

DOMINION PIPELINE MONITORING COALITION

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Submitted Via Email

Re: Notice of Intent to Provide Section 401 Water Quality Certification for Activities
Authorized Under Corps of Engineers Nationwide Permit 12

Dear Mr. Hardwick:

I am submitting these comments on behalf of the Dominion Pipeline Monitoring Coalition (“DPMC”). DPMC and its members have direct and ongoing interests in the environments that would be affected by the subject water quality certification (“WQC”).

We object to the issuance of this WQC, because the proposed action fails to meet the requirements of federal and state laws. The record offered as support for this action includes no analysis to justify issuance of the WQC and, therefore provides no legal or technical basis for a finding by the DEQ. Further, the absence of the required analysis makes it impossible for members of the public to provide complete and effective comments during this notice period. The current proposal must be rejected.

The Notice of Intent (“Notice”) for this proposed action states that “DEQ . . . may only issue final Section 401 Certification decisions on a Nationwide . . . USACE permit if the permit meets the requirements of the VWP regulation. . . .” In addition to the Virginia Water Protection Permit regulation, a state WQC is governed by section 401 of the Clean Water Act (“CWA”) and must meet that statute’s requirements and those of associated regulations.

The Clean Water Act Review

The CWA requires that:

Any applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable waters, shall provide the licensing or permitting agency a certification from the State in which the discharge originates or will originate . . . that any such discharge will comply with the applicable provisions of sections 301, 302, 303, 306, and 307 of this title.

CWA § 401(a) (U.S.C. § 1341(a)).

Because the activities authorized by U.S. Army Corps of Engineers (“COE” or the “Corps”) Nationwide Permit (“NWP”) number 12 will result in discharges to navigable waters, the prerequisites to issuance of a WQC apply to this action. According to the federal regulations governing reviews under CWA section 401, Virginia is required to conduct a “reasonable assurance” analysis to certify that the activities permitted under NWP 12 will not result in violations of state water quality standards and other state requirements designed to protect water quality. 40 C.F.R. § 121.2(a)(3). Without such a finding, the certification may not be issued. A state may impose conditions on its WQC, which are incorporated into the federal permit.

As the U.S. EPA has stated, “Congress intended for the States to use the water quality certification process to ensure that no Federal license or permits would be issued that would violate State standards or become a source of pollution in the future.” U.S. EPA, *Water Quality Standards Handbook: Second Edition* (“WQS Handbook”), 1994, Section 7.6.3. We expect the Virginia DEQ to meet its obligations to protect Virginia waters from the federal permit issued by the Corps. To do so, the state must deny certification for the Corps’ NWP 12.

The Virginia DEQ has not performed a reasonable assurance analysis and, therefore, the WQC may not be issued for NWP 12. DPMC made a request of the DEQ for records related to this regulatory action, including:

- The specific bases for a finding that there is a reasonable assurance that any activity covered by NWP 12 will meet all Virginia water quality standards.
- Any data or efforts made by the DEQ to assess whether activities covered by and in compliance with NWP 12 in the past have achieved compliance with Virginia water quality standards.

The documents we received (filed as attachments to this letter) contain no evidence of the required analysis. Given this record, the legal and technical support for finding a reasonable assurance of compliance with Virginia WQS does not exist. In fact, given the blanket nature of the proposed certification, which fails to take any account of the many and varied circumstances across the state where covered activities may occur, we submit that such a “one-size-fits-all” approval cannot protect all state waters.

Only one of the documents supplied by DEQ to support its action, the *Decision Document, Nationwide Permit 12* (“Decision Document”) issued by the COE, even addresses the need to ensure compliance with state water quality standards (“WQS”). That Decision Document reiterates that “[u]nder Section 401 of the Clean Water Act States review proposed discharges to determine compliance with applicable water quality standards.” Decision Document, page 37. The COE has made, and can make, no showing of compliance with Virginia water quality protection requirements upon which the DEQ may rely.

Another document provided by DEQ in response to our request for information supporting this regulatory action was a portion of Virginia’s erosion and sediment control standards, entitled *STD & SPEC 3.25, Utility Stream Crossing* (“Std & Spec”). This document is described as a “strategy for crossing small waterways when in-stream utility construction is involved” and is said to be “[g]enerally applicable to flowing streams with drainage areas less than one square mile.” Std & Spec., at 1. First, this document and the guidelines therein will clearly be inapplicable for a vast

number of waterbodies where utility line crossings may be allowed under NWP 12. The document states that the “[s]tructures and methodology for crossing streams with larger drainage areas should be designed by methods which more accurately define the actual hydrologic and hydraulic parameters which will affect the functioning of the structure.” Id.

Second, the goals for pollution control methods described in the Std & Spec document do not address the need to meet state water quality standards. Rather, the document describes two purposes: “1. To help protect sediment from entering the stream from construction within approach areas” and “2. To minimize the amount of disturbance within the stream itself.” Id. As discussed below, these goals do not define results that conform to water quality conditions that must be maintained to truly protect instream uses and meet all other conditions in the WQS. General approaches promising minimization of impacts are not legally supportable bases for a finding under Virginia’s CWA section 401 responsibilities, unless those minimal impacts are proven to conform to WQS.

The nature of a “nationwide” permitting action, such as that used to develop NWP 12, makes state-specific and waterbody-specific findings impossible. As the COE stated, “[s]ince NWPs authorize activities across the nation, projects eligible for NWP authorization may be constructed in a wide variety of environmental settings.” Decision Document at 42. As the COE acknowledges, its evaluation of potential impacts “must be speculative or predictive in general terms.” Id. The Corps states that, because of the national scale of NWP 12, local conditions may require “[d]ivision and district engineers [to] impose, as necessary, additional conditions on the NWP authorization or exercise discretionary authority to address locally important factors or to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects.” Id. at 42-43.

For Virginia to certify NWP 12, the state would need to anticipate the range of impacts that might result from these discretionary judgements by Corps officials for individual cases where NWP 12 coverage is proposed. The state has not done so, and given that COE officials have significant latitude to impose requirements that are different from the general conditions in NWP 12, the state cannot realistically do so. To certify all projects proposed for Virginia under NWP 12 with a blanket WQC is, in effect, to cede the state’s authority to protect its waters to Corps officials on a case-by-case basis.

It is also important to note that the COE defines its mandate as that of limiting activities such that they will cause “no more than minimal individual and cumulative environmental effects.” Id. at 63. A vague promise that impacts will be only “minimal” does not meet the demands that are embodied in state standards. Further, the Decision Document asserts that “[m]ost of the impacts relating to the construction, maintenance, repair, or removal of utility lines will be temporary.” Id. at 62. Again, permit requirements that allow impacts the Corps deems “temporary,” will not uphold WQS in numerous situations.

Virginia’s WQS, in conformance with the minimum requirements in federal regulations, include three major components, which are designed to meet the CWA’s objective, to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” 33 U.S.C. § 1251 (CWA section 101(a)). These components of the WQS include: 1) designated uses for

all state waters, 2) narrative and numeric criteria, and 3) antidegradation provisions. An activity may meet the minimum requirements of NWP 12, as defined by the COE and still violate each of these provisions of the WQS.

Designated Uses -

Designated uses that apply to “[a]ll state waters, including wetlands” include “recreational uses, e.g., swimming and boating; the propagation and growth of a balanced, indigenous population of aquatic life, including game fish, which might reasonably be expected to inhabit them; wildlife; and the production of edible and marketable natural resources, e.g., fish and shellfish.” 9VAC25-260-10.A. Other uses may apply to specific waterbodies, as designated in the state regulations. Virginia WQS do not allow for impairment of these uses to a “minimal” degree or on a temporary basis, thus, the NWP is not designed to ensure that the uses will be maintained fully.

The COE Decision Document describes numerous ways that state designated uses may be impaired, even if the requirements of NWP 12 are met. Just two examples are described below.

The COE states that “[a]ctivities authorized by this NWP may alter the habitat characteristics of streams, wetlands, and other waters of the United States, decreasing the quantity and quality of fish and wildlife habitat.” Decision Document, at 58. To minimize these impacts NWP 12 includes conditions such as General Condition 2, which the COE states will “reduce adverse effects to fish and other aquatic species by prohibiting activities that *substantially disrupt* the necessary life cycle movements of indigenous aquatic species. . . .” Id. at 59 (emphasis added). Further, the Decision Document states that “[c]ompliance with general conditions 3 and 5 will ensure that the authorized activity has only *minimal adverse effects* on spawning areas and shellfish beds, respectively.” Id. (emphasis added). However, the levels of disruption that meet the Corps’ definition of “substantial” or the threshold for “minimal adverse effects” are not defined by the COE in a way that meets the standards of protection required by the state WQS and are nowhere justified as sufficient to meet those standards.

The Corps’ Decision Document states that “[a]ctivities authorized by this NWP may change the recreational uses of the area. Certain recreational activities, such as bird watching, hunting, and fishing may no longer be available in the area. Some utility line activities may eliminate certain recreational uses of the area.” Id. at 60. The State of Virginia may not certify federally-licensed activities that “may eliminate” designated uses or “existing uses,” as explained below.

There is abundant evidence in the scientific literature demonstrating that the types of pollution control practices allowed by the COE under NWP 12 and described in the Std & Spec document will cause unacceptable impacts to streams. One such reference, prepared for the Interstate Natural Gas Association of America (“INGAA”) indicates that aquatic life impairment will persist for extended periods. That document explains that effects of in-stream pipeline construction on downstream waters are typically short-term and recovery to pre-construction conditions is generally apparent within a year.” INGAA, *River and Stream Crossings Study, (Phase I), Executive Summary* (“INGAA Report”), at 15. Asserting that impacts will “generally” abate with one year carries the obvious implication that effects will last longer in

some cases. And, there is no basis in Virginia WQS for allowing impairment of aquatic life uses for a year or more in any state waters.

The INGAA Report's finding that some impacts to aquatic life and to instream habitats will persist for extended periods is well supported by numerous technical studies. For example, Reid et al. 2002 note that "[s]ediment load increases during construction have been reported to directly and/or indirectly affect fish through modification of their habitats (e.g., increased embeddedness of substrates or infilling of pools)," describing those impacts as "temporary" because pre-construction conditions will be restored within "1 to 2 years." Reid, Scott M., Scott Stoklosar, Serge Metikosh, and Jim Evans, *Effectiveness of Isolated Pipeline Crossing Techniques to Mitigate Sediment Impacts on Brook Trout Streams*, Water Qual. Res. J. Canada, Volume 37, No. 2, 2002, at 473 (internal citation omitted).

Another scientific paper describes "long-term impacts that are more directly associated with the stream's response potential, such as channel incision and lateral migration." Castro, J. M., A. Macdonald, E. Lynch, and C. R. Thorne, *Risk-based Approach to Designing and Reviewing Pipeline Stream Crossings to Minimize Impacts to Aquatic Habitats and Species*, River Res. Applic., 31, at 767, 2014 (internal citation omitted). And while it may be asserted that the conditions imposed by NWP 12 will mitigate these types of long-term impacts in some circumstances, on a nationwide basis, as the Virginia's Std & Spec document states, such general assurances cannot be assumed to protect all state waters unless the methods used "accurately define the actual hydrologic and hydraulic parameters which will affect the functioning of the structure." Std & Spec at 1.

Water Quality Criteria -

Virginia's WQS include both narrative statements and numeric criteria that are designed to support all designated uses. Numeric criteria for specific chemical constituents or for physical characteristics of water bodies (such as temperature, pH, etc.) are included in the state regulations. Narrative criteria apply to all state waters whether numeric criteria exist or not.

For example, in addition to the requirement that all designated used be fully supported, "State waters . . . shall be free from substances . . . in concentrations, amounts, or combinations which . . . are inimical or harmful to human, animal, plant, or aquatic life." 9VAC25-260-20.A. This narrative command requires that, whether numeric criteria are established or not, substances, such as sediments, may not be permitted if they will harm humans or wildlife. The State of Virginia has so far refused to adopt numeric criteria to limit the concentrations or loads of sediments in waterbodies outside the coastal plain but this failure does not relieve the DEQ of the responsibility to enforce the narrative criterion.

General condition 23 of NWP requires permittees to "avoid and minimize discharges of dredged or fill material into waters of the United States to the maximum extent practicable on the project site." Decision Document at 67. However, the conditions required by the WQS do apply only where it is "practicable" to meet them. If conformance with the standards is deemed impracticable, then the activity may not be allowed or certified by a WQC.

Antidegradation -

The Virginia antidegradation provisions in the WQS, in accordance with federal CWA regulations, provide, at a minimum that all “existing uses” in waterbodies be “maintained and protected.” 9VAC25-260-30.1. “Existing uses” “are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.” 40 CFR 131.3(e). Even where a state determines that a designated use is inapplicable to certain waters, the state may approve a variance to that designated use only if “existing uses will be *fully* protected.” WQS Handbook, Section 1.9.1. (emphasis added). As the COE explicitly acknowledges, as cited above, “[c]ertain recreational activities, such as bird watching, hunting, and fishing may no longer be available in the area. Some utility line activities may eliminate certain recreational uses of the area existing recreational.”

Antidegradation provisions in Virginia’s WQS require even stricter controls in high quality waters, stating that “[w]here the quality of the waters exceed water quality standards, that the higher quality shall be “maintained and protected” unless the state makes a specific finding, after a public participation process is conducted, “that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located.” 9VAC25-260-30.2. Many of the waters where NWP 12 may be applied are of high quality and there are no provisions in the Corps permit ensuring that high quality will be maintained. Also, a blanket WQC by the DEQ clearly does not allow for the kind of site-specific finding of a need to serve “important economic or social development in the area” affected by a particular waterbody crossing to be made and would not allow the public participation that is required.

Finally, the state has designated 30 waterbodies that “provide exceptional environmental settings and exceptional aquatic communities or exceptional recreational opportunities” and, in general, “[n]o new, additional, or increased discharge of sewage, industrial wastes or other pollution into waters designated in subdivision 3 c of this subsection shall be allowed.” 9VAC25-260-30.3.b.(2). This prohibition on new discharges in the designated waters may be waived in very limited circumstances but a generalized certification, as is proposed in this regulatory action, cannot ensure that those requirements will be met. One such condition would include the finding of economic or social necessity described above. Further, even if very limited impacts are allowed in these waters, there can be no interference with existing uses.

Virginia’s VWPP Review

Reflecting the federal regulations governing CWA section 401 reviews, the *Virginia Water Protection Permit Program Regulation* (“VWPP regulation), 9VAC25-210-10. *et seq.*, requires that a “VWP permit shall include requirements to comply with all appropriate provisions of state laws and regulations,” including the WQS regulation. The state VWPP regulation includes as one finding to justify denial of a WQC that “[t]he project will result in violations of water quality standards or will impair the beneficial uses of state waters.” 9VAC25-210-230.A.1.

“State waters,” as defined in Virginia regulations, include “all water, on the surface and under the ground, wholly or partially within or bordering the Commonwealth or within its jurisdiction, including wetlands.” Thus, the protections in the VWPP reach waters not defined

as “waters of the U.S.” and protected by the Clean Water Act. This includes groundwater, for which the state has adopted quality standards at 9 VAC 25-280-10 *et seq.* These groundwater standards include an antidegradation component which states that: “If the concentration of any constituent in ground water is less than the limit set forth by ground water standards, the natural quality for the constituent shall be maintained; natural quality shall also be maintained for all constituents, including temperature, not set forth in ground water standards.” 9 VAC 25-280-30. Further, this regulatory provision states that “[i]f the concentration of any constituent in ground water exceeds the limit in the standard for that constituent, no addition of that constituent to the naturally occurring concentration shall be made.” *Id.*

Again, this antidegradation provision does not allow for a variance “unless it has been affirmatively demonstrated that a change is justifiable to provide necessary economic or social development, that the degree of waste treatment necessary to preserve the existing quality cannot be economically or socially justified, and that the present and anticipated uses of such water will be preserved and protected.” *Id.*

These groundwater standards adopted by Virginia are particularly vital to protection of state waters from activities in and adjacent to waterbodies, because surface waters and groundwater are often directly and intimately connected, especially in the vast regions of the state underlain by karst formations. Digging and blasting in streams can easily contribute pollution to groundwater bodies and any such constituents may well impair those groundwater resources for extended periods and seriously threaten uses, such as public and private drinking water wells and springs. Even where activities are not directly over karst aquifers, the transport of sediments and other pollutants downstream into karst areas may also contribute pollution to the groundwater, through sinking streams and swallets.

NWP 12 does not protect against any of these these threats to groundwater in any way. Even if the discharge of sediments or other pollutants in a stream are limited to a very short period and cause no discernible impacts to stream habitat, these same discharges may cause serious impairment of groundwater.

One additional factor that poses threats to waterbodies, is the failure to assess impacts from multiple stream or wetland crossings within a particular watershed. The COE regulates water crossings in a piecemeal fashion, as long as those crossings are deemed to occur at “separate and distant locations” or, for “linear projects” such utility lines, where a line crosses “a single waterbody several times at separate and distant locations.” 33 C.F.R. § 330.2(i). However, requiring that impacts from multiple crossings only be assessed in aggregate when they occur on a “single waterbody several times” does not protect downstream waters where a number of crossings on different tributaries may cause significant damage to downstream sections and the larger streams fed by those tributaries.

To arbitrarily segment the analyses of different crossings, as NWP 12 does, may well lead to violations of state WQS, both through the cumulative effects of pollutants flowing downstream and through the changes to habitats, hydrologic characteristics, and aquatic life movements and interactions throughout a group of headwater streams. These separate and distant tributaries comprise an irreplaceable part of a larger watershed, influencing many

physical, chemical, and biological components of the system, as described at length in a multitude of scientific studies. The paper by Meyer et al. provides an excellent synthesis of the types of damage that may be caused by impacts to separate and distant streams in a watershed. Meyer, Judy L., David L. Strayer, J. Bruce Wallace, Sue L. Eggert, Gene S. Helfman, and Norman E. Leonard, *The Contribution of Headwater Streams to Biodiversity in River Networks*, Journal of the American Water Resources Assoc., Vol. 43, No. 1, February, 2007.

Conclusion

To meet its legal duties under both state and federal law, the State of Virginia must adequately review the activities covered under a federal permit and deny water quality certification unless there is a “reasonable assurance” that all state standards and water quality protection requirements will be met. The DEQ has not conducted the required analysis for this proposed WQC to cover the Corps’ NWP 12. Further, the evidence offered in this letter details a number of ways in which a party’s activities may meet NWP’s requirements and still violate Virginia standards. Those examples described herein are only a sampling of the kinds of impacts these activities may cause. An analysis of the type the DEQ is required to conduct would identify others. The range in the sizes and types of projects that would be covered under this blanket WQC, combined with the great diversity of environments that could be impacted, makes a generalized analysis designed to cover all of Virginia’s state waters and a certification based on such an analysis would be irresponsible, arbitrary, and scientifically impossible.

The DEQ must deny certification for NWP 12.

Sincerely,

_____/s/_____
David Sligh
Regulatory Systems Investigator