January 2018. In addition, the Authority routinely failed to provide information from September 2015 through May 2017 as required by the Hopyard permit. The Authority indicated that the total phosphorus exceedances were the result of fluctuating mixed liquors which made the alum feed rates hard to consistently maintain phosphorus levels. The Authority stated the *E. coli* exceedance was caused by issues with the UV system. On February 13, 2018, DEQ staff performed a site inspection at Hopyard Farm WWTP. One UV disinfection unit was offline and another unit had just been repaired. The Hopyard operators noted that there had been ongoing *E. coli* issues in the effluent because of the maintenance issues with the units. The Authority did not submit a report of noncompliance to DEQ for the non-compliance with monthly average *E.coli* limits. During the inspection, DEQ staff observed that there had been an unauthorized discharge from the Hopyard Farm WWTP. The Authority did not submit a report of an unusual discharge to DEQ. DEQ also observed several maintenance and operational issues during the February 13, 2018 inspection. The Fairview Beach WWTP exceeded discharge limitations contained in its permit for total ammonia as N, fecal coliform, enterococci, dissolved oxygen, and total phosphorus. The Authority reported exceedances of the monthly concentration average limit for ammonia as N for December 2014. The Authority reported exceedances of the weekly concentration average maximum limit for ammonia as N for December 2014, January 2015, January 2017, July 2017, and September 2017. The Authority reported exceedances of the monthly concentration average limit for fecal coliform for January 2015, April 2016, May 2016, July 2016, August 2016, October 2016, November 2016, January 2017, April 2017, May 2017, June 2017, September 2017, December 2017, January 2018, February 2018, and May 2018. The Authority reported exceedances of the monthly concentration average limit for enterococci for February 2015, April 2015, May 2016, January 2017, and September 2017, January 2018, February 2018, and May 2018. The Authority reported a failure to meet the minimum concentration limit for dissolved oxygen for June 2017. The Authority reported exceedances of the calendar year limit for total phosphorus 2016 and 2017. The Authority reported an exceedance of the monthly concentration average for total phosphorus for April 2018. Additionally, the Authority routinely delayed or failed to provide information from September 2015 through May 2017 as required by the Fairview permit. On December 17, 2015, DEQ conducted an inspection of the Fairview Beach WWTP and observed that the SBR mixers were non-operational and a large amount of debris and rags were observed in tanks. The Authority submitted a late DMR for the January 2016 reporting period and the February and June 2017 reporting periods. On April 20, 2016, DEQ conducted an inspection of the Fairview Beach WWTP and observed that the headworks auger and grit processes were not in service and the Bank 2 UV module was in need of repair. The Authority indicated that the ammonia as N exceedances were a result of insufficient air/dissolved oxygen delivery to the SBR reactor tanks. The Authority adjusted the DO settings to provide more DO for ammonia removal. The Authority said the fecal coliform and enterococci results were due to an ongoing UV system issue. On July 7, 2017, the Authority responded to many of the NOV's and DEQ's December 2015 and April 2016 inspections via letter. The letter stated that during DEQ's

2015 inspection, the Pre-EQ Basin, headworks auger, SBR mixer, and UV circuit board needed repair. The Authority reported that the Pre-EQ Basin work was completed in March 2016. The Basin was cleaned and new diffuser sleeves were installed. The Basin blowers were inspected and were brought into operational condition. The Basin effluent pump was inspected and brought into operational condition. The headworks auger screw was replaced in February 2016. The SBR mixers were repaired in early April 2016. The UV system was still in need of repair due to technical support issues. The Dahlgren WWTP exceeded discharge limitations contained in its permit for total suspended solids, total kjeldahl nitrogen, total nitrogen, total phosphorus, and enterococci. The Authority reported exceedances of the monthly concentration limit for total suspended solids for January 2015, February 2015, March 2015, April 2015, and February 2018. The Authority reported exceedances of the weekly concentration limit for TSS for January 2015, February 2015, March 2015, April 2015, February 2018, March 2018, and April 2018. The Authority reported exceedances of the monthly concentration limit for TKN for March 2015, April 2015, and April 2018. The Authority reported exceedances of the weekly concentration limit for TKN for March 2015 and April 2015. The Authority reported exceedances of the calendar year limit for total nitrogen for 2015. The Authority reported exceedances of the calendar year concentration average limit for total phosphorus for 2015 and 2017. The Authority reported exceedances of the Enterococci monthly average for March 2018 and April 2018. On April 30, 2015, DEQ conducted an inspection of the Dahlgren WWTP and observed the UV intensity meter for Bank #1 and Bank #2 indicated a 0.0 percent intensity and daily sampling for *Enterococci* had not been implemented. There was a strong sewage and ammonia odor throughout the facility, especially in the filtration and disinfection building. In addition, the lagoon liner was floating on the water's surface; solids were observed in the clarifier, filtration tank, and effluent tank; and turbid and discolored water was observed after the UV disinfection. Sludge was observed on the ground adjacent to the digester. Additionally, The Authority failed to submit the SIU survey by the June 9, 2015 deadline. The SIU survey was not received until June 30, 2017. The Authority delayed or failed to provide information in September 2015 and from November 2015 to May 2017 as required by the permit. In September 2016, the Authority had an unauthorized discharge which represents a failure by the Authority to maintain Reliability Class I at the pump station. The Authority submitted a late DMR for the June 2017 reporting period. It was received August 9, 2017. In a letter dated June 29, 2017, the Authority responded to the November 2015-June 2017 NOV's. In the letter, the Authority stated that it had questioned the requirement for the Industrial User Survey and had asked that the requirement be omitted or that a later due date be granted since the Authority had conducted a similar survey as part of the previous permit and was not experiencing growth or new connections. DEQ did not grant the request to remove the requirement or grant an extension. The Authority conducted the survey late and submitted delayed survey results. The Authority also stated that it hired a contractor to repair the synthetic liner within the EQ Basin. In addition, the Authority said it was considering further actions, including investigating the use of microalgae utilization for algae control, construction of a roof or cover for the final effluent tank to reduce the debris that enters the tank and the amount of sun exposure to reduce algae growth, and increasing the frequency of cleaning units to reduce particulate matter and floating material. The Oakland Park WWTP exceeded discharge limitations contained in its permit for total suspended solids, total kjeldahl nitrogen, CBOD5, copper, dissolved oxygen, total phosphorus, and total nitrogen. The Authority reported exceedances of the weekly concentration average maximum limit for TSS for February 2015, April 2017, November 2017, December 2017, and January 2018. The Authority reported exceedances of the weekly quantity average maximum limit for TSS for November 2017 and December 2017. The Authority reported exceedances of the monthly concentration average limit for TSS for February 2015, February 2017, November 2017, December 2017, January 2018 and February 2018. The Authority reported exceedances of the monthly quantity average maximum limit for TSS for November 2017 and December 2017. The Authority reported exceedances of the weekly quantity average maximum limit for TKN for November 2017. The Authority reported exceedances of the monthly concentration average limit for TKN for March 2015, December 2016, February 2017, March 2017, April 2017, November 2017, December 2017, and January 2018. The Authority reported exceedances of the weekly concentration average maximum limit for TKN for December 2015, December 2016, January 2017, April 2017, May 2017, November 2017, December 2017, February 2018, and May 2018. The Authority reported exceedances of the weekly concentration average maximum limit for CBOD5 for December 2016, December 2017, and March 2018. The Authority reported exceedances of the monthly concentration average limit for CBOD5 for December 2017 and January 2018. The Authority reported exceedances of the monthly

quantity average limit for CBOD₅ for December 2017. The Authority reported exceedances of the weekly quantity average maximum limit for CBOD₅ for December 2017. The Authority reported exceedances of the monthly concentration average limit for copper for September 2016, January 2017, February 2017, and November 2017. The Authority reported exceedances of the copper weekly concentration average maximum limit for September 2016, January 2017, February 2017, and November 2017. The Authority reported a failure to meet the minimum concentration limit for dissolved oxygen for June 2017, July 2017, August 2017, September 2017, October 2017, and April 2018. The Authority reported an exceedance of the calendar year limit for total phosphorus for 2017. The Authority reported an exceedance of the calendar year limit for total nitrogen for 2016 and 2017. On May 21, 2015, June 2, 2015, and June 16, 2015, DEQ staff conducted inspections of the Oakland Park WWTP and observed solids in the clarifier effluent trough and pre and post UV treatment, and flashing UV intensity measurement. On July 22, 2015, DEQ conducted an inspection and observed that a bypass of the filtration system was being conducted. DEQ had not been notified of the bypass. On August 18, 2015 and September 11, 2015, DEQ conducted inspections and the DO and pH meter thermometer annual certifications that were due June 2015 were unavailable. The Authority routinely delayed or failed to provide information in September 2015, November 2015-April 2016, and June 2016-May 2017 as required by the permit. During a facility inspection on April 20, 2016, DEQ staff observed solids in the pre and post UV treatment and flashing UV intensity measurement. On January 23, 2018, DEQ staff visited the facility and observed that one train was completely offline because of a clogged return line. There was only one blower for the entire facility to provide air to both trains, the EQ basin, and the sludge holding tank. The operator had to make manual valve adjustments to adjust availability of air flow to plant operations. Additionally, the Authority failed to submit a survey of all industrial users that was due to DEQ by April 1, 2018. According to the Authority, the 2015 TSS excursion was due to the solids in the aeration basin being trapped in surface foam around the clarifier inlet. These solids found their way into the clarifier and the effluent. The operator responded by cleaning the clarifier inlet of any foam or solids. On November 10, 2015, the Authority submitted a written certificate of calibration for the DO and pH meter thermometer instruments. The Authority stated the filter bypass was a single event required to make some repairs to the air scour lines and solenoid valves, and the filter was returned to operation. Additionally, the Authority stated it will monitor the clarifier troughs and UV channels for solids, as needed. The Authority said the 2015 TKN violations were addressed by increasing the soda ash feed to increase the pH and reducing the MLSS through additional wasting. The Authority attributed the December 2015 TKN exceedance to automatic air flow control issues between Trains A&B. The September 2016 total recoverable copper exceedance was a result of not feeding enough lime to assist with the copper removal via the sand filters. The lime feed rate was increased and copper levels were reduced. The December 2016 TKN and CBOD₅ exceedances were determined to be the result of clogged return lines and/or inadequate air supply for the return lift pump. The Authority attributes the total annual nitrogen exceedance to not having a full year of operation of the equalization basin air diffusers. The January 2017 TKN exceedance was caused by a clogged returned line in Train A resulting from a blower malfunction. The returned line was cleared and air was restored to the lift pump. The February 2017 TSS, TKN, and total recoverable copper limits were exceeded when flows were transferred from Train B to Train A to allow for Train B sand filter maintenance. The flow required some time to establish additional biomass for treatment in Train A. The March and April 2017 TKN exceedances were a result of a blower malfunction. The April 2017 TSS exceedance was a result of sand filter maintenance. The Train B sand filters were returned to service and flows were transferred back to Train A in late April 2017. On July 13, 2017, the Authority submitted responses to the NOV's from August 2015 to July 2017. With respect to the flashing UV system alarms, the Authority said it had the UV system serviced on August 23, 2015 and that it cleans the modules. To address the solids, the Authority said it would increase cleaning frequency. The Purkins Corner WWTP exceeded discharge limitations contained in its permit for total kjeldahl nitrogen, total suspended solids, and dissolved oxygen. The Authority reported exceedances of the weekly concentration average maximum limit for TKN for February 2015. The Authority reported exceedances of the weekly concentration average maximum limit for TSS for January 2017. The Authority also reported a failure to meet the minimum concentration for dissolved oxygen for August 2017. In addition, the Authority delayed or failed to provide information in September 2015 and November 2015-April 2016 and June 2016-May 2017 as required by the permit. The Authority submitted a late DMR for the June 2017 reporting period. The Authority failed to submit a survey of all industrial users that was due to DEQ by May 31, 2018.

Additionally, the Authority failed to submit a Pharmaceutical Management and Disposal Plan that was due to DEQ by May 1, 2018. The Authority stated the TSS exceedance in January 2017 was the result of a malfunctioning effluent pinch valve for the equalization basin. The pinch valve was repaired and the level sensor was re-programmed for automatic operation and consistent flow.

The consent order requires the Authority to pay a civil charge and complete corrective action items. The corrective action includes drafting and updating standard operating procedures at each facility for process controls, communication and maintenance, solids handling, and sanitary sewer collection systems. The Authority is also required to provide the results of a feasibility study describing the closure of the Oakland Park WWTP and Purkins WWTP and expansion of the Hopyard WWTP. In addition, the Authority must update its O&M manual, ensure the UV system is operating correctly, ensure that each operator attends at least one DEQ training session, repair equipment, submit documentation required by the permits and submit detailed plans describing how the facilities will maintain compliance with permit limits. Civil Charge: \$82,250.

Cambria 2014 LLC, Midlothian - Consent Special Order w/ Civil Charges: Cambria 2014, LLC (Cambria) is developing the Cambria Cove Subdivision (Property) as a residential single family home subdivision development in Chesterfield County. On December 3, 2007, DEQ issued a VWP General Permit WP4-07-1773 for wetland impacts associated with the development of the Cambria Cove Subdivision. The Permit authorized the permanent impacts to 1.14 acres of palustrine forested wetlands, 265 linear feet of perennial stream channel, 1,553 linear feet of intermittent stream channel and the temporary impact to 0.11 acre of forested wetland and 61 linear feet of intermittent stream channel. A site inspection was conducted on March 1, 2016, and DEQ staff observed unauthorized permanent impacts to 192 linear feet of stream bed and 0.02 acre of forested wetland caused by grading and unmaintained erosion & sediment controls. On April 14, 2016 the Department issued NOV No. 16-03-PRO-701 to Cambria for the violations observed during the March 1, 2016 inspection. A site inspection was conducted on November 2, 2016, and DEQ staff observed unauthorized permanent impacts to 70 linear feet of stream bed and 0.02 acre of forested wetland caused by the placement of fill for sewer line construction. On December 6, 2016, the Department issued NOV, No. 1612-000071, to Cambria for the violations observed during the November 2, 2016 inspection. On March 21, 2017, DEQ staff met with Cambria to discuss the NOVs, the pending permit application and compliance issues on site. On April 3, 2017, WP4-07-1773 was terminated and VWP General Permit WP4-16-0738 (Permit) was issued to Cambria 2014, LLC. A site inspection was conducted on March 6, 2018, and DEQ staff observed additional wetland impacts and erosion & sediment controls in need of repair. On March 7, 2018, DEQ staff met with Cambria to discuss compliance issues and the draft Consent Order. On March 27, 2018, a Department inspection confirmed that the Cambria property is back in compliance with its Permit and associated regulations. Civil Charge: \$45,754.

Harbor Station Communities, LLC for the Potomac Shores Development Project, Prince William County - Consent Order w/ Civil Charges: The Potomac Shores Project (Site) owned by Harbor Station Communities, LLC, (Harbor Station) consists of the construction of a mixed-use development including a golf course, residential units, elementary school, a fire/rescue station and associated infrastructure and a water withdrawal from one intake structure located in Powell's Creek to provide supplemental irrigation for the golf course, on an approximately 1,800-acre parcel. The project is located within the eastern portion of the Cherry Hill Peninsula east of U.S. Route 1 (Jefferson Davis Highway) in Prince William County. On April 15, 2016, DEQ issued a WL, W2016-04-N-1022, to the Harbor Station, as the result of an inspection conducted on March 23, 2016, for additional impacts to 0.15 acre of palustrine forested wetlands, 0.036 acre of palustrine scrub-shrub wetlands, 0.007 acre of palustrine emergent wetlands and 225 linear feet of stream channel. In response to the observations, on March 23, 2016, a corrective action plan was submitted to DEQ, by WSSI, and approved by the Department on April 15, 2016. The approved corrective action plan (CAP) required restoration within 90 days. WSSI notified DEQ, via letter dated July 20, 2016, and report dated November 11, 2016, that the CAP for the unauthorized impacts identified in the Warning Letter Number W2016-04-N-1022 was completed. On February 28, 2017, and March 13, 2017, DEQ staff conducted compliance site visits of the Project Site. Based on a review of DEQ files and observations made during the site visits conducted on February 28, 2017, and March 13, 2017, DEQ:

1. Confirmed that the corrective action plan, approved by DEQ on April 15, 2016, appeared to have not been fully completed.
2. Observed additional unauthorized fill material had been discharged into surface waters as the result of sediment discharge from construction and channel erosion. The report/ CAP on these impacts submitted by WSSI March 21, 2017, confirmed unauthorized impacts were observed but did not quantify the area of affected surface waters. Based upon the site visits and a review of the file material, staff estimated the areas of impact from construction sediment deposition affected approximately 500 linear feet of stream channel and 1.0 acre of wetlands. Additional stream channels and wetlands were affected by sediment deposition from channel erosion. Portions of the impacted surface waters are located in compensatory preservation areas.

On April 10, 2017, As a result of the observations made during the site visits and file review, DEQ issued a Notice of Violation (NOV), NOV No. 1704-000290. On May 15, 2017, WSSI, representing the Harbor Station, responded to the NOV. The response letter stated that the required restorations set forth in the CAP were completed within the approved amount of time as described in the CAP-Sediment Cleanup Summary Report submitted on July 20, 2016. Some areas had not achieved permanent vegetative coverage at the time that the report was submitted, however it was stated that the impacted areas mentioned in the report have been completed and would continue to be monitored in the Construction Monitoring Reports (CMR) for October 2016 and April 2017. Based on this NOV response and information presented to DEQ by WSSI, the violation is deemed resolved and will not be addressed in the Consent Order, nor included in the civil penalty. In addition, WSSI's response letter stated that based on soil types and erosion characteristics DEQ's estimate of the amount of fill material within the stream and wetland system from construction sediment deposition discovered in the eastern branch of the project cited in the NOV and inspection report is not completely accurate. On June 23, 2017, DEQ, WSSI, and the Harbor Station met on site. As a result of the site visit, on September 18, 2017, WSSI presented a report and CAP that mapped and calculated surface water impacts due to construction sediment deposits to 705 linear feet of stream channel and 0.70 acres of wetlands. DEQ accepts the impact amounts mapped by WSSI in the September 18, 2017 report. Appendix A of the Consent Order (Order) requires Harbor Station to submit documentation of a compensatory credit purchase and implement a DEQ approved Corrective Action Plan. The corrective measures in Appendix A ensure no net loss of surface water function and value. Civil Charge: \$45,500.

Eastern Shore Poultry - Consent order with corrective action plan: DEQ's experience working with the community of groundwater users has shown that some users remain unaware of the regulatory requirements for a groundwater withdrawal permit, or are unaware that their groundwater withdrawal meets the criteria requiring a permit. To help address this, DEQ implemented a short-term Compliance Assistance Framework during 2017. The Compliance Assistance Framework provided a period of time for unpermitted groundwater users in the Eastern Virginia and Eastern Shore Groundwater Management Areas to conduct a voluntary assessment of their water use, and then if needed, submit a complete application to DEQ for a new groundwater withdrawal permit on or before December 15, 2017. As part of the Compliance Assistance Framework, DEQ conducted six (6) informational sessions during April 2017, including one (1) informational session at the Eastern Shore Community College on April 18, 2017. During this informational session it was determined that many, if not all, Eastern Shore poultry operations were unaware of the regulatory requirements for a groundwater withdrawal permit. DEQ subsequently met with poultry industry representatives and farms operators in July and November 2017, to further discuss the regulatory requirements and the ongoing Compliance Assistance Framework. A total of 32 new groundwater withdrawal permit applications associated with Eastern Shore poultry operations were received on or before December 15, 2017. On February 22, 2018, DEQ sent Warning Letters to all known Eastern Shore poultry operations which did not submit a permit application during the Compliance Assistance Framework and the operation's total monthly water usage was estimated to be greater than 300,000 gallons. On March 23, 2018, DEQ sent Notices of Violation to all known Eastern Shore poultry operations which did not respond to the Department's Warning Letter. On April 16, 2018, DEQ offered all known Eastern Shore poultry operations whose total monthly water usage was estimated to be greater than 300,000 gallons the opportunity to enter into a draft Consent Order without the assessment of a civil penalty. Fifty-seven (57) draft Consent Orders were signed and returned to DEQ for public notice. Consent Orders are

being proposed for 57 existing and newly constructed poultry facilities on the Eastern Shore currently withdrawing 300,000 gallons or more of groundwater a month within a Designated Groundwater Management Area without a permit in violation of the Groundwater Management Act of 1992 and the Groundwater Withdrawal Regulations. The consent orders authorize groundwater withdrawals pending application submittal and Department review. The Consent Orders require the submittal of a complete groundwater withdrawal permit application by October 1, 2018, establishes groundwater withdrawal limits, requires each metering and reporting, and requires coordination with DEQ for any new well construction.