

# Commonwealth of Virginia

# VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY

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SUBJECT:	Technical Advisory Committee (TAC) Meeting Summary to Discuss the 2023		
	Reissuance of 9VAC25-860 Virginia Pollutant Discharge Elimination System (VPDES)		
	General Permit Regulation for Potable Water Treatment Plants		
TO:	TAC Members and DEQ Staff (listed below)		
FROM:	Elleanore Daub, Office of VPDES Permits		
DATE:	January 21, 2022		

A TAC meeting was held on January 6, 2022 beginning at 12:30 PM.

TAC members attending the meeting were:

Tim Castillo	August County Service Authority
Robert Edelman	Virginia Department of Health, Office of Drinking Water (VDH ODW)
David Sirois	Virginia Municipal Drinking Water Association
Allan Brockenbrough	DEQ – CO VPDES Permits
Elleanore Daub	DEQ – CO VPDES Permits

DEQ additional staff attending the meeting were:

Kevin Crider	DEQ – BRRO Water Permitting
Deborah Debiasi	DEQ – CO VPDES Permits
Scott Van Der Hyde	DEQ – CO Water Division
Heather Weimer	DEQ – PRO Water Compliance

Information provided to the TAC and staff prior to the meeting were:

- Approval of TAC Membership from the DEQ Director;
- Role of the TAC;
- Link to VPDES website: <u>https://www.deq.virginia.gov/permits-</u> regulations/permits/water/surface-water-virginia-pollutant-discharge-elimination-system
- Agenda; and
- Regulation with draft amendments (9VAC25-860) for TAC discussion.

### I. Welcome and Introduction

All attendees introduced themselves and DEQ staff described the role of the TAC. The role of the TAC is to advise DEQ on amendments to the regulation, that the goal is to reach consensus but the State Water Control Board ultimately makes the final decision.

### **II. Background of Rulemaking**

<u>Periodic Review</u> – There is a Governor's Executive Order that specifies a review of regulations every 4 years. The agency received comments during the periodic review from Southern Environmental Law Center and the Potomac Riverkeeper Network about per- or poly fluoroalkyl substances (PFAS). DEQ response to the periodic review was that regulation would be retained. We do not propose to include PFAS requirements in this proposal. This issue could come up again during Notice of Public Comment.

#### Notice of Intended Regulatory Action (NOIRA), TAC Formation, Future Actions -

The NOIRA was published on August 2, 2021 (NOTE – the slide presented at the meeting erroneously had year 2020 listed for the NOIRA). No comments were received during the NOIRA. Following the NOIRA, the TAC was approved and this meeting was scheduled. After this meeting a summary of the meeting will be published. Staff intends to ask for State Water Control Board approval of draft amendments for public notice and hearing at their March 2022 quarterly meeting. A 60 day public comment period and public hearing will follow. Final Board approval of the regulation is expected in September 2022 and the permit will be effective in plenty of time for the permit effective date of July 1, 2023. Between adoption and effective date, staff will write and publish guidance which describes the implementation of the permit and regulation, develop the revised registration statement, mail out and receive those registrations and fees and finally reissue the permit coverage.

### **III.** Compliance

Staff reviewed compliance data from the current permit term. Out of a total of 107 active permits, 25 had one or more compliance issues with Warning Letters. The issues included missing or late discharge monitoring reports, limit violations and inspection issues. Most of the limit violations were for TSS and chlorine with a lesser amount for pH and dissolved oxygen.

One question was raised about whether the 107 active permits reflects total number of facilities that can be permitted. The VDH list of water treatment facilities has more than 107 facilities. DEQ explained that some of the facilities have individual permits or discharge to POTWs and would not need coverage under this permit. The VDH will share their list of water treatment facilities with DEQ so that DEQ may cross reference the lists to make sure that everyone is covered by an appropriate permit.

### **IV. Review and Discussion of Draft Regulation**

A summary of draft regulation amendments and discussion was section by section as follows:

## Definitions (Section 10)

No new definitions were presented but the definition for "Department" was suggested for deletion because that definition is in the permit regulation and does not need to be repeated here. The definition section states that the words and terms used have the meanings defined in the VPDES Permit Regulation (VAC25-31-10) and "Department" is defined in the VPDES Permit Regulation. The membrane treatment definition is defined as a pressure driven process. A suggestion was made to include "vacuum process" in the membrane treatment definition as that is also used in membrane treatment.

Some businesses treat or soften drinking water and may also have a discharge from that type of treatment but supplying drinking water is not the primary purpose of the business nor would they identify with the SIC code for water treatment plants listed in the definition for "Potable water treatment plant." Examples of this include campgrounds, parks and hospitals that provide drinking water to their

users. Are they still covered under permit? DEQ thinks that if these types of facilities treat and discharge the wastewater from treating or softening the water for drinking, then they could get coverage under this general permit regardless of the SIC for the primary activity at the site. This type of interpretation would be useful in the implementation guidance document.

VDH noted that there is no definition for "conventional" treatment but the term is used in the regulation. The VDH Waterworks Regulation (12VAC5-590-10) has a definition that DEQ could consider. The use of the term "conventional" is discussed further in the registration statement section (9VAC25-860-60 C registration question #7) below.

<u>Applicability of incorporated references based on the dates they became effective (Section 15)</u> This section incorporates the EPA 40 CFR citations into the regulation and provides a recent reference date.

### Effective date of permit (Section 40)

This section is updated to reflect the next 5 year term for the general permit (July 1, 2023 – June 30, 2028).

### Authorization to Discharge (Section 50)

This section allows for permit coverage if the registration statement is filed, the fee is paid, the effluent limits and other requirements have been met, there are no prohibitions in the receiving stream, the antidegradation policy is met and the discharge is consistent with the assumptions and requirements of an approved Total Maximum Daily Load (TMDL). There is another consideration that is included with this permit for authorization and that is whether the permit is subject to the requirements of the VPDES Watershed General Permit Regulation for Total Nitrogen and Total Phosphorus Discharges and Nutrient Trading in the Chesapeake Watershed in Virginia (9VAC25-820). This is because there is one water treatment plant registered under the Watershed General Permit so there remains a possibility another one could need that coverage also.

A discussion ensued about the use of phosphate chemicals that are sometimes added to drinking water as a corrosion inhibitor to prevent corrosion of metals and that phosphorus is not limited in this general permit. DEQ noted that typically these chemicals are added after treatment to the finished water and some filtration plants use backwash water that does not contain corrosion inhibitor. Therefore, it depends on whether the water treatment plant is using the finished water in the backwash process. Also, the potable water treatment plants are already characterized in the Chesapeake Bay Watershed Implementation Plan so our concern would be with new or expanded sources that use phosphates or existing plants that change their chemicals and begin to use phosphates that weren't using them before. DEQ will check the definition of "expansion" in the Nutrient Trading General Permit. Also, the water containing phosphates would have to be in the water used to backwash the filters or somehow be introduced into the wastewater discharge. The permit writers would benefit from some instruction on evaluating this requirement during the registration process. This could also be added to the implementation guidance. During the registration statement discussion (question #13), this topic came up again. See below.

This section also contains continuation of permit allowances for when coverage cannot be granted in time. It states that continuation of permit coverage is allowed if the owner submits a timely complete registration statement which cannot extend beyond the expiration date of the "original" permit. DEQ is eliminating the reference to the "original" permit as that is confusing and unnecessary.

#### Registration Statement (Section 60)

This section specifies when registration statements are due. For reissuances, registrations are due 60 days prior to expiration. For owners currently having an individual permit and moving to this general permit, they must submit a registration 270 days prior to expiration. DEQ is proposing to change 270 to 240 days. This is the same time period used in other general permits and gives the DEQ 30 days to review the registration statement, 180 days for the permittee to submit another individual permit application if registration coverage under the general permit is denied and another 30 days for DEQ to review the individual permit application.

The general "catch-all" requirement for any facility not currently covered by a VPDES permit shall file a registration statement (with no due dates) in section 9VAC25-860-60 A 1 c is proposed for deletion. Typically, most industries that discharge process water are known entities and already covered under either an individual or a general VPDES permit. It was intended for unpermitted facilities that are discovered and must apply for a permit. This occurs sometimes for stormwater permits but for most other facilities it is unnecessary.

*Registration statement question #6* - DEQ staff discussed question 9VAC25-860-60 C 6 of the registration statement which asks for the daily maximum actual or the projected wastewater flow rate in millions of gallons per day (MGD) or gallons per day (GPD). Staff explained the daily maximum is the flow rate needed to determine if WET monitoring is required. The daily maximum and the monthly average are the two required discharge flow rates reported to DEQ quarterly or monthly in the permit. Staff suggested deleting "projected flow" and substituting "monthly average actual" in the question. Monthly average actual process wastewater flow corresponds to the EPA e-reporting flow requirements and also the DEQ reporting discharge monitoring flows.

The group discussed whether the word "actual" is needed. It is probably added by EPA to distinguish between "design" flows. Instructions could be added to the registration statement to explain the flows reported here should be gathered from the previous permit cycle.

Also discussed was if the word "rate" was redundant and whether "typical volume" was useful.

Related to the flow references are that the limits pages in Part I A 1 and 2 of the permit (9VAC25-860-70) indicate this flow rate is an "estimate based on the technical evaluation of the sources contributing to the discharge." Some smaller facilities will use volume and discharge time to estimate a MGD or GPD flow rate. Other facilities will use a flow meter which is also allowable. This could be clarified in the instructions for the registration.

Eventually, the consensus was as follows for question # 6:

6. The outfall number, latitude and longitude, 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...

*Registration statement question* #7 - The type of water treatment is another question in the registration statement (9VAC25-860-60 C 7). The examples listed are conventional, microfiltration, ultrafiltration, nanofiltration, reverse osmosis, or a combination of these. VDH explained that conventional is defined as drinking water treatment type (including coagulation, flocculation,

sedimentation, and filtration) and is not defined by DEQ in this regulation. DEQ's only concern is the filtration type since this is how the limits pages are separated. It is assumed "conventional" treatment (microfiltration and ultrafiltration or anything that is NOT reverse osmosis or nanofiltration) falls under Part I A 1 of the permit and "reverse osmosis" and nanofiltration falls under Part I A 2. DEQ should consider adding a definition of "conventional" treatment. VDH will share the Waterworks Regulation with DEQ. DEQ should consider adding the word "filtration" to clarify this question (i.e., to list "the type of water treatment <u>filtration</u>.....") or reword the question to provide emphasis on the type of filtration (e.g., "Does the water treatment plant utilize micro, ultra, nanofiltration or reverse osmosis?).

*Registration statement question* #12 - DEQ asked if the point of chlorine injection should be added to the question or to the instructions in the registration statement. It is useful for DEQ to determine if the chlorine limits apply to a discharge and for compliance to check during an inspection to ensure the correct limits have been applied. It is related to question #13 in that DEQ needs to know chemicals that may get into the process wastewater.

Registration statement question #13 – This question asks for information on chemicals used in the production of drinking water and process wastewater treatment. The permittee is instructed to include the SDS sheets with the registration statement. One DEQ regional office had indicated the SDS sheets could be 50 - 100 pages and was not necessary. Another DEQ office said this had not been their experience and that SDS sheets were useful. Consensus was to leave the instructions as is and continue to ask for the SDS sheets.

This registration statement question reopened the topic of the use of phosphate in drinking water treatment. DEQ thinks it is only a concern if it is a new or expanding facility, if chemicals have changed in the treatment of drinking water and if the phosphate enters the process wastewater. DEQ will consider adding questions about new or expanding dischargers to the registration statement. The question currently asks for chemical usage changes and whether the chemicals enter the process wastewater. The concern about the use of phosphate in drinking water treatment may also warrant more registration statement instructions and guidance for the permit writers.

*Registration statement question* #15 - DEQ noted that one permittee had incorrectly indicated they discharge to an MS4 when they actually discharged into a stream within the MS4 city limits. DEQ will explain this more thoroughly in the registration statement instructions.

Registration statement in 9VAC25-860-60 E is the requirement for electronic submittal of registration statements upon notification from the Department.

## General Permit (Section 70 Part I A) - Limits

In the past questions have come up about monthly average reporting and how to calculate this value. Staff plans to add an explanation in special condition 9VAC25-860-70 B 8 (Compliance reporting) to address this. See below compliance reporting discussion.

An instruction about composite sampling is in footnote #4 in Part I A 1 and footnote #3 in Part I A 2. Staff explained there are some unusual situations that don't fit clearly into the composite sampling instructions and flexibility is needed to address these and still get a representative composite sample.

Consensus was that "for the duration of the discharge" was preferable wording over "until the discharge ceases" based on other general permit definitions of a "composite" sample. Also, the reference to the proposed word "daily" must be removed because that indicates a 24 hour sampling period which cannot be met due to variability in discharge times and manpower. The final language that reached consensus was:

"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 daily 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.

<u>General Permit (Section 70 Part I B) – Special Conditions</u> Several special conditions were discussed.

*Special condition* #5 - This condition states that owners of facilities that are a source of the specified pollutant of concern to waters with approved TMDLs shall implement measures and controls that are consistent with the assumptions and requirements of the TMDL. There are several sediment TMDLs with impairments and wasteload allocations (WLAs) for potable water treatment plants. These were calculated using the existing flows and permit limit concentrations in the permits so these are considered consistent with the assumptions and requirements of those TMDLs. There is also an aggregate phosphorus TMDL where one potable water treatment plant is part of that an aggregate. The permittee may be asked to demonstrate how they are consistent with the assumptions and requirements or revert to an individual permit. DEQ will inquire with the regional TMDL planner if this permit would be considered consistent with the assumptions and requirements of that TMDL.

*Special condition* #6 – This condition contains reporting requirements for certain toxic pollutants. This condition is required in all industrial permits per the VPDES (9VAC25-31-200) and NPDES (40 CFR 122.42) permit regulations. If the permittee suspects they might discharge these pollutants, then they must be reported. DEQ was asked if there was a definition for toxic pollutants and did it include PFAs? There is not a definition in this regulation but the permit regulation defines toxic pollutants (9VAC25-31-10) as any pollutant listed as toxic under § 307(a)(1) of the CWA or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing § 405(d) of the CWA. The reference list does not include PFAs. The definitions in the permit regulation apply to all general permits as well.

*Special condition* #8 – This condition contains compliance reporting requirements including quantification levels (QLs). DEQ is suggesting to remove the sentence that refers to the use of QLs when calculating quantity limits since the only quantity reporting is for flow (all others are concentration limits) and no QLs are involved with flow measurements. A sentence is proposed to be added on how to calculate quarterly monthly averages and daily maximums. DEQ recommended changing the proposed language to "maximum of the daily values for each calendar day during the monitoring period." Consensus was that this was less confusing.

Special condition #10 – No changes are suggested here but DEQ explained WET testing is triggered when the daily maximum flow rate is greater than or equal to 50,000 GPD over three consecutive monitoring periods (quarterly for Part IA1 limits or monthly for Part IA2 limits). This means the facility may exceed the daily maximum on multiple days in a quarter or in a month without triggering the WET requirement. The daily maximum must be exceeded consistently 3 quarters or months in a row regardless of the number of days during those quarters or months. The implementation guidance may need to provide clarity on this. The need for WET limits is typically determined at reissuance.

<u>Conditions Applicable to All VPDES Permits (Section 70 Part II)</u> This part is referred to as the "boilerplate" because it is placed in all VPDES permits.

*Part II A* – This condition contains monitoring requirements. VDH asked if the facilities that analyze parameters on site (e.g., chlorine and pH) must be certified in accordance with the Virginia Environmental Laboratory Accreditation Program (VELAP). DEQ responded that the approved procedure must be followed in accordance with 40 CFR 136 and the testers methodologies are inspected by DEQ but these field tests do not need to be performed in a VELAP certified laboratory and this exemption may be in the VELAP regulations. VDH said the Waterworks Regulation contains a specific exception for this and will share that language with DEQ. The concern is that the current language could indicate the testers need to be certified as a lab or samples need to be sent to a certified lab.

*Part II C* – This condition is amended to require electronic DMR (e-DMR) once 3 months notification has been given by DEQ.

*Part II I* – This condition is amended to include the new Pollution Response Program (PREP) reporting web link. DEQ staff mentioned that each regional office contains separate reporting emails for PREP and we should consider allowing those to be substituted or included in the regulation. The regional DEQ staff will send central office staff the language that they use for individual permits.

### V. Next Steps

The group discussed whether a future TAC meeting was needed. DEQ staff suggested they can email a revised draft to the group to decide if we need to have another in person meeting but the consensus was that another meeting would not be necessary.

Staff will ask the State Water Control Board in March for approval to go to public comment and hearing. The Notice of Public Comment will be in the May-June time period. A final is expected to go before the Board in Sept 2022.

Between October 2022 and the effective date of July 1, 2023, DEQ will update implementation guidance, the registration statements will be mailed and returned and permit coverage reissued.

Thanks to all the TAC members for their service.