



Commonwealth of Virginia

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SUBJECT: Technical Advisory Committee (TAC) Meeting to Discuss the 2023 Reissuance of 9VAC25-120 Virginia Pollutant Discharge Elimination System (VPDES) General Permit Regulation for Discharges From Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests
TO: TAC Members and DEQ Staff (listed below)
FROM: Alison Thompson, NRO Office of VPDES Permits
DATE: December 20, 2021 (FINAL)

A TAC meeting was held on December 1, 2021 at the DEQ NRO office, 13901 Crown Court, Woodbridge Virginia 22193. The meeting, which was the first TAC meeting for this general permit, began at 12:30 PM. Participants attending¹ the meeting were:

<u>Name</u>	<u>Organization</u>
James Thornhill	Wire Gill LLP
John Diehl	ECC Inc.
Christopher Elliott	ECS Mid-Atlantic
David Bookbinder	ECS Mid-Atlantic
Nich Allen	ECC Inc.
Allan Brockenbrough	DEQ - CO
Alison Thompson	DEQ - NRO
Peter Sherman	DEQ - CO
Ann Zimmerman	DEQ - NRO
James Barnett	DEQ - CO
Troy Nipper	DEQ - CO
Zach Pauley	DEQ - CO
Jeanne Puricelli ¹	DEQ - PRO
Heather Weimer ¹	DEQ - PRO

¹ Some DEQ Technical Liaison staff participated via conference call.

Information provided before the meeting included:

- Regulation with draft amendments, VPDES) General Permit Regulation for Discharges From Petroleum Contaminated Sites, Groundwater Remediation, and Hydrostatic Tests, 9VAC25-120
- Role of TAC overview
- Memo regarding potential expansion of the scope of this general permit.

Discussion

Department of Environmental Quality (DEQ) staff reviewed the agenda and presented information (11 slides) regarding the TAC process, the framework for the draft general permit regulation, and key issues

DEQ noted that the NOIRA was published in late 2020. The first TAC meeting is today. A second TAC meeting is likely after the holidays. At present, DEQ is hoping to present the proposed regulation at the March 2022 meeting. The current general permit expires February 2023.

DEQ briefly reviewed the *Role of the TAC* handout.

DEQ observed that the current scope of the general permit includes wastewater discharges from sites contaminated by petroleum products, chlorinated hydrocarbon solvents, hydrostatic testing of natural gas storage tanks and pipelines, hydrostatic testing and dewatering of petroleum storage tank systems and associated distribution equipment, and the hydrostatic testing of water storage tanks and pipelines.

DEQ noted that there are 34 current permit coverages (with 22 in NRO). One participant asked if the 34 permits include short-term (projects under 2-weeks) coverages. DEQ responded that short-term projects are not included in the total.

Key elements of the general permit include the registration statement, effluent limits (four sets) and monitoring, special conditions and standard conditions. One question for reissuance is whether DEQ should expand the scope of the general permit.

DEQ then reviewed the draft regulatory language prepared for this meeting with a focus on the basic changes needed to update the general permit (edits regarding any expansion were not in the working draft presented). DEQ noted:

- Dates have been amended (would be effective February 26, 2023; expire February 25, 2028);
- Some general edits (non-substantive) have been made to make this general permit consistent with other VPDES general permits.
- Replaced location with the latitude and longitude of the discharge point under registration statement requirements (required for electronic-reporting [e-reporting]).
- Added the State Corporation Commission entity identification number under registration statement requirements (to ensure correct business entity is permitted).

- Added a contingent e-reporting requirement for submission of registration statements (required for electronic-reporting – not in effect until DEQ provides permittees with notice).
- Added a contingent discharge monitoring report (DMR) e-reporting requirement (required for electronic-reporting – not in effect until DEQ provides permittees with notice).
- Updated the pollution response reporting link (changed due to DEQ’s website redesign).
- Amended the inspection and entry provision to add EPA-recommended language regarding the presentation of credentials.

One DEQ participant asked if the effective date could start at the beginning of a monitoring period. There was agreement that this would be desirable, but any implications need to be considered.

DEQ noted that there would be no changes to the effluent limits for hydrostatic test waters.

DEQ is looking to adjust the significant figures for ethanol to make it consistent with the applicable method.

There was a participant comment about ethylene dibromide (a toxic) regarding checking whether method 8011 will address it. Is there a more current method?

A participant asked if DEQ will review all of the current limits and methods to determine whether they need to change. DEQ responded yes. DEQ also will check to see if any applicable water quality standards have changed.

DEQ indicated that in this draft there are no changes to special conditions (other than above).

DEQ introduced and reviewed the technical memo that was distributed and that discusses expanding the scope of the general permit to address additional dewatering and contamination. The memo discussed the Voluntary Remediation Program (VRP) and proposes adding three metals – copper, nickel and zinc – to the general permit. Expansion would better compliment the VRP program (many VRP facilities are interested in coverage under this general permit), and provide a more efficient VPDES permitting option.

Discussion of Replacing the Lead Limit Equation with a Numeric Limit for Lead

DEQ is proposing to specify the existing lead limit as a numerical value (instead of the current equation) since this is clearer to the permittee and would make reporting more effective. DEQ would need to determine what hardness is reasonable to use in establishing such a numeric limit. A lead limit is specified in the existing general permit for gasoline contamination.

The memo include some hardness data (ranging from 24 – 540 mg/L as CaCO₃) and presents limits calculated based on 50 mg/L as CaCO₃ (would be applicable east of the Blue Ridge) and 100 mg/L as CaCO₃ (west of the Blue Ridge) based on GM00-2011. Participants agreed that they

see variation in hardness. One commented that monitoring often indicates non-detect for lead. Another noted that copper, nickel and zinc tend to be the problems.

A DEQ participant mentioned possibly having tiers to reflect the variation in average hardness across the state. This participant suggested DEQ should take a more detailed look at available hardness data to inform decisions for this reissuance.

Discussion of Including Addition Metal Limits in the General Permit

The memo discusses adding limits to the general permit for three metals: copper, nickel and zinc. These are the parameters that most often require reasonable potential (RP) analysis to determine whether these metals cause or contribute to an exceedance of water quality criteria (where they do, at present, an individual permit is required). Where these metals are present at levels of concern, and the general permit is not available, the options for discharge, such as private treatment, can be quite expensive.

One issue is that VRP facilities are often not able to obtain coverage under the petroleum general permit whereas non-VRP facilities may be able to obtain such coverage. This is because VRP facilities are required to develop monitoring data for metals that can then be subject to reasonable potential analysis, while non-VRP facilities are not required to develop such data. It was pointed out that this general permit should not create a disincentive to participate in the VRP program. The VRP process also presents a history of the facility, which can help identify a whether contamination comes from natural conditions or a human source. One participant stated that it would be nice if DEQ had discretion to decide if a man-made source of pollutions exists. DEQ pointed out that permit writers are generally not in good position to be making this decision, and even natural pollution that is exposed or altered due to remediation can cause water quality problems.

There was some discussion that the quality of samples vary (some can be high in sediment).

One participant asked if a facility could treat for metals in order to qualify for coverage under the general permit. DEQ responded yes, where the permit includes a limit for the metal (the facility must meet the limit).

One participant suggested that one option could be to require metals monitoring, collect the data, and evaluate the need for additional metals limits during the next reissuance. This approach was used for the cooling water general permit.

One participant asked about post-construction dewatering. DEQ said that at present if there is no RP and no exceedance of water quality standards, then dewatering coverage is normally terminated. If there is either of these, or even high volume discharges, permits writers may be uncertain on how best to proceed.

One participant observed that some of the metals numbers (criteria) are low, and in many cases metals are naturally occurring. Discharging to MS4s pose issues. Participants also observed that permitting natural conditions is not the focus of the VPDES program.

One participant said that the volume of the discharge is a significant factor related to environmental impact. Some discharge volumes are substantial.

There was some discussion of filtered versus dissolved samples.

Some different approaches to metals were discussed. Under one, if there is RP for a metal of concern, the permit could require monitoring. Limits could address a source of contamination, however, such monitoring would capture background contamination. Under a second, if a source of contamination is identified, metal limits could apply (e.g., gas station old enough to have used lead gas).

One participant asked whether other metals (beyond copper, nickel and zinc) would be added to the general permit. Metals such as arsenic, iron and cadmium.

One participant pointed out that if this general permit is not available, the long lead time to obtain an individual permit does not work for shorter term projects, and the discharges tend to go to a POTW. So not having this permit available could overwhelm POTWs.

A DEQ participant said we need to look further into the data. Addressing other metals could be helpful and DEQ will consider such a change. For example, the District of Columbia identified a manganese problem. A participant mentioned selenium and mercury. One question is how any additional metal limits would be integrated into the existing general permit structure (i.e., existing limits table, new limits table, etc.). This depends on how they would be used and when they are a concern (issues still to be decided).

One participant asked if setting screening levels for these additional metals is a workable approach. The objective would be to use existing data or obtain data that allowed for determining when a source of metals is present such that the general permit needs metals limits. One participant observed that EPA has regional screening levels (RSOs).

Discussion of Monitoring for Temperature and Dissolved Oxygen

Temperature monitoring was previously raised within DEQ by a DEQ staff person but we need to clarify whether this is an issue that should be presented to the TAC. The dissolved oxygen (DO) issue is that groundwater has low DO (low DO is harmful to aquatic life).

Closing Discussion

DEQ agreed to take a deeper look at the metals data that it has. A participant encouraged DEQ to assess the data statistically. DEQ will also talk to its Land Office staff. DEQ also will work to quantify naturally occurring ranges of metals. A participant noted that groundwater metals data are limited.

One participant noted that the general permit assumes a dry ditch discharge. It might be possible to vary metals limits based on stream flow (although this is more complex).

A participant noted that most dewatering is continuous (at least where the source is deep; if shallow, the flow is seasonal).