



June 24, 2022

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Submitted Electronically

Board of Directors:

Re: Comments on Reissuance of VPDES General Permit No. VAG83 for
Discharges from Groundwater Remediation of Contaminated Sites,
Dewatering Activities of Contaminated Sites, and Hydrostatic Tests

Bette Dzamba

Dear Ms. Thompson:

Leigh Kirchner

I submit these comments on behalf of Wild Virginia and our members across the state. We object to issuance of the permit as currently drafted as it fails to conform to regulatory and statutory requirements. Therefore, we urge the Department of Environmental Quality (DEQ) to determine that this permit cannot be issued and to draft a new permit or permits that are fully protective of water quality and legally supportable.

Kate Mallek

Allison McClure

Grace Tuttle

Ryan Wagener

Our primary objections include:

Elizabeth Williams

- that a single general permit is inappropriate to cover all of the activities to be covered,
- that the permit would allow violation of the state's antidegradation policy, and
- that the permit may allow violation of the narrative criteria.

A Single General Permit is Inappropriate to Cover the Range of Activities Addressed

The fact sheet (FS) prepared in support of the draft permit states that the permit is to cover "point source discharges from petroleum and non-petroleum contaminated sites, groundwater remediation, dewatering activities, and hydrostatic tests to surface waters of the Commonwealth of Virginia." FS at 1. It goes on to say that "the category of discharges is appropriately controlled under a general permit," apparently based on the assertion that "[t]he category of discharges to be included involves facilities with the same or similar types of operations and the facilities discharge the same or similar types of wastes." Id.

The assertion that all of the different activities DEQ proposes to cover under this single permit qualify as the same or similar is simply not supportable. A number of the criteria for inclusion of classes of activities in a general discharge permit, as defined in state and federal regulations, are clearly not met here.

State regulations define the circumstances under which the Board may issue general Virginia Pollutant Discharge Elimination (VPDES) permits, at 9 VAC 25-31-170.¹ That section of the administrative code states that a general permit may include one or more categories or subcategories of point sources if all covered sources:

- (1) Involve the same or substantially similar types of operations;
- (2) Discharge the same types of wastes or engage in the same types of sludge use or disposal practices;
- (3) Require the same effluent limitations, operating conditions, or standards for sewage sludge use or disposal;
- (4) Require the same or similar monitoring; and
- (5) In the opinion of the board, are more appropriately controlled under a general permit than under individual permits.

9 VAC 25-31-170.A.2. This draft permit fails to conform to conditions (1) - (4).

Operations described in the draft permit are very different for different types of activities covered. For example, in performing hydrostatic testing of "new or repaired petroleum or natural gas pipelines, petroleum storage tanks, or water storage tanks and pipelines," as addressed in Part I.A.2., parties acquire either potable or non-potable water, which is presumably not known to be contaminated, feed that water into the units to be tested, and place the system under pressure. The water is then released from the units and discharged. The units being tested are to be "substantially free of debris, raw material, product, or other residual materials," FS at 19. Discharges in this category are "generally one-time occurrences of less than 48 hours." Id.

In sharp contrast, operations covered under Parts I.A.3., I.A.4, I.A.5., and I.A.6. are designed to gather water polluted by spills, leaks, or dumping of waste and treat it to meet numerous effluent limitations for pollutants expected to be present because of the nature of the cleanup site being addressed. Clearly the handling and treatment for polluted water at these types of sites requires personnel and systems adequate to protect humans and the environment from these activities themselves and to ensure that treatment systems are properly designed, operated, and maintained. These discharges may last for extended periods of at least weeks or months.

As noted above, the types of wastes vary greatly between sites merely handling hydrostatic test water and those involved in pollution cleanup. Further, the wastes from one subcategory of cleanup site to another vary drastically. The great differences in the types of wastes, from one category to another, is reflected in wholly different and distinct sets of effluent limitations. To illustrate this fact, we note that water accumulated and treated at sites contaminated by chlorinated hydrocarbon solvents, under Part I.A.5., may contain measurable levels of eight pollutants that are "known or suspected carcinogen[s]."² Water from sites

¹ Virginia's regulation is essentially identical in substance to federal regulations at 40 C.F.R. § 122.28.

² As designated for each of these pollutants in the table at 9 VAC 25-260-140.B.

contaminated by metals, covered under Part I.A.6., has no identified carcinogens but does include twelve separate metals in the "total recoverable" form. Some of these metals are present naturally in the areas addressed, some are not. The toxicity of these pollutants, which may cause both acute and chronic effects, is affected by the hardness of the water containing them. Clearly, it is not credible to assert that either the types of wastes or the effluent limitations for these different types of discharging operations are "the same."

Finally, the monitoring methods and requirements are significantly different from one subcategory of discharge addressed in the draft permit to another. The collection of samples for metals, volatile organic compounds, and other types of pollutants require different methods, containers, preservation techniques, and holding times. The analytical tests are different and require different types of training and levels of expertise.

It is also notable that the permit requires that monitoring results be recorded by the dischargers for "short term projects" at Part I.A.1. and "dischargers of hydrostatic test waters" at Part I.A.2., but these dischargers are not required to submit the results to DEQ. All other categories addressed in the permit require monthly reporting to DEQ. This difference in requirements implies that DEQ places a higher level of importance on the monitoring efforts and results for some operations than for others.

Activities Covered Under the Draft Permit Are Likely to Violate the Antidegradation Policy

The state may not issue a VPDES permit if there is a reasonable potential that discharges made in accordance with the permit's requirements will cause or contribute to violations of the water quality standards (WQS). This applies to all parts of the WQS, including narrative and numeric criteria and the antidegradation policy.

We assert that discharges allowed under the conditions of the permit and the implementation procedures defined by DEQ will almost certainly violate the antidegradation policy in some cases, particularly where water quality currently exceeds the minimum levels required under the numeric criteria in the WQS. Therefore, we believe the permit must be re-drafted to prevent this potential.

The regulation governing the application of this general permit states that a party proposing a discharge which "violates or would violate the antidegradation policy in the Water Quality Standards at VAC25-260-30" will be notified that the discharge is not eligible for coverage under general permit number VAG83. 9 VAC 25-194-50.B.3.

The section of Virginia's water quality standards regulation that deals with high quality or so-called "Tier 2" waters states, in part:

Where the quality of the waters exceed water quality standards, that quality shall be maintained and protected unless the board finds, after full satisfaction of the intergovernmental coordination and public participation provisions of

the Commonwealth's continuing planning process, that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. . . .

According to a communication from DEQ staff: "In the event that a discharge is proposed to a Tier II stream, staff is instructed to evaluate whether the effluent limits are protective of the antidegradation policy using the methodology outlined in Guidance Memo No. 00-2011."³

The guidance document referenced varies from the plain wording of the regulation, which mandates that high quality conditions "shall be maintained and protected," in that the guidance arbitrarily defines levels water quality reductions the agency deems significant. That threshold of significance is, according to the agency memorandum, based on "a consensus of agency opinion."⁴ That document provides no scientific or technical sources or analyses that support this "consensus of agency opinion." The record for this permit action does not include any such analyses or support.

Most pertinent to our concerns regarding pollutants to be discharges under this permit are the assertions in the guidance that "there will be no significant lowering of water quality if the permit limits is [sic] based on the following restrictions . . .

- No more than 25% of the unused assimilative capacity is allocated for toxic criteria for the protection of aquatic life.
- No more than 10% of the unused assimilative capacity is allocated for criteria for the protection of the human health.

Id.

As explained below, we assert the application of the agency guidance for this permit action is unsupportable for five reasons.

First, the plain language of the regulation is unambiguous and the agency is not authorized to weaken or change that regulatory provision based on a "consensus of agency opinion." The State Water Control Board (Board) bears the sole authority to adopt water quality standards. The Board has allowed for the agency to make findings of significance in other parts of the WQS regulations⁵ but did not do so in this instance. We may not assume that they intended to allow this latitude for agency judgement here.

³ Email message from Alison Thompson, DEQ to David Sligh, Wild Virginia, *RE: General Permit VAG83*, June 24, 2022.

⁴ Virginia DEQ, Memorandum from Larry G. Lawson, Guidance Memo No. 00-2011; *Guidance on Preparing VPDES Permit Limits*, August 24, 2000, p. 9.

⁵ 9 VAC 25-260-40 prohibits "significant changes to naturally occurring dissolved oxygen and pH fluctuations in [Class VII trout] waters;" 9 VAC 25-260-275.E. allows for findings of "significant adverse social and economic impacts to beneficial uses and to the locality and its citizens" as a factor in decision-making related to protection of clam and oyster waters; 9 VAC 25-260-370.B. allows for judgements as to whether populations of trout or warmwater gamefish exist in a stream.

Second, while EPA has allowed states to apply significance or de minimis concepts in regard to antidegradation, there is no support for those actions in the Clean Water Act (CWA) or regulations. The EPA's primary justification for allowing de minimis amounts of degradation is that this procedure "allows States and Tribes to focus limited resources where they may result in the greatest environmental protection"⁶ but, by this reasoning, the EPA seems willing to replace the judgement of Congress with ad hoc and relatively unbounded value judgements by State agencies. At the same time, the EPA acknowledges that "States or Tribes that define a high threshold of significance may be unduly restricting the number of proposed activities that are subject to a full antidegradation review"⁷ but the Agency has failed to define what it considers an appropriate "threshold."

The Supreme Court addressed this issue in *Arkansas v. Oklahoma*, 503 U.S. 91 (1992). In that case a new sewage treatment plant in Arkansas, which was to discharge effluent that would flow downstream through a series of three creeks for 17 miles, enter the Illinois River, and then flow another 22 miles before crossing the border into Oklahoma. The State of Oklahoma's WQS required that "no degradation" of the upper Illinois River could be permitted.⁸

An Administrative Law Judge had first upheld the permit, finding that there would not be an "undue impact" from the new discharge to a portion of the River in Oklahoma that was already impaired; that there would be no more than "a mere de minimis impact" on the downstream State's waters.⁹ The EPA's Chief Judicial Officer also upheld the permit but ruled that a proper interpretation of the federal regulation required a more protective standard; that where the prediction of an impact was merely theoretical but was "not expected to be actually detectable or measurable,"¹⁰ the permit should not be denied on that basis. The Supreme Court ruled that EPA's interpretation of the CWA and the regulation was not arbitrary and capricious and upheld the permit.

The levels of degradation in quality allowed in DEQ guidance and apparently applied in implementing this permit will certainly result in detectable negative impacts on receiving waters. Therefore, we believe they cannot be justified under federal law, even if the state's regulation is held to allow this interpretation.

Third, even if it is held that DEQ has the latitude to interpret the regulation to allow an insignificant or de minimis lowering of water quality, DEQ has done so in an arbitrary and unlawful manner through the guidance document. As stated above, no evidence of any technical reasoning or support has been offered in this proceeding or at the time the guidance was issued to justify the raising of pollutant levels as specified and noted above. DEQ must

⁶ Water Quality Standards Regulation, Advance notice of proposed rulemaking, 63 Fed. Reg. 36742, 36783 (July 7, 1998).

⁷ Id.

⁸ *Arkansas v. Oklahoma*, 503 U.S. 91, 94 (1992).

⁹ Id. at 96.

¹⁰ Id. at 97.

not be allowed to base important regulatory decisions on vague bases, such as unexplained "consensus of agency opinion."

Fourth, in regard to some of the specific types of pollutants addressed in permit number VAG83, any addition will increase risks and cannot be easily dismissed as insignificant. As discussed above in this letter, there are numerous substances deemed to be known or suspected cancer-causing agents that are allowable in measurable amounts in discharges. This is particularly significant because, unlike many other pollutants, there are no "safe" levels of carcinogens in the environment. By contrast, for many substances smaller amounts are considered harmless to humans and wildlife but above defined thresholds they are thought to cause acute or chronic toxicity effects.

Fifth, even if we could determine that increases in any one carcinogenic pollutant and the greater risk it presents are acceptable, this would not account for the fact that discharges allowed under this permit may contain a soup of multiple carcinogenic and non-carcinogenic substances and we have no idea how these combinations of pollutants affect risk of death or impairment to humans or wildlife. As explained above, the permit could allow increases in levels of up to eight carcinogens in the form of chlorinated hydrocarbon solvents along with other pollutants. We simply have no idea how these mixtures affect the risk levels humans would face if exposed to them and it highly irresponsible to allow these increases without that understanding. We do know that combinations of pollutants may have synergistic reactions, such that the impacts to two or three or eight may cause orders of magnitude greater harm than would each individual chemical.

Activities Covered Under the Draft Permit May Violate Narrative Criteria

The Board's WQS regulation includes general or narrative criteria that prohibit discharges that cause or contribute to conditions in state waters that "interfere directly or indirectly with designated uses of such waters or are inimical or harmful to human, animal, plant, or aquatic life." 9 VAC 25-260-20.A. All state water are designated for "recreational uses" and "the propagation and growth of a balanced, indigenous population of aquatic life." 9 VAC 25-260-10.

Any water user wishing to use a stream that receives discharges such as those allowed in the draft permit from contaminated sites, particularly those containing a mix of cancer-causing chemicals, even if those pollutants are individually found in small concentrations, would understandably have their uses interfered with. This would constitute a violation of the narrative criteria and must not be allowed under the permit.

As support for this contention, we cite the Virginia Appeals Court decision in *State Water Control Board v. Captains Cove Utility Company, Inc.*¹¹ In that case, the Board had denied a discharge permit to a sewage treatment facility based on the fact that the potential for bacterial

¹¹ *State Water Control Board v. Captains Cove Utility Company, Inc.*, 74 Va. Cir. 253 (2007).

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contamination in receiving waters would cause a perception of risk for recreation and shellfishing. The court was clear that the narrative WQS prohibition on direct or indirect interference with uses, including recreation, could justify denial of a permit. The discharge need not contravene established numeric criteria. As here, it is possible that every one of the chemicals in one of these discharges could be below the numerical concentrations allowed under our WQS but still reasonably be deemed an interference with recreational uses.

Conclusion

The range of activities and pollution types combined under this single general permit is not allowable under either state or federal regulations. If DEQ wishes to cover any or all of these categories under general permits, it must separate them by categories that are the same or similar in term of the operations to be used, the nature of the pollutant and limitations and other factors defined in the regulation.

DEQ must find that there is a reasonable potential that discharges made in compliance with this permit may cause violations of both the antidegradation policy and the narrative criteria in the WQS regulation. The defined types of activities and discharges should be addressed in new general or individual permits that provide proper technical and legal support to ensure that the mandates of the Clean Water Act and State Water Control Law will be met.

Thank you for considering our comments. We would welcome the chance to discuss these issues further.

Sincerely,

/s/ David Sligh

David Sligh
Conservation Director