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August 22, 2017

VIA E-MAIL

Virginia Department of Environmental Quality
P.O. Box 1105
Richmond, VA 23218
comment-acp@deq.virginia.gov

Re: Comments on Draft 401 Water Quality Certification (No. 17-002) for Construction and Operation of the Atlantic Coast Pipeline

Dear Director Paylor and members of the Staff of the Office of Wetlands & Stream Protection:

The Southern Environmental Law Center, on behalf of the Conservation Groups listed below, respectfully submits the following comments on draft Certification No. 17-002, the draft section 401 Water Quality Certification for construction and operation of the Atlantic Coast Pipeline (“the pipeline”). We urge the Department of Environmental Quality (“DEQ” or “the Department”) to recommend denial of Certification No. 17-002 to the State Water Control Board (“the Board”) for this pipeline because the state lacks “reasonable assurance” that Virginia’s water quality standards will be protected as required by the Clean Water Act and its implementing regulations.¹ Specifically,

- DEQ must exercise the full breadth of Virginia’s authority under Section 401 of the Clean Water Act to regulate the impacts to water quality from natural gas pipelines and to even deny certification for pipelines that will harm state waters. DEQ should apply clear regulatory standards to conduct a comprehensive review of potential impacts to water quality. The Department should not rush through its process solely to accommodate the developer’s timeline, thus cutting dangerous and unlawful corners that will jeopardize water quality.
- DEQ asserts that it has “reasonable assurance” that water quality standards will not be violated, but it has failed to articulate any explanation for its

¹ 33 U.S.C. § 1341; 40 C.F.R § 121.2(a)(3).

action, much less a rational connection between the facts the Department examined and the choice it made. DEQ does not discuss which water quality standards might be affected by the Atlantic Coast Pipeline or whether those standards will be violated, nor has it conducted an antidegradation review.

- DEQ has arbitrarily postponed consideration of critical information until *after* this 401 Certification process. The public is therefore denied the opportunity to meaningfully comment on all information relevant to the project's impacts and the agency lacks sufficient information on which to base a decision. In the most glaring example, DEQ has deferred evaluation of erosion and sediment control and stormwater management plans even while it acknowledges that these plans are "critically important" to protecting water quality in Virginia's streams, rivers, and wetlands.
- DEQ proposes to rely on a nationwide permit from the U.S. Army Corps of Engineers for review of the pipeline's stream, river, and wetland crossings, but elsewhere the agency identified shortcomings with that permit that have never been resolved.
- DEQ accepted incomplete information and did not consider other important information in preparing the draft 401 Certification for the Atlantic Coast Pipeline. Therefore, the agency does not have an adequate basis to conclude with "reasonable assurance" that Virginia water quality standards will be protected.

DEQ must remedy the defects in its process and Atlantic must submit a new application containing the necessary site-specific information to reasonably evaluate the impacts of the project on water quality before DEQ can initiate a subsequent 401 Certification process for the Atlantic Coast Pipeline. We discuss each of the issues outlined above and others in the **Comments** attached to this letter. We incorporate by reference the comments submitted by the Chesapeake Bay Foundation and Dominion Pipeline Monitoring Coalition.

Section 401 of the Clean Water Act requires "[a]ny applicant for a Federal license or permit . . . which may result in any discharge into the navigable waters, [to] provide . . . a certification from the State in which the discharge will originate"² that, among other

² 33 U.S.C. § 1341.

requirements, the State has “reasonable assurance” that the permitted activity “will be conducted in a manner which will not violate applicable water quality standards.”³ State water quality standards include the designated uses of waterways, such as fish and wildlife habitat, drinking water, and recreation; water quality criteria established to achieve designated uses; and an antidegradation policy to protect the existing uses of waterways.⁴ Therefore, when certifying a project under Section 401, a state must have “reasonable assurance” that the project complies with the designated uses of waterways, meets numeric and narrative water quality criteria, and is consistent with the state’s antidegradation policy.

DEQ must not recommend certification of the Atlantic Coast Pipeline to the State Water Control Board, and the Board must not approve such certification. The deficiencies outlined in this letter render it impossible for the Board to conclude, as the Clean Water Act requires, that it has “reasonable assurance” that the project will not violate Virginia’s water quality standards.

At the outset, we express our strong disagreement with DEQ that it can limit the scope of comments that it will allow into the administrative record for this certification. DEQ recently published an online statement of its intention to exclude “[c]omments on erosion and sediment control plans, stormwater plans, the Corps’ nationwide permit 12, or the environmental impact statements” from the record of the 401 Certification.⁵ It is difficult to ascertain precisely how narrowly DEQ construes the scope of its review, but its warning highlights the most glaring problem with the Department’s process: DEQ has unjustifiably splintered the regulatory process into discrete parts that are in reality inextricably linked and indeed essential to an evaluation of the project’s impacts on water quality.

The purpose of a 401 Certification is to determine whether a project subject to federal permitting will violate state water quality standards. The Department cannot arbitrarily

³ 40 C.F.R. § 121.2(a)(3).

⁴ See 33 U.S.C. § 1313(c)(2)(A) (state water quality standards “consist of the designated uses of the navigable waters involved and the water quality criteria for such waters based on such uses”); *PUD No. 1 of Jefferson Cty. v. Wash. Dep’t of Env’tl. Quality*, 511 U.S. 700, 705 (state water quality standards must “include ‘a statewide antidegradation policy’ to ensure that ‘[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.’”) (citing 40 C.F.R. § 131.12).

⁵ Va. Dep’t of Env’tl. Quality, Information for Public Hearing: Atlantic Coast Pipeline Proposed Section 401 Water Quality Certification (2017), <http://www.deq.virginia.gov/Portals/0/DEQ/Water/Pipelines/ACPMetingBrochure.pdf?ver=2017-07-28-133726-730>.

exclude any comments from the record of its 401 decision that pertain to information relevant to that question. The 401 Certification is inextricably linked to what DEQ has relegated to other regulatory processes—namely, the Army Corps’ Nationwide Permit 12 and erosion and sediment control and stormwater management plans. If we are to comment meaningfully on the draft 401 Certification, our comments must encompass a discussion of these elements and others that have a direct bearing on understanding the project’s impacts on water quality. We respectfully ask that all of our comments be carefully considered by DEQ and the Board and incorporated into the action’s record.⁶

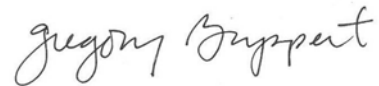
The Southern Environmental Law Center submits these comments on behalf of Shenandoah Valley Network, Highlanders for Responsible Development, Virginia Wilderness Committee, Shenandoah Valley Battlefields Foundation, Natural Resources Defense Council, Potomac Riverkeeper Network, Shenandoah Riverkeeper, Cowpasture River Preservation Association, Friends of Buckingham, Rockbridge Area Conservation Council, Piedmont Environmental Council, James River Association, Virginia Conservation Network, and Dominion Pipeline Monitoring Coalition (the Conservation Groups). In general, these organizations advocate for the conservation of Virginia’s natural resources, including its waterways and aquatic ecosystems. Their members rely on the waterways and aquatic ecosystems that will be harmed by the proposed Atlantic Coast Pipeline for recreation, observation, drinking water, aesthetic enjoyment, and many other uses. A list of the address, telephone number, and contact person for each organization is included.⁷

⁶ See *Univ. of Colo. Health at Mem’l Hosp. v. Burwell*, 151 F.Supp.3d 1, 13 (D.D.C. 2015) (recognizing that for the purposes of judicial review, parties may supplement the record (1) when the agency deliberately or negligently excluded documents that may have been adverse to its decision; (2) when background information is needed to determine whether the agency considered all the relevant factors; and (3) when the agency failed to explain administrative action so as to frustrate judicial review”) (citing 5 U.S.C.A. § 706).

⁷ See **Attachment 1**.

Thank you for your attention to these important matters. Please contact us with any questions about these comments.

Sincerely,

A handwritten signature in cursive script that reads "Gregory Buppert".

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On behalf of Conservation Groups

COMMENTS

I. FEDERAL LAW PROHIBITS DEQ AND THE STATE WATER CONTROL BOARD FROM ACTING ARBITRARILY TO ISSUE A SECTION 401 WATER QUALITY CERTIFICATION FOR THE ATLANTIC COAST PIPELINE.

To issue a Section 401 Certification, the State Water Control Board must have “reasonable assurance” that the activity requiring a federal permit “will be conducted in a manner which will not violate applicable water quality standards.”⁸

Under the Natural Gas Act, interstate natural gas pipelines regulated by the Federal Energy Regulatory Commission (“FERC”) are subject to judicial review in the U.S. Court of Appeals for the circuit in which a facility is proposed to be constructed.⁹ Reviewing Courts of Appeals have held that a state’s issuance or denial of a Section 401 Certification for an interstate natural gas project is reviewed under the Administrative Procedure Act’s (“APA”) standard of review.¹⁰ First, a court reviews *de novo* whether the state agency has complied with the relevant federal law.¹¹ Second, if no illegality is found, the APA provides that a court may set aside agency actions that are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”¹² An agency decision is arbitrary and capricious if the agency

- “has relied on factors which Congress has not intended it to consider,”
- “entirely failed to consider an important aspect of the problem,”
- “offered an explanation for its decision that runs counter to the evidence before the agency, or”

⁸ 40 C.F.R § 121.2(a)(3).

⁹ 15 U.S.C. § 717r.

¹⁰ See, e.g., *AES Sparrows Point LNG, LLC v. Wilson*, 589 F.3d 721, 727 (4th Cir. 2009); *Constitution Pipeline Co., LLC v. N.Y. State Dep’t of Env’tl. Conservation*, No. 16-1568, 2017 WL 3568086 (2d Cir. Aug. 18, 2017), included as **Attachment 2**; *Islander East Pipeline Co., LLC v. McCarthy*, 525 F.3d 141, 150 (D.C. Cir. 2008).

¹¹ See, e.g., *Islander East Pipeline Co. v. Conn. Dep’t of Env’tl. Prot.*, 482 F.3d 79, 94 (2d Cir. 2006).

¹² 5 U.S.C. § 706(2)(A).

- “is so implausible that it could not ascribed to a difference in view or the product of agency expertise.”¹³

To uphold an agency decision, a court must confirm that the agency “examine[d] the *relevant data* and *articulate[d] a satisfactory explanation for its action*, including a rational connection between the facts found and the choice made.”¹⁴ “[T]his scrutiny of the record is meant primarily to educate the court so that it can understand enough about the problem confronting the agency to comprehend the meaning of the evidence relied upon and the evidence discarded; the questions addressed by the agency and those bypassed; the choices open to the agency and those made.”¹⁵ If a state agency’s determination of “reasonable assurance” that a project will not violate water quality standards is found to be arbitrary and capricious, a court must vacate the Certification.

II. DEQ’S EXPEDITED REVIEW OF THE ATLANTIC COAST PIPELINE DOES NOT ACKNOWLEDGE THE FULL SCOPE OF ITS AUTHORITY UNDER THE CLEAN WATER ACT.

The proposed Atlantic Coast Pipeline will cross 234.8 miles in Virginia,¹⁶ through some of the steepest terrain and most intact forest in the Commonwealth, and through hundreds of streams and rivers and 312 acres of wetlands.¹⁷ As discussed throughout these comments, the project’s potential harm to water quality in Virginia cannot be overstated. Fortunately, the Clean Water Act contemplates a robust role for state environmental agencies to play to ensure that projects like the Atlantic Coast Pipeline do not cause violations of state water quality standards. Not only does the Act’s cooperative federalism put the establishment of water quality standards in states’ hands,¹⁸ but Section 401 provides states with a powerful mechanism to regulate the effects of natural gas pipelines and even deny certification for projects that will harm state waters.¹⁹

¹³ *Motor Vehicle Mfrs.’ Ass’n of U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

¹⁴ *Id.* (emphases added).

¹⁵ *AES Sparrows Point LNG*, 589 F.3d at 733.

¹⁶ See FERC, Atlantic Coast Pipeline and Supply Header Project, Final Env’tl. Impact Statement at 2-4, Table 2.1.1-1 (July 21, 2017) [hereinafter Final EIS].

¹⁷ Final EIS at 4-135.

¹⁸ 40 C.F.R. § 131.4.

¹⁹ 33 U.S.C. § 1341; 40 C.F.R. § 121.2(a)(3).

There is no question that DEQ has the authority to deny a 401 Certification for the Atlantic Coast Pipeline if there is not reasonable assurance that the project will not violate water quality standards. In a recent letter, DEQ seemed to suggest otherwise.²⁰ The Department asserted that “DEQ has no authority to utilize its review of wetlands and streams to affect the route of the proposed pipelines.”²¹ DEQ did not indicate whether it believes that this apparent limitation on state authority also applies to the Department’s review of upland land-disturbing activities. The source DEQ cited for this restriction on its authority is Virginia Code § 62.1-44.15:21, a provision of the Virginia Water Protection Permit (VWPP) program. We have several concerns with DEQ’s position.

First, it appears to suggest that DEQ believes it lacks the authority to veto the proposed route of a pipeline subject to FERC approval even if it lacks reasonable assurance that water quality will be protected. If that is the Department’s position, we strongly disagree. There is no doubt that the Clean Water Act vests states with the authority to prevent a pipeline from being constructed in the state if the state lacks reasonable assurance that water quality will be protected.

The text of the Clean Water Act could not be clearer: “No license or permit shall be granted if [Section 401] certification has been denied by the State.”²² In fact, retaining state authority over water quality was an important consideration when the Clean Water Act was proposed. In 1971, a Senate report noted that “the Committee continues the authority of the State . . . agency to act to deny a permit and thereby *prevent* a Federal license or permit from issuing to a discharge source within such State.”²³ The report went on to confirm that “[s]hould such an affirmative denial occur no license or permit could be issued by such Federal agencies as the Atomic Energy Commission, Federal Power Commission, or the Corps of Engineers unless the State action was overturned in the appropriate courts of jurisdiction.”²⁴

²⁰ Letter from David K. Paylor, Dir., Va. Dep’t of Env’tl. Quality, to Kate Wofford, Dir., Shenandoah Valley Network et al. (July 19, 2017) (on file with S. Env’tl. Law Ctr.), included as **Attachment 3**.

²¹ *Id.*

²² 33 U.S.C. §1341(a)(1).

²³ S. Rep.No. 92-414, at 69 (1971).

²⁴ *Id.*

Accordingly, courts have consistently upheld states' authority to deny Section 401 Certifications.²⁵ The most recent instance came in an opinion from the Second Circuit just a few days ago, on August 18, 2017. In that case, the Second Circuit upheld the New York State Department of Environmental Conservation's (NYSDEC) denial of a 401 Certification for the proposed Constitution Pipeline, a natural gas pipeline that has already received federal approval from FERC.²⁶ As discussed below, NYSDEC denied the 401 Certification on the ground that, despite requested requests to the developer for detailed project plans, Constitution had "failed to provide reasonable assurance" that the project would be conducted in conformity with state water quality standards.²⁷

The pipeline developer challenged the denial, arguing that "NYSDEC's 'jurisdiction to review'—and 'in effect, to veto'—FERC determinations is preempted by FERC's performance of its obligations under the National Environmental Policy Act . . . to prepare a DEIS and a FEIS."²⁸ In other words, the developer argued that state environmental agencies cannot prevent a pipeline that would violate water quality standards from being constructed in the state—a perspective that would wholly undermine the text and purpose of Section 401, and one that the Second Circuit rejected out of hand.

Noting that the Clean Water Act explicitly "preserves states' authority to determine issues of a planned project's effect on water quality," the Court reiterated that "§ 401 [is] 'a statutory scheme whereby a single state agency *effectively vetoes* an energy pipeline that has *secured approval from a host of other federal and state agencies.*'"²⁹ Similarly, the D.C. Circuit has held that "[t]hrough [the § 401 certification] requirement, Congress

²⁵ See, e.g., *S.D. Warren Co. v. Maine Bd. of Env'tl Prot.*, 547 U.S. 370 (2006); *AES Sparrows Point LNG, LLC v. Wilson*, 589 F.3d 721 (4th Cir. 2009); *Islander East Pipeline Co., LLC v. McCarthy*, 525 F.3d 141, 164 (2d Cir. 2008).

²⁶ *Constitution Pipeline Co., LLC v. N.Y. State Dep't of Env'tl. Conservation*, No. 16-1568, 2017 WL 3568086 (2d Cir. 2017), included as **Attachment 2**.

²⁷ N.Y. State Dep't of Env'tl. Conservation, Notice of Denial of Water Quality Certification for Constitution Pipeline (Permit No. 0-9999-00181/00024) (Apr. 22, 2016), http://www.dec.ny.gov/docs/administration_pdf/constitutionwc42016.pdf [hereinafter NYSDEC Constitution Pipeline denial], included as **Attachment 4**.

²⁸ *Constitution*, 2017 WL 3568086, at *9.

²⁹ *Id.* at *10 (quoting *Islander East Pipeline Co., LLC*, 525 F.3d 141, 164) (emphases in original).

intended that the states would retain the *power to block*, for environmental reasons, local water projects that might otherwise win federal approval.”³⁰

In light of the clear text of the Clean Water Act, the Congressional intent behind the Act, and relevant case law, it is indisputable that states have the authority to do more than merely “affect the route” of a proposed pipeline. States have the power to veto federal approval of proposed pipelines. To the extent that DEQ believes that it lacks authority, we encourage DEQ to recognize the full extent of its authority and use it to protect water quality in Virginia.

Unfortunately, the Virginia Department of Environmental Quality (DEQ) has thus far declined to exercise to its full extent the authority plainly granted it by the Clean Water Act. In light of the magnitude of the proposed project and the potentially irreparable harm to Virginia’s waters and the communities and ecosystems that rely on them, we respectfully urge DEQ to exercise its authority to conduct a comprehensive review of impacts to water quality. As discussed throughout these comments, DEQ lacks or has ignored information necessary to conclude that there is “reasonable assurance” that construction and operation of the proposed Atlantic Coast Pipeline will not violate water quality standards. Until the deficiencies discussed in these comments are remedied, we request that DEQ recommend denial of the Section 401 certification to the State Water Control Board.

We are deeply concerned that DEQ’s unwillingness to exercise its full authority stems from the Department’s efforts to shepherd the project through the process too quickly. From the outset, DEQ’s 401 Certification process has been extremely rushed. After a great deal of confusion in April and May 2017 over whether DEQ would be conducting an individual 401 Certification at all, and if so, what that Certification would cover, DEQ finally announced that it would conduct a review of land-disturbing activities in upland areas. DEQ first asked Atlantic for information pertinent to its “upland activities” 401 Certification process on May 15, 2017.³¹ Atlantic responded on May 31,³² and two weeks

³⁰ *Keating v. FERC*, 927 F.2d 616, 622 (D.C. Cir. 1991) (emphasis added).

³¹ Request for Information for Developing and Evaluating Additional Conditions for Section 401 Water Quality Certification for Interstate Natural Gas Infrastructure Project from Melanie D. Davenport, Dir., Water Permitting Div., Va. Dep’t of Env’tl. Quality, to Robert Bisha, Dominion Va. Power (May 19, 2017) [hereinafter May 19 DEQ Information Request].

³² Response to Va. Dep’t of Env’tl. Quality Request for Information for Developing and Evaluating Additional Conditions for Section 401 Water Quality Certification for Interstate Natural Gas Infrastructure Project from Robert Bisha, Technical Advisor, Atlantic Coast Pipeline, to Melanie

later DEQ issued a second information request.³³ Atlantic submitted a 723-page response to DEQ’s second information request on June 27.³⁴ Four business days later, on July 3, the Department published a notice³⁵ informing the public that it had issued a draft 401 Certification.³⁶ DEQ could not have conducted the kind of searching review that a project of this scope requires, and that Virginia’s waters and communities deserve, in such a short period of time.

We are deeply concerned that this accelerated review will compromise water quality. Those concerns are widely shared. On August 7, 2017, a bipartisan group of legislators wrote a letter to Governor McAuliffe, DEQ, and the Board on behalf of a caucus of western Virginia members of the General Assembly representing the headwaters of the Chesapeake Bay.³⁷ The letter urged the Commonwealth “to use the full scope of its authority to assess the impacts of the Mountain Valley and Atlantic Coast pipelines” and explicitly asked DEQ to “push back” the timetable for public comment periods and hearings in order to give both the agency and the public time to properly review and comment meaningfully on all information relevant to the 401 Certification—including crossings of streams and wetlands.³⁸ The legislators ask, as do we, “Why the rush?”³⁹

Davenport, Dir., Water Permitting Div., Va. Dep’t of Env’tl. Quality (May 31, 2017) [hereinafter May 31 Atlantic Response].

³³ Review of June 1, 2017 Submittal in Response to Request for Information from Melanie D. Davenport, Dir., Water Permitting Div., Va. Dep’t of Env’tl. Quality, to Robert Bisha, Dominion Va. Power (June 15, 2017) [hereinafter June 15 DEQ Information Request].

³⁴ Response to Va. Dep’t of Env’tl. Quality Request for Information for Developing and Evaluating Additional Conditions for Section 401 Water Quality Certification for Interstate Natural Gas Infrastructure Project from Robert Bisha, Technical Advisor, Atlantic Coast Pipeline, to Melanie Davenport, Dir., Water Permitting Div., Va. Dep’t of Env’tl. Quality (June 27, 2017) [hereinafter June 27 Atlantic Response].

³⁵ Va. Dep’t of Env’tl. Quality, Public Notice – Atlantic Coast Pipeline – Additional 401 Water Quality Conditions (July 3, 2017), <http://www.deq.virginia.gov/Portals/0/DEQ/Water/Pipelines/final%20notice-acp.pdf?ver=2017-06-29-144101-470>.

³⁶ Va. Dep’t of Env’tl. Quality, Draft 401 Water Quality Certification Issued to Atlantic Coast Pipeline, LLC, Certification No. 17-002 (July 3, 2017), <http://www.deq.virginia.gov/Portals/0/DEQ/Water/Pipelines/ACPfinaldraft401cert.pdf> [hereinafter DEQ Draft 401 Certification].

³⁷ Letter from Va. Del. Richard P. “Dickie” Bell, 20th Dist., Va. Sen. R. Creigh Deeds, 25th Dist., Va. Del. Sam Rasoul, 11th Dist., and Sen. Emmett W. Hanger, Jr., 24th Dist., to Terry McAuliffe, Governor of Virginia, David Paylor, Dir. of Va. Dep’t of Env’tl. Quality, and Robert Dunn, Chair, Va. State Water Control Bd. (August 7, 2017), https://www.abralliance.org/wp-content/uploads/2017/08/Letter_re_ACP_and_MVP_20170807.pdf, included as **Attachment 5**.

³⁸ *Id.*

DEQ's vague allusions to the importance of "timely action" and "mov[ing] forward in a timely manner" do not begin to answer that question or to overcome the procedural deficiencies that characterize the Department's review of the Atlantic Coast Pipeline.⁴⁰ We respectfully request to exercise its full authority to ensure that the Atlantic Coast Pipeline does not cause irreparable harm to Virginia's waters and communities.

III. DEQ DOES NOT OFFER AN EXPLANATION FOR ITS CONCLUSION THAT THERE IS "REASONABLE ASSURANCE" THAT WATER QUALITY WILL BE PROTECTED.

A. Atlantic and DEQ fail to identify which water quality standards are applicable to the proposed project.

Ultimately, DEQ must determine whether construction and operation of the Atlantic Coast Pipeline will violate water quality standards. The burden is on the applicant to provide DEQ with evidence of compliance with water quality standards, and that evidence must in turn serve as the basis for the Department's "reasonable assurance" determination. But nowhere in any of the documentation provided by Atlantic to DEQ does the applicant identify relevant water quality standards, let alone describe how those standards will be met. The closest Atlantic comes is to identify the parameters it will use in monitoring, which include metrics like turbidity, pH, and dissolved oxygen, all of which are governed by state water quality standards.⁴¹ But a commitment to *monitoring* water quality during construction has no bearing on the actual purpose of a 401 Certification, which is to determine, *before* construction begins, that there is reasonable assurance the project will not violate specific water quality standards.

Nor has DEQ provided any explanation of which water quality standards are implicated by the proposed project, let alone articulated why it has "reasonable assurance" that those water quality standards will not be violated. DEQ's unsupported assertion of reasonable assurance is arbitrary and capricious if not supported by an "articulat[ion of] a satisfactory explanation for its action, including a rational connection between the facts found and the choice made."⁴² A prerequisite for demonstrating a

³⁹ *Id.*

⁴⁰ Robert Zullo, *Pressure Mounting on Virginia Environmental Agency to Slow Down Pipeline Water Certifications*, Richmond Times Dispatch (Aug. 19, 2017), http://www.richmond.com/business/pressure-mounting-on-virginia-environmental-agency-to-slow-down-pipeline/article_b9baad0b-3c9a-578b-8bad-9e7b88d107ee.html.

⁴¹ June 27 Atlantic Response, *supra* note 34, App. F, Water Quality Monitoring Plan at 6.

⁴² *Motor Vehicle Mfrs.' Ass'n of U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 US 29, 43 (1983).

rational connection between facts found and DEQ's decision would be *identification* of relevant water quality standards and an *articulation* of how those standards will be protected. Neither the materials considered by DEQ nor the draft 401 Certification itself contain either.

The following water quality standards are some of those implicated by construction and operation of the Atlantic Coast Pipeline. DEQ must assess the likelihood of the project causing violations of these and any other applicable water quality standards and provide a reason for determining reasonable assurance:

- 9VAC25-260-20: State waters must be kept free of “substances” that “interfere directly or indirectly with the designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life.” Specifically included in this category are “substances that produce . . . turbidity” like sediment laden runoff from construction sites.
- 9VAC25-260-30: The state antidegradation policy, an element of the water quality standards, requires that “[a]s a minimum, existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.”
- 9VAC25-260-40: “Man-made alterations in stream flow shall not contravene designated uses including protection of the propagation and growth of aquatic life.”
- 9VAC25-260-50: Provides numerical criteria for dissolved oxygen, pH, and maximum temperature for the following classes of water that may be affected by construction and operation of the Atlantic Coast Pipeline: tidal waters in the Chesapeake Bay and its tidal tributaries (Class II); nontidal waters (coastal and piedmont zones) (Class III); mountainous zones waters (Class IV); stockable trout waters (Class V); and natural trout waters (Class VI); and Class VII (swamp waters).
- 9VAC25-260-60: Provides that “[a]ny rise above natural temperature shall not exceed 3°C except in the case of Class VI waters (natural trout waters), where it shall not exceed 1 °C.” This standard also allows the Board to, “on a case-by-case basis, impose a more stringent limit on the rise above natural temperature.”

- 9VAC25-260-70: Provides that the “maximum hourly temperature change shall not exceed 2 °C, except in the case of Class VI waters (natural trout waters) where it shall not exceed .5 °C . These criteria shall apply beyond the boundaries of mixing zones and are in addition to temperature changes caused by natural conditions.”
- 9VAC25-260-185: Lists dissolved oxygen, submerged aquatic vegetation and water clarity, and chlorophyll, criteria designed to protect designated uses from the impacts of nutrients and suspended sediment in the Chesapeake Bay and its tidal tributaries, to be implemented under the Chesapeake Bay Program.
- 9VAC25-260-310 through 540: Establish special standards and requirements for particular basins and sub-basins throughout the state, some of which may be affected by construction and operation of the Atlantic Coast Pipeline.

B. Potential impacts from construction and operation of the Atlantic Coast Pipeline are likely to cause violations of applicable water quality standards.

Once DEQ adequately identifies which water quality standards are at risk, it must determine whether the potential impacts from the project will violate those standards. Construction of the Atlantic Coast Pipeline poses significant risks to water quality in Virginia. Builders will clear more than 3,000 acres of forests and 300 acres of wetlands in Virginia to establish a 125-foot construction corridor, build or improve access roads, stage materials, and create other workspaces.⁴³ Forests and wetlands play a critical role in the maintenance of water quality.⁴⁴ As DEQ acknowledged in its comments to FERC, “[f]orests contribute the lowest nutrient and sediment loadings to Virginia’s waterways of any type of landcover.”⁴⁵ In the mountain counties of western Virginia, the pipeline

⁴³ Final EIS at 4-155.

⁴⁴ See, e.g., Todd Lookingbill, Analysis of Potential Fragmentation Impacts of the Atlantic Coast Pipeline Proposed Route at 13 (Mar. 25, 2017) (“Forested watersheds play a critical role in maintaining the quality of the numerous streams and rivers in the study region.”) (citation omitted), copy included as **Attachment 6**.

⁴⁵ Va. Dep’t of Env’tl. Quality, Comments on FERC Draft Environmental Impact Statement for the Atlantic Coast Pipeline and Supply Header Project, Att. B (Feb. 16, 2017; submitted to FERC Apr. 6, 2017), included as **Attachment 7**.

would cut through some of Virginia’s most intact forest landscapes.⁴⁶ For example, Bath County, which would be crossed by 22 miles of pipeline, is 89% forested and has “the highest percentage of core forest in the Commonwealth.”⁴⁷ Percentages of core forests in Highland and Nelson Counties are also among the top tier for Virginia counties.

Land clearing increases the volume and intensity of stormwater runoff, increases erosion, and results in dramatically greater sediment loads delivered to waterways. According to Dominion’s sedimentation models, exposed soil along the construction right of way, access roads, and other disturbed areas will increase sediment loads in waterways as much as 200 to 800 percent over pre-construction conditions.⁴⁸ But these models likely significantly underestimate the increase in sedimentation from forest clearing. Erosion and sediment control measures are typically well less than 100 percent effective, and here, the pipeline crosses 41 miles of steep slopes in Virginia,⁴⁹ where silt fences, straw bales, and other typical erosion and sedimentation control measure will likely be ineffective.

In addition to land clearing, in-stream pipeline construction will include trenching, blasting, placement of fill into waterways, temporary diversion of waters, and the use of horizontal directional drilling sites on stream banks.⁵⁰ Trenching, blasting, and filling will release sediment-laden water downstream and can alter the morphology of stream channels and increase scouring and erosion.

Horizontal directional drilling would eliminate the effects of in-stream trenching, blasting, and filling, and DEQ requested in its comments on the draft EIS that this method be considered for crossings of “trout waters, high quality streams, streams with threatened and endangered species, and other “sensitive waters.”⁵¹ Atlantic has not provided information about whether it intends to comply. Moreover, this type of drilling is not without serious impacts—drilling mud can be released into surface waters and intensive use of stream-side or upslope work areas results in increased erosion.

⁴⁶ *See id.* (“The current alternative for the Virginia segment of the ACP (Rev 11a, as of Dec. 2016) intersects some of the largest blocks of unfragmented forest in Virginia.”).

⁴⁷ *See* Lookingbill, *supra* n. 44, at 11.

⁴⁸ *See* Final EIS at 4-240.

⁴⁹ *See id.* at 4-28.

⁵⁰ *See id.* at 2-38 to 2-45.

⁵¹ Va. Dep’t of Env’tl. Quality, *supra* note 45, at Attach. B.

These effects of pipeline construction will cause significant harm to aquatic ecosystems crossed by or near the pipeline corridor. As acknowledged in the final EIS, sedimentation can cause “permanent alterations in invertebrate community structures, including diversity, density, biomass, growth, rates or reproduction, and mortality.”⁵² Sedimentation and turbidity “reduc[e] light available for photosynthesis,” and visibility, harming organisms’ ability to find food or avoid prey.⁵³ Sedimentation can also clog the gills of fish and harm their respiratory functions, as well as “smother spawning beds,” fish eggs, benthic biota, including endangered and freshwater mussel species, which have evolved in “low levels of suspended sediment and may not be able to compensate” for increased levels.⁵⁴ Furthermore, changes to the habitat caused by sedimentation can “reduce juvenile fish survival, spawning habitat, and benthic community diversity and health.”⁵⁵ According to the final EIS, Atlantic has not provided critical information to demonstrate how the impacts to aquatic resources from sedimentation can be mitigated.⁵⁶ At the time the final EIS was published, the Forest Service “believe[d] sedimentation effects on water resources [were] *unknown* pending incorporation of necessary mitigation measures.”⁵⁷

Harm caused by pipeline construction and operation will be cumulative within the downstream watersheds. The Atlantic Coast Pipeline may cross or effect multiple streams within a single watershed. In these circumstances, “the capacity of the system to recover from impact may be exceeded, and the detrimental effects of crossing construction permanent.”⁵⁸

Harm caused by pipeline construction can persist for years after the pipeline is built. Atlantic will permanently convert 75 feet of the construction right-of-way from forest and wetland cover, and thus the water quality protection function of these areas will be permanently diminished. The remainder of the construction right-of-way will take many decades to recover its pre-construction functions and those impacts, although claimed to

⁵² Final EIS at 4-228 to 4-229.

⁵³ *Id.*

⁵⁴ *Id.*

⁵⁵ *Id.*

⁵⁶ *See* Final EIS at 4-129.

⁵⁷ *Id.*

⁵⁸ Lucie Levesque & Monique Dube, *Review of the Effects of In-Stream Pipeline Crossing Construction on Aquatic Ecosystems*, 132 *Envtl. Monitoring & Assessment* 395, 399 (2007).

be temporary, should be considered permanent as well.⁵⁹ For instance, forested wetlands outside the maintenance corridor can take a *century* or more to recover—if they recover at all.⁶⁰

Moreover, permanent harm to aquatic life and ecological functioning of aquatic systems may not be detectable immediately after construction.⁶¹ Increased sedimentation, increased flows, and increased stream temperatures can push populations of vulnerable brook trout and other species towards an “extinction vortex” which results in the loss of entire populations over time.⁶² DEQ itself acknowledged the potential of permanent harm to aquatic ecosystems. In its comments to FERC, DEQ wrote that it “is concerned that the proposed temporary impacts could result in a permanent alteration of the impacted systems post construction,” and the agency sought robust “pre-impact characterizations” to provide evidence that aquatic systems could be restored.⁶³ Atlantic has not fulfilled DEQ’s request, even though the agency is now moving forward with a 401 Certification for the pipeline.

Concerns regarding impacts to water quality from stream and wetland crossings are not merely speculative. In their denial of a 401 Certification for the proposed Northern Access Pipeline, discussed below, regulators in New York observed that even robust protective measures are inadequate to prevent water quality violations.

NYSDEC’s recent experiences with constructing large scale natural gas pipelines across New York State, involving multiple water body crossings in multiple watersheds or basins, point to the fact that, even with stringent water quality protection conditions, violations of water quality standards at this scale occur causing significant degradation of water

⁵⁹ See Lookingbill, *supra* n. 44, at 11.

⁶⁰ Final EIS at ES-10 (emphasis added).

⁶¹ Robert H. Hilderbrand, Ph.D., Assessment of Potential Threats to Streams Occurring in Proximity to the Proposed Atlantic Coast Pipeline 2-3 (2017), included as **Attachment 8**.

⁶² *Id.*

⁶³ Va. Dep’t of Env’tl. Quality, *supra* note 45, at Attach. B.

quality in stream after stream along a constructed [right of way].⁶⁴

And NYSDEC's concerns are far from unwarranted. While the Atlantic Coast Pipeline wends its way through federal and state permitting processes, natural gas pipelines currently under construction are causing precisely the kinds of environmental problems that the Atlantic Coast Pipeline threatens for Virginia waterways. The takeaway from these other pipelines is simple: Natural gas pipelines pose grave threats to water quality, and it is up to state environmental agencies to do all they can to ensure that water quality is protected, including denying certification if appropriate.

In April 2017, a month after receiving its 401 Certification from Ohio regulators, Rover Pipeline LLC spilled several million gallons of drilling mud into wetlands in Stark County, Ohio.⁶⁵ Just a few months later, in July, the company spilled an additional 6,500 to 7,500 gallons of drilling mud into the same wetlands area. The drilling mud contained chemicals used to blast into the ground to create space for the pipeline. It also contained diesel fuel that could contaminate nearby drinking water supplies. From March, when pipeline construction began, through July, the Ohio EPA received 34 complaints and issued 10 notices of violation. FERC took the extraordinary step of barring the pipeline company from initiating drilling at any new sites, and administrative orders issued by Ohio EPA orders proposed civil penalties close to \$1 million. In a letter to the Attorney General of Ohio, the Ohio EPA requested that the Attorney General initiate proceedings to pursue those civil penalties.⁶⁶

The Rover pipeline has also caused environmental degradation in West Virginia. In July 2017, the West Virginia Department of Environmental Protection issued a cease and desist order under the state Water Pollution Control Act to Rover Pipeline LLC for violations of permit conditions and state regulations concerning erosion and

⁶⁴ N.Y. State Dep't of Env'tl. Conservation, Notice of Denial of Water Quality Certification for Northern Access Pipeline (Permit No. 9-9909-00123/00004) (Apr. 7, 2017), https://apps.cio.ny.gov/apps/mediaContact/public/download.cfm?attachment_uid=15E9281F-5056-907F-6FE8A484F3F4CC1B [hereinafter NYSDEC Northern Access denial], included as **Attachment 9**.

⁶⁵ Phil McKenna, *Rover Gas Pipeline Builder Faces Investigation by Federal Regulators*, Inside Climate News (Jul. 19, 2017), <https://insideclimatenews.org/news/19072017/rover-gas-pipeline-ferc-investigation-historic-home-demolished-ohio-farm-fields-wetlands>.

⁶⁶ Enforcement Referral of Rover Pipeline, LLC from Craig G. Butler, Dir., Ohio Env'tl. Prot. Agency, to Hon. Michael DeWine, Att'y Gen. of Ohio (July 7, 2017), <https://www.documentcloud.org/documents/3896685-OHIO-EPA-AGO-Referral-Letter.html>, included as **Attachment 10**.

sedimentation.⁶⁷ Having observed such violations on six different occasions over the course of almost four months, WVDEP issued a cease and desist order for any further land development activity.⁶⁸ While that cease and desist order was still in place, inspectors discovered additional water pollution violations at two different Rover construction sites and issued notices of violation for each.⁶⁹ Inspectors found that erosion and sediment control failures had allowed sediment from construction sites to enter streams, violating West Virginia water quality standards.

Also in July, regulators in Pennsylvania shut down drilling operations at 55 locations along the Sunoco Mariner East II pipeline.⁷⁰ The shutdown order came following documentation of 60 instances drilling fluids released to surface waters in less than 3 months, including spills of 160,000 gallons, 60,000 gallons, and 20,000 gallons.⁷¹

C. DEQ has not articulated an explanation for its conclusion that there is “reasonable assurance” that water quality will be protected.

The draft 401 Certification asserts without support that there is “reasonable assurance” that water quality standards will not be violated and lists the information examined by the Department. But it provides no basis for its “reasonable assurance” determination. Therefore, neither the public nor the Board knows why DEQ’s review of the materials listed in the draft 401 Certification lead it to the conclusion that water quality standards will not be violated.

Specifically, the Department identify which designated uses and water quality criteria might be affected by the project, let alone articulate how the measures taken by the pipeline developer, including conditions included in the draft Certification, will prevent violations of those standards. DEQ also has not indicated that it has conducted an

⁶⁷ W.Va. Dep’t of Env’tl. Protection, Order No. 8749 Issued Under The Water Pollution Control Act, West Virginia Code, Chapter 22, Article 11 (July 17, 2017) (“Rover Pipeline LLC shall immediately cease & desist any further land development activity until such time when compliance with the terms and condition of its permit and all pertinent laws and rules is achieved”), <http://wvivers.org/wp-content/uploads/2017/05/Rover-Pipeline-8749-Unilateral-Order.pdf>, included as **Attachment 11**.

⁶⁸ *Id.*

⁶⁹ Ken Ward, Jr., *More Water Violations Found on Rover Pipeline Construction Sites*, Charleston Gazette-Mail (Aug. 19, 2017), <http://www.wvgazettemail.com/news/20170819/more-water-violations-found-on-rover-pipeline-construction-sites>.

⁷⁰ *Clean Air Council et al. v. Pa. Dep’t of Env’tl. Prot. et al.*, No. 2017-009-L Pa. (Env’tl. Hearing Bd. July 25, 2017), included as **Attachment 12**.

⁷¹ *See id.*

antidegradation analysis of the of the proposed pipeline activities, the third prong of the state's water quality standards. However, states "must apply antidegradation requirements to . . . any activity requiring a CWA § 401 certification."⁷² This failure constitutes arbitrary and capricious decision-making. DEQ asserts that the State Water Control Board has "reasonable assurance" that water quality standards will not be violated, but we do not know what state law guided the Department in that analysis.

DEQ's failure to articulate a basis for its "reasonable assurance" determination is compounded by the fact that a 401 Certification that only applies to activities in upland areas is unprecedented. Because DEQ has never conducted a 401 Certification review for upland activities before, the process is unmoored from any state regulatory framework. Typically, DEQ would rely on the Virginia Water Protection permit program (VWPP program), the legal framework Virginia has developed to implement Section 401 of the Clean Water Act.⁷³ However, the scope of the VWPP program is limited to stream and wetland crossings. Because DEQ is relying on NWP 12 for those crossings, it is not clear what role the VWPP plays. While DEQ's guidance document that briefly outlines this custom-made regulatory approach notes that the review "is intended to supplement, but not replace, the Corps and/or VWP permit processes," it is not clear what that means. DEQ has assured the public that this process would be transparent. In accordance with that assurance, DEQ should at least clarify what legal framework it is using to guide its 401 Certification process. We recommend that DEQ use the VWPP program to provide substantive guidelines for review of the project and that the agency commit to doing so explicitly to the public and to the Board.

If DEQ has not used the VWPP program regulations to guide its analysis, the draft 401 Certification the Department issued on July 3, 2017 is not based on any state statutes or regulations. This is of concern because the agency and the public need some legal framework to determine whether the proposed project will comport with water quality standards. For instance, 9VAC25-210-230, a regulation under the VWPP program, includes a non-exhaustive list of bases for denial of a VWP permit. For example, the Board may deny a VWP permit if the project will result in violations of water quality standards or impair the beneficial uses of state waters, if the project fails to adequately avoid and minimize impacts to state waters to the maximum extent practicable, or if

⁷² 63 Fed. Reg. 36,742, 36,780 (July 7, 1998).

⁷³ 9VAC-25-210-10 *et seq.*; See Va. Dep't of Env'tl. Quality, *A Public Guide to the Wetland Permitting Process in Virginia* (2012), <http://www.deq.virginia.gov/portals/0/deq/water/wetlandsstreams/publicguiderevised2012.pdf>.

natural or stockable trout waters would be permanently and negatively impacted by the proposed activity.⁷⁴ It is unclear whether those reasons for denial are available to the Board for the “upland activities” 401 Certification and whether that has been communicated to the Board.

DEQ’s apparent reliance on a guidance document it created for the purpose of certifying the Atlantic Coast and Mountain Valley Pipelines is not an adequate replacement and does nothing to assuage these concerns.⁷⁵ A guidance document is not a statute or regulation, nor does this guidance document provide any substantive guidance for the Board in making its decision to approve or deny the Certification.

Because DEQ has essentially created a new regulatory mechanism—an “upland activities” 401 Certification—to assess the potential impacts on water quality outside the Corps’ jurisdiction, neither the agency nor the public has a legal framework to look to in order to determine whether the preliminary decision to certify the project is justified. The Department could have alleviated this concern by expressly relying on the VWPP program as a guidepost for its analysis, but the Department has not indicated that it has done so.

IV. THE SCOPE OF THE 401 CERTIFICATION IS TOO NARROW TO ENSURE PROTECTION OF WATER QUALITY.

The most significant deficiency of the draft 401 Certification is that DEQ has construed its own authority and the scope of the Certification far too narrowly to ensure protection of state water quality. The purpose of a state’s 401 Certification is simple: to ensure that an activity subject to a federal license or permit will not violate state water quality standards. To make such a determination, DEQ must examine the potential individual and cumulative impacts from the construction and operation of the proposed Atlantic Coast Pipeline.

Unfortunately, the Department has instead elected to perform regulatory gymnastics in an apparent effort to maneuver the project around any potential obstacle that might prevent the State Water Control Board from having “reasonable assurance” that water

⁷⁴ 9VAC25-210-230(A)(1), (3), (5).

⁷⁵ Va. Dep’t of Env’tl. Quality, Div. of Water Monitoring, Guidance Memo No. GM17-2003, Interstate Natural Gas Infrastructure Projects—Procedures for Evaluating and Developing Additional Conditions for Section 401 Water Quality Certification Pursuant to 33 USC § 1341 (May 19, 2017), <http://www.deq.virginia.gov/Portals/0/DEQ/Water/Pipelines/GuidanceMemoGM17-2003Section401WaterQualityCertification.pdf>.

quality standards will not be violated. In so doing, DEQ is shirking its responsibilities to Virginians and violating the Clean Water Act. The issues discussed in this section are not insignificant procedural problems—they go directly to the heart of the Section 401 Certification process. The scope of the Department’s review must be revised to encompass an assessment of stream and wetland crossings and of erosion and sediment control and stormwater management requirements.

A. The Section 401 water quality certification should consider cumulative impacts of pipeline construction and operation on water quality.

The underlying problem with DEQ’s approach to the 401 Certification process is that it splinters the analysis of impacts of construction and operation of the Atlantic Coast Pipeline on water quality into piecemeal regulatory processes.⁷⁶ DEQ appears to believe that simply bringing *more* regulatory processes to bear is the best way to ensure protection of water quality. But the *only* way to effectively protect water quality is to consider the impacts of the pipeline as a whole on state water quality. By unjustifiably splintering its review of impacts to water quality into separate regulatory processes, DEQ is all but ensuring ineffective review. In order to determine whether the Department can genuinely recommend that the Board conclude that it has “reasonable assurance” that water quality will be protected, DEQ must assess the cumulative impacts of all aspects of the proposed project—from water crossings to slope stabilization plans to the flow of water through karst terrain to erosion and sediment control and stormwater management measures.

The purpose of a Section 401 Certification is to answer one simple question: Does the State Water Control Board have “reasonable assurance” that the construction and operation of the Atlantic Coast Pipeline will protect water quality standards? Divorcing the analysis of stream and wetlands crossings from that of impacts to those same streams and wetlands from upland activities is without basis in reason or science. Less justifiable still is DEQ’s decision to separate the analysis of upland activities from that of erosion and sediment control and stormwater management measures, which are indistinguishable from impacts from upland activities. Impacts to water quality cannot be conveniently divided into separate buckets. DEQ’s approach will not identify and account for the combined effects on water quality that result from the pipeline’s stream and wetland crossings and uplands activities.

⁷⁶ Va. Dep’t of Env’tl. Quality, Environmental Tools (2017), <http://www.deq.virginia.gov/Portals/0/DEQ/Water/Pipelines/EnvironmentalTools.pdf>.

Virginia’s approach to 401 Certification for the Atlantic Coast Pipeline falls far short of other states’ processes. In several recent instances, state environmental agencies that have looked closely at the cumulative impacts of natural gas pipelines have exercised this authority to deny water quality certifications for natural gas pipelines.

For instance, the New York State Department of Environmental Conservation (NYSDEC) has denied Section 401 water quality certifications for two pipelines in the past year and a half.⁷⁷ Unlike DEQ, NYSDEC conducted individual 401 certification reviews of stream and wetlands crossings—and also considered the impacts on those streams and wetlands from construction activities in upland areas. The approach taken by the NYSDEC illustrates the type of approach that should be used in Virginia. Setting aside the outcome of NYSDEC’s decisions on the Constitution and Northern Access pipelines, that agency’s regulatory approach should serve as a model for DEQ. In its notice denying water quality certification to the Constitution Pipeline, NYSDEC considered impacts to water quality both from actual crossings of waterbodies and from activities DEQ separates out as “upland activities”—namely, destabilization of slopes adjacent to waterbodies. Having considered the cumulative effects of all pipeline activities that may degrade water quality, the agency concluded that Constitution’s 401 Certification application “fails in a meaningful way to address the significant water resource impacts that could occur from this Project and has failed to provide sufficient information to demonstrate compliance with New York State water quality standards.”⁷⁸

We encourage Virginia to follow suit and conduct a comprehensive review of potential cumulative impacts to water quality from construction and maintenance of the Atlantic Coast Pipeline.

B. The draft 401 Certification is not based on review of all information relevant to impacts of upland activities on water quality.

Under the “reasonable assurance” standard, the Department must consider at all information relevant to the simple question: “Will activities of the Atlantic Coast Pipeline violate water quality standards?” Even setting aside concerns about DEQ’s failure to consider the cumulative effects of the pipeline, the Department cannot possibly conclude

⁷⁷ NYSDEC Constitution Pipeline denial, *supra* note 27; NYSDEC Northern Access denial, *supra* note 64. For a full discussion of NYSDEC’s denials of both pipelines, see Comments re: Section 401 Certification Application for Construction of the Atlantic Coast Pipeline, submitted by S. Env’tl. Law Ctr., to Jennifer A. Burdette, N.C. Dep’t of Env’tl. Quality (Aug. 18, 2017), included as **Attachment 13**.

⁷⁸ NYSDEC Constitution Pipeline denial, *supra* note 27, at 1.

that it has “reasonable assurance” that upland activities associated with the pipeline will not violate water quality unless it considers all relevant information. Any decision made without consideration of all relevant information will constitute arbitrary and capricious decision-making.⁷⁹ As discussed in this section, DEQ’s procedural framework excludes critically relevant information from its 401 analysis. For this reason, the proposed Certification and conditions cannot possibly provide “reasonable assurance” that upland activities will protect water quality standards because they were developed on the basis of incomplete information.

Chief among our concerns is DEQ’s decision to use two separate regulatory processes to assess potential impacts to water quality from upland land-disturbing activities. First, DEQ will use the Clean Water Act Section 401 process. Then, only once the pipeline has been granted certification under Section 401, will DEQ assess the effectiveness of erosion and sediment control and stormwater management plans requested by the agency and submitted by Dominion.⁸⁰ This approach is wholly inadequate because it unjustifiably carves out one of the most important components of an analysis focused on impact from activities in upland areas.

DEQ has noted that the applicable erosion and sediment control and stormwater management requirements are “established law that address[] land disturbances” and that “[t]he proposed [401] certification will address situations not covered by other regulations and requirements.” But here, the proposed 401 Certification DEQ has developed addresses *precisely* the situations covered by the erosion and sediment control and stormwater management requirements. Like those requirements, the 401 certification asks whether land-disturbing upland activities will violate or meet water quality standards. According to state regulations, objectives of the stormwater management regulations “include, but are not limited to, supporting state designated uses and water quality standards.”⁸¹ But to the extent that stormwater management and erosion and sediment control requirements are meant to protect water quality from impacts of upland land-disturbing activities, they cannot be divorced from a 401 certification process that *also* seeks to protect water quality from impacts of upland land-disturbing activities.

From a technical perspective, excluding consideration of erosion and sediment control and stormwater management measures from an analysis of water quality impacts from

⁷⁹ *Motor Vehicle Mfrs.’ Ass’n of U.S. v. State Farm Mut. Auto. Ins. Co.*, 463 US 29, 43 (1983).

⁸⁰ Va. Dep’t of Env’tl. Quality, *supra* note 76.

⁸¹ 9VAC25-870-46.

upland activities does not make sense. As noted in the final EIS, “[t]he discharge of stormwater, trench water, or hydrostatic test water could increase the potential for sediment-laden water to enter wetlands and cover native soils and vegetation.”⁸² This illustrates the inextricable connections between the regulatory processes DEQ has arbitrarily separated. The fact that DEQ has decided to consider Dominion’s Best in Class (“BIC”) program addressing construction on steep slopes as part of the 401 certification process, but is deferring consideration of erosion and sediment control and stormwater management plans until after that process, is illustrative of this problem. If the Department is concerned about the impacts of erosion and sedimentation on water quality, it cannot address those concerns in the context of slope stabilization but not erosion and sediment control or stormwater management.

Preventing sediment impacts from construction, particularly on steep slopes, will require adequate site-specific slope stabilization plans *and* sufficiently protective erosion and sediment control and stormwater management plans. Those protections are closely related, as they all address the fundamental question whether the pipeline will be constructed and operated in such a way as to avoid impacts to water quality from sedimentation.

For instance, the requirement included in the Virginia Erosion and Sediment Control Regulations that no more than 500 linear feet of trench may be opened at one time is highly relevant to the question whether the project will meet or violate water quality standards.⁸³ While structural erosion control practices are helpful and essential, there is no better protection for downstream waters than limiting the amount of land disturbance at any given time.⁸⁴ But there is no mention of this critical requirement in the draft 401 Certification or any supporting documents because DEQ has improperly deferred that analysis until after the 401 Certification process has concluded. It is not clear that DEQ intends to enforce the 500 foot open trench limit or that Atlantic intends to comply with it.

Yet another important consideration being left to post-401 assessment is the question whether Atlantic will be able to demonstrate hydrological equivalency between pre-

⁸² Final EIS at 4-137.

⁸³ 9VAC25-840-40(16)(a).

⁸⁴ David J. Hirschman, Hirschman Water & Env’t, LLC, Comments on the Virginia Department of Environmental Quality’s Proposed 401 Certification for the Atlantic Coast Pipeline 2 (2017), included as **Attachment 14**.

construction and post-construction runoff conditions. In its responses to DEQ's information requests, Atlantic indicates that it "is providing the VDEQ a quantitative evaluation that includes water quality and quantity and demonstrates that post-construction runoff characteristics for ACP will remain hydrologically equivalent to pre-construction runoff characteristics."⁸⁵ But the calculations Atlantic claims will demonstrate that hydrological equivalency are included in the Stormwater Pollution Prevention Plan (SWPPP), which the Department has not considered as part of its 401 Certification review. Without consideration of site-specific plans documenting equivalency, DEQ will be unable to determine whether Atlantic's equivalency claim is warranted.⁸⁶ The equivalency issue is highly relevant to an assessment of impacts to water quality and should therefore be addressed during the 401 Certification process—not after.

This is particularly true in light of our concerns that Atlantic's hydrological equivalency claim is based on unwarranted assumptions. Specifically, it is not clear from Atlantic's 401 documentation that it is addressing drainage areas with access roads in a different manner from those without.⁸⁷ This approach appears to be inconsistent with Appendix B of the Annual Standards and Specifications, which identifies four separate categories of roads, two of which (Categories 3 and 4) "involve improvements that are expected to result in a material change to the existing stormwater runoff characteristics as a result of the addition of impervious surface."⁸⁸ This "acknowledged increase in stormwater impacts should certainly be addressed in the 401 Certification, as it is a major principle of water quality protection and maintenance of water quality standards."⁸⁹

DEQ itself has recognized the paramount importance of erosion and sediment control and stormwater measures to protection of water quality. In its comments on the Draft Environmental Impact Statement (draft EIS) for the Atlantic Coast Pipeline, DEQ stated: "DEQ considers stormwater management and ESC measures to be *critically important to minimizing potential water quality impacts* from the ACP project. The ACP project

⁸⁵ June 27 Atlantic Response, *supra* note 34, at 9.

⁸⁶ Hirschman, *supra* note 84, at 3.

⁸⁷ *Id.*

⁸⁸ *See id.*; Dominion Energy, 2017 Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management for Construction and Maintenance of Gas Transmission Facility Projects in Virginia App. B at 4 (2017), <http://www.deq.virginia.gov/Portals/0/DEQ/Water/Pipelines/VSM/ACP/DETI%20Annual%20Standard%20Narrative.pdf?ver=2017-07-10-133203-897>.

⁸⁹ Hirschman, *supra* note 84, at 4.

includes areas of special interest such as karst, steep slopes, slide prone area and acid sulfate soils. Proper stormwater management and ESC design, implementation and monitoring *will be paramount in protecting these resources.*”⁹⁰

DEQ must look at all information relevant to that question. It cannot consider some of the most relevant after the 401 process has already concluded—even under the guise of separate regulatory processes. DEQ can of course consider those plans, which it has available, during the course of the 401 process. It has simply elected not to, without any scientific justification.

While these comments do not include technical comments on the erosion and sediment control and stormwater management plans the Department has made public over the course of the past month, we note that if they are inadequate to protect water quality standards, it is doubly important for the Department to assess the adequacy of those plans in the context of the 401 Certification process.

Other states considering impacts on water quality from natural gas pipelines have recognized the critical role of stormwater and erosion and sediment control measures in protecting water quality when pipelines are constructed on steep slopes. In its denial of a water quality certification for the Constitution Pipeline, NYSDEC noted that its Staff’s “extensive experience and technical reviews have shown that destabilization of steep hillslopes and stream banks will likely occur and may result in erosion and failure of banks, causing turbid inputs to waterbodies.”⁹¹ NYSDEC continued that “when appropriate stormwater controls are not properly implemented, erosion can result in increased sediment inputs to streams and wetlands. If these events occur they can affect the water quality and habitat quality of these streams.”⁹² NYSDEC’s analysis demonstrates that there is simply no way to divorce concerns about construction on steep slopes, or any other “upland activity” associated with pipeline construction and operation, from stormwater management and erosion and sediment control measures.

In light of DEQ’s own recognition of the critical role ESC and stormwater management will play in protection of water quality, there appears to be no basis for DEQ’s decision to divorce consideration of ESC and stormwater management plans for the 401 process, the purpose of which is to ensure protection of water quality. We cannot

⁹⁰ Va. Dep’t of Env’tl. Quality, *supra* note 45, at Att. B, DEQ Consolidated Program Comments at 13.

⁹¹ NYSDEC Constitution Pipeline denial, *supra* note 22, at 4.

⁹² *Id.*

fathom why DEQ has elected to separate one question—whether upland activities associated with the ACP will impact water quality—into two separate regulatory processes. The only possible explanation is that doing so will allow DEQ to shepherd the project through the 401 process as quickly as possible in order to comply with Atlantic’s desired timeline. Such an approach cannot and will not provide the Board with reasonable assurance that water quality standards will be met.

In a recently published “Frequently Asked Questions” document on the Department’s website, DEQ addresses this issue in response to a question asking, “Why is the 401 certification process different from erosion and sediment control (ESC) and stormwater management (SWM)?”⁹³ The agency responds that while “[b]oth programs are aimed at protecting water quality . . . they are separate regulatory processes.”⁹⁴ This is circular reasoning: DEQ is essentially positing that the reason they have separated these two regulatory processes is because they are separate regulatory processes. This answer is entirely unsatisfactory. As DEQ recognizes here and in its comments on the draft EIS,⁹⁵ the objective of both the Section 401 Certification and erosion and sediment control and stormwater management requirements is to protect water quality. Further, the ESC and SWM requirements are *critical* to the very question DEQ’s 401 certification asks: will upland activities associated with construction and operation of the Atlantic Coast Pipeline meet Virginia water quality standards?

Unless DEQ commits to considering erosion and sediment control and stormwater management plans, it will be unable to conclude that “reasonable assurance” exists that the pipeline will not violate water quality.

C. DEQ should conduct an individual 401 Certification for stream and wetland crossings rather than deferring to the U.S. Army Corps’ Nationwide Permit 12.

In response to requests from the public to conduct an individual 401 certification review of proposed stream and wetland crossings, DEQ contends that conducting an individual review would be redundant with the Army Corps’ expected authorization of

⁹³ Va. Dep’t of Env’tl. Quality, Frequently Asked Questions About the Mountain Valley and Atlantic Coast Pipelines (2017), <http://www.deq.virginia.gov/Portals/0/DEQ/Water/Pipelines/PipelineFAQ.pdf?ver=2017-08-16-160239-303>.

⁹⁴ *Id.* (emphasis added).

⁹⁵ Va. Dep’t of Env’tl. Quality, *supra* note 45, Att. B., DEQ Consolidated Program Comments at 13.

the project under Nationwide Permit 12 (NWP 12).⁹⁶ While the Corps must ensure that proposed crossings meet the requirements to be authorized under NWP 12, that does not mean that the Corps will assess stream and wetland crossings to ensure that they will meet Virginia water quality standards. Indeed, that is not the Corps' job—it is DEQ's job.⁹⁷

Section 404 of the Clean Water Act provides for nationwide permits that are designed to streamline authorization of certain activities that have no more than minimal individual and cumulative adverse environmental effects.⁹⁸ The Atlantic Coast Pipeline simply does not fall within that category of projects, and the Army Corps should reject Dominion's request to have the permit authorized under NWP 12. However, assuming the Corps grants that request, DEQ should step in and conduct the comprehensive review required to ensure that Virginia water quality is protected. If the Department fails to do so, there will be no meaningful review of the impacts of constructing a 42-inch natural gas pipeline through Virginia's sensitive streams and wetlands. Such a result is unacceptable.

DEQ itself has expressed concerns regarding stream and wetlands crossings, and those specific concerns will not be addressed if DEQ relies on NWP 12. Most notably, the Department catalogued those concerns in its comments to the Federal Energy Regulatory Commission (FERC) on the draft Environmental Impact Statement (Draft EIS). The Department is neither precluded nor excused from considering those same concerns in the context of its § 401 analysis. In a list on DEQ's website explaining the "environmental tools" the agency is using to review the pipeline, DEQ includes "environmental impact review" and notes that it, along with other Virginia agencies, "submitted numerous comments and recommendations on the draft environmental impact statements published by FERC" for the ACP.⁹⁹ The Department specifically highlighted the fact that, in those comments, it "identified specific concerns in a number of stream segments crossing watersheds," and that it "recommended additional pre- and post-construction water quality monitoring, heightened erosion and sedimentation control practices, and/or pre-impact characterization of proposed stream and wetland

⁹⁶ Robert Zullo and Graham Moomaw, *Virginia Department of Environmental Quality Denies Backpedaling on Pipeline Water-Crossing Reviews*, Richmond Times Dispatch (May 24, 2017) (citing DEQ as saying, "We felt like the work [the Corps was] doing would simply be duplicated by DEQ."), http://www.richmond.com/business/virginia-department-of-environmental-quality-denies-backpedaling-on-pipeline-water/article_a3ea4db1-8c62-5c6a-ab2e-e076605f5c63.html.

⁹⁷ 33 U.S.C. § 1341; 40 C.F.R. § 121.2(a)(3).

⁹⁸ 33 U.S.C. § 1344(e)(1).

⁹⁹ Va. Dep't of Env'tl. Quality, *supra* note 76.

crossings.”¹⁰⁰ At least some of those concerns and recommendations are directly related to stream and wetland crossings (others are at least also relevant to what DEQ has characterized as “upland activities).

As noted above, DEQ specifically recommended that “[t]he final EIS should include a requirement for **Pre-impact characterizations** of proposed stream and wetland crossings which go beyond the normal jurisdictional determination requirements to include sufficient evidence that the system will be able to maintain its original functions indefinitely after restoration.”¹⁰¹ The Department also made other recommendations regarding protection of water quality for stream and wetland crossings, including comments regarding specific crossings.¹⁰²

Notably, DEQ noted in its draft EIS comments that because horizontal directional drilling (HDD) “would result in no impacts to streams and is considered an avoidance measure,” the Department “recommend[ed] considering HDD, if practicable, at crossings of sensitive waters, e.g., trout waters, high quality streams, [and] T&E waters.”¹⁰³ As of its most recent response to DEQ, Atlantic is only considering HDD for six river crossings in Virginia.¹⁰⁴ Because DEQ ceded its authority to the Corps under NWP 12, the Department has given up its opportunity to demand that Atlantic consider more extensive use of HDD. Unlike DEQ, in its review of the Constitution Pipeline NYSDEC required that each crossing “be evaluated for environmental impacts and that trenchless technology was the preferred method for stream crossing.”¹⁰⁵ If DEQ believes HDD would be more protective of water quality, the Department should have taken a similarly protective approach.

If DEQ is sufficiently concerned about impacts to water quality from stream and wetland crossings to express those concerns to FERC in comments, and to recommend that FERC require Atlantic to abide by conditions not included in NWP 12, it should also be sufficiently concerned to ensure that those concerns are addressed by conducting an individual 401 certification review of those crossings. DEQ has not explained why,

¹⁰⁰ *Id.*

¹⁰¹ Va. Dep’t of Env’tl. Quality, *supra* note 45, Att. B, DEQ Consolidated Program Comments at 1 (emphasis in original).

¹⁰² *See id.* at 1-12.

¹⁰³ *Id.* at 1.

¹⁰⁴ June 27 Atlantic response, *supra* note 36, at 20.

¹⁰⁵ NYSDEC Constitution Pipeline denial, *supra* note 27, at 8.

despite its own concerns regarding stream and wetland crossings, it has unnecessarily ceded its authority under the Clean Water Act to the federal government. The purpose of the cooperative federalism approach of Section 401 is to delegate—from the federal government to state governments—authority to grant or deny water quality certification to federally permitted projects. In light of DEQ’s explicit concerns regarding pipeline crossings, the agency should exercise the authority it was granted under the Clean Water Act. As discussed above, this seemingly contradictory position is indicative of arbitrary and capricious decision-making.

We support DEQ’s submission of comments to FERC regarding potential water quality impacts from stream and wetland crossings. However, submitting comments on the draft EIS in no way precludes or excuses the Department from taking those same concerns into consideration in the 401 certification process. To the contrary, the fact that DEQ is concerned about these crossings should merit in *favor* of a comprehensive individual 401 certification—not against it.

In addition to the fact that DEQ itself has expressed concerns about stream and wetland crossings that will be left unaddressed if the Department relies on NWP 12, there are fundamental problems with the application of NWP 12 to large-scale pipelines like the Atlantic Coast Pipeline. NWP 12 authorizes utility line activities, including natural gas pipelines, “provided the activity does not result in the loss of greater than ½-acre of waters of the United States for each single and complete project.”¹⁰⁶ While the definition for a “single and complete project” for non-linear projects is “the total project proposed or accomplished by one owner/developer,”¹⁰⁷ for the purposes of NWP 12 the Army Corps has defined each individual stream or wetland crossing along the length of a pipeline as a “single and complete” project.¹⁰⁸ The effect of this definition is to allow each water crossing along a proposed linear utility project like the Atlantic Coast Pipeline to be authorized separately as so many “single and complete projects.” But the individual effects of pipeline construction can have a much greater cumulative effect. For instance, construction of multiple crossings within a watershed has the potential for cumulative effects such that “the capacity of the system to recover from impact may be exceeded,

¹⁰⁶ U.S. Army Corps of Eng’rs, Decision Document for Nationwide Permit 12 1-2 (2017), http://www.usace.army.mil/Portals/2/docs/civilworks/nwp/2017/NWP_12_2017_final_Dec2016.pdf?ver=2017-01-06-125514-797.

¹⁰⁷ 33 CFR § 330.2(i).

¹⁰⁸ U.S. Army Corps of Eng’rs, *supra* note 100, at 3.

and the detrimental effects of crossing construction permanent.”¹⁰⁹ This is certainly true in the case of the 600-mile Atlantic Coast Pipeline.

Prior to the Army Corps’ reissuance of NWP 12 in March 2017, a group of conservation organizations urged the Corps not to reissue the permit on the ground that as written, it violates § 404 of the Clean Water Act by allowing segmented approval of major pipelines without any-project specific environmental review or public review process.¹¹⁰ In our comments on the nationwide permit reissuance, we argued that Congress never intended the nationwide permit program to be used to streamline major, environmentally destructive, projects like interstate natural gas pipelines.¹¹¹

Other states have recognized the fact that NWP 12 fails to adequately address the environmental impacts of large-scale projects like interstate natural gas pipelines and have amended their own regulatory processes accordingly. For instance, West Virginia certified NWP 12, but included a condition in that certification that any pipeline over 36 inches receive an individual 401 certification. This condition serves as an implicit rejection of the application of NWP 12 to large pipelines.¹¹² New York took a different approach that performs a similar function: NYSDEC included a condition in its certification of NWP 12 that re-defines “single and complete project” as “a single project for all crossings for the entire length of the project in New York State” for the purpose of obtaining a § 401 Certification.¹¹³ New York’s adoption of an appropriate definition for “single and complete project” allows for an assessment of the *cumulative* impacts of pipeline construction and maintenance. Virginia’s 401 certification of NWP 12 includes no such condition to limit the application of NWP 12 to projects that actually threaten only minimal impact. It therefore must decide to conduct individual 401 Certifications on a case-by-case basis.

¹⁰⁹ Levesque & Dube, *supra* note 58, at 407.

¹¹⁰ Comments re: the U.S. Army Corps of Engineers’ Proposal to Reissue and Modify Nationwide Permit, from Sierra Club et al., to U.S. Army Corps of Eng’rs 12 (Aug. 1, 2016), https://www.nwf.org/~media/PDFs/Global-Warming/Tar-Sands/NWP-12-Comments_FINAL_080116.ashx, included as **Attachment 15**.

¹¹¹ *Id.* at 2.

¹¹² W.Va. Dep’t of Env’tl. Prot., West Virginia State 401 Water Quality Certification Conditions for U.S. Army Corps of Engineers Section 404 Nationwide Permits 2017 Renewal (2017), <http://www.dep.wv.gov/WWE/Programs/Documents/2017NWPWVCertConditions.pdf>.

¹¹³ N.Y. State Dep’t of Env’tl. Conservation, Section 401 Water Quality Certification for USACOE Nationwide Permits (Mar. 7, 2017), http://www.dec.ny.gov/docs/permits_ej_operations_pdf/wqcnwp2017.pdf.

Fortunately, for precisely this reason, DEQ has reserved authority to conduct an individual 401 Certification review when a project merits it, as the Atlantic Coast Pipeline certainly does. The Department explicitly recognized that it retains the authority to conduct individual 401 reviews of projects—even when a project could be authorized under a NWP. In its 401 certification of the nationwide permits, including NWP 12, DEQ noted that “[t]he Commonwealth reserves its right to require an individual application for a permit or a certificate or otherwise take action on any specific project that could otherwise be covered under any of the NWPs when it determines on a case-by-case basis that concerns for water quality and the aquatic environment so dictate.”¹¹⁴ If the proposed ACP is not a project that merits a comprehensive individual 401 certification review, it is difficult to imagine what kind of project would. As Virginia Secretary of Natural Resources Molly Ward recently observed, the certification for the ACP is “the first time DEQ has done a certification of this kind in a generation.” Her observation rightly speaks to the exceptional nature of this proposed project that merits a comprehensive review.

DEQ does not have to leave Virginia water quality at the mercy of NWP 12. The Department should rely on NWP 12 only if it can honestly characterize the proposed Atlantic Coast Pipeline as a project that “will have only minimal cumulative adverse effect on the environment.”¹¹⁵ While DEQ has already certified NWP 12, the mere fact that the Commonwealth certified a set of nationwide permits divorced from the technical specifics of any given project, does not preclude DEQ from requiring an individual 401 certification when a project warrants such a review. In other words, the fact that DEQ certified NWP 12 does not preclude DEQ from conducting an individual review of streams and wetlands. The fact that Virginia certified NWP 12 generally does not tie DEQ’s hands, nor is it sufficient assurance that water quality will be protected for a particular project—especially when the project is as potentially harmful as the ACP.

It is also noteworthy that Virginia is the only state through which the Atlantic Coast Pipeline that is relying on the Army Corps NWP 12 to assess the potential impacts on water quality from construction and operation of the pipeline. While both West Virginia and North Carolina’s 401 Certification processes fall far short of ensuring that water quality will be protected,¹¹⁶ at the very least both states are conducting individual 401

¹¹⁴ Va. Dep’t of Env’tl. Quality, Section 401 Water Quality Certification of the 2017 Nationwide Permits 2 (2017), <http://www.deq.virginia.gov/Portals/0/DEQ/Water/WetlandsStreams/Final%20401%20Certification%202017%20NWP%20with%20typos%20corrected.pdf?ver=2017-05-01-135819-313>.

¹¹⁵ 33 USC § 1344(e)(1).

¹¹⁶ See, e.g., Comments re: Section 401 Certification Application for Construction of the Atlantic Coast Pipeline, *supra* note 77.

Certification reviews. Virginia DEQ should follow suit. Further, while North Carolina's certification of NWP1 does not include a condition restricting the application of NWP 12 to minimally harmful projects, North Carolina DEQ (NCDEQ) nevertheless chose to conduct an individual 401 certification review for the Atlantic Coast Pipeline.¹¹⁷

Therefore, in order to assess the potential impacts of the Atlantic Coast Pipeline at least as meaningfully as the other states in the pipeline's path, Virginia should exercise its authority under the Clean Water Act to require an individual 401 Certification for the Atlantic Coast Pipeline's stream and wetland crossings.

V. THE INFORMATION THE AGENCY IS CONSIDERING IS INSUFFICIENT TO PROVIDE REASONABLE ASSURANCE THAT THE PROPOSED PROJECT WILL NOT VIOLATE WATER QUALITY STANDARDS.

A. DEQ failed to require Atlantic to submit site-specific slope stabilization plans necessary to provide "reasonable assurance" that water quality will be protected.

One of the greatest threats the Atlantic Coast Pipeline poses to water quality in Virginia is the fact that the proposed route would cut across some of the steepest slopes in the state. As discussed above, construction on very steep slopes presents severe erosion and sedimentation risks. In order to adequately assess whether the pipeline will violate water quality standards, DEQ must have access to site-specific slope stabilization plans.¹¹⁸

Atlantic has acknowledged that it has not provided site-specific plans for each site along the pipeline's route where it will employ its "Best in Class" steep slope management program. The justification Atlantic posits for failing to provide this critically important information during the 401 certification process is that waiting until the eleventh hour "provide[s] flexibility when [the construction company] embarks on construction."¹¹⁹ For a highly technical area of review like that of steep slope

¹¹⁷ In North Carolina, "individual certifications are issued on a case-by-case basis." 15A N.C. Admin. Code 02H .0501(c)(1).

¹¹⁸ For a detailed discussion of the importance of site-specific slope stabilization plans, see Rick Webb, Deferred Planning for the High Hazard Areas of the ACP, submitted as comments on the 401 Certification to DEQ (Aug. 22, 2017) (incorporated).

¹¹⁹ Robert Zullo, *Virginia's Environmental Agency Says Contractor's Work for Dominion Doesn't Pose a Conflict for Pipeline Review*, Richmond Times Dispatch (Aug. 9, 2017), <http://www.richmond.com/>

stabilization, the devil is in the details. And if the details are not disclosed during the certification process—to the reviewing agency or the public—the Board cannot conclude that it has “reasonable assurance” that water quality standards will be met. Dominion’s vague reference to “flexibility” during the construction process is far from sufficient justification for failure to provide site-specific plans based on Dominion’s best in class program. Further, it is not as though the developer would be unable to seek permission from DEQ to modify or amend those plans during the construction phase should the need arise. A generic set of guidelines for steep slope construction cannot and does not demonstrate that those plans will be sufficient on the site-specific level, which is what the Board would need to know in order to have “reasonable assurance” of water quality protection.

The importance of site-specific stabilization plans has also been highlighted by the U.S. Forest Service. The Forest Service has repeatedly requested from Atlantic site-specific designs of stabilization measures on steep slopes along the proposed route on or near the Monongahela and George Washington National Forests. Citing the “very challenging terrain” of the central Appalachians, the Forest Service expressed concern about precisely how Atlantic will handle and mitigate impacts arising from steep slopes, the presence of headwater streams, geologic formations with high slippage (landslide) potential, highly erodible soils, and the presence of high-value natural resources downslope of high hazard areas.¹²⁰ The Forest Service also noted that such concerns were compounded by high annual rates of precipitation and the potential for extreme precipitation events.¹²¹ Further, the Forest Service pointed out that similar hazards on smaller pipelines in the central Appalachians have led to slope failures, erosion and sediment incidents, and damage to aquatic resources.¹²² Since these consequences attended even smaller pipelines, the Forest Service expressed the inevitable concern that the Atlantic Coast Pipeline could present a high risk of failure leading to damage to forest lands and waters.¹²³

[business/virginia-s-environmental-agency-says-contractor-s-work-for-dominion/article_da3d5a4f-adcc-5ee0-86d5-0676afc5a2f0.html](https://www.washingtonpost.com/business/virginia-s-environmental-agency-says-contractor-s-work-for-dominion/article_da3d5a4f-adcc-5ee0-86d5-0676afc5a2f0.html).

¹²⁰ Letter from Clyde Thompson, Forest Supervisor, U.S. Forest Serv., to Kimberly D. Bose, Secretary, FERC (Oct. 24, 2016), included as **Attachment 16** [hereinafter Forest Service High-Hazard Stabilization Measures Request].

¹²¹ *Id.*

¹²² *Id.*

¹²³ *Id.*

While DEQ seems content to rely on Dominion’s Best in Class program, the Forest Service held Atlantic to a much higher standard: it demanded evidence of the *effectiveness* of these purportedly “best in class” techniques.¹²⁴ The evidence the Forest Service asked for was site-specific stabilization plans.¹²⁵ When Atlantic failed to provide the Forest Service with those plans, despite repeated requests, a third-party reviewer working with the Monongahela National Forest lamented that “Dominion/ACP failed to provide specific and targeted evidence of the effectiveness of the so-called “Best in Class” Steep Slopes Program.”¹²⁶

Despite the importance of site-specific plans, DEQ appears ready to move forward without application of the BIC program to specific sites. We encourage the agency not to recommend 401 Certification until Atlantic has provided, and the Department and public have thoroughly reviewed, site-specific slope stabilization plans.

B. The karst mitigation plan on which the draft 401 Certification is conditioned is insufficient to provide “reasonable assurance” that water quality will be protected.

The draft 401 Certification requires Atlantic to “develop a Karst Dye Tracing Plan to be submitted and approved by the Department.”¹²⁷ Dye tracing is a crucial tool because it functions as a map of how water moves underground.¹²⁸ This is unnecessary for above-ground waterways due to the availability of maps, but it is the only way we can gain a comprehensive understanding of the movement of water underground.¹²⁹ There has been no comprehensive dye tracing analysis done in the region of Virginia through which the pipeline would pass,¹³⁰ so it must be done now. Without those “maps” created by dye tracing, it will be impossible for DEQ or the Board to determine whether water quality

¹²⁴ *Id.*

¹²⁵ *Id.*

¹²⁶ Letter from James A. Thompson, Ph.D., Professor of Pedology and Land Use, W. Va. Univ., to Clyde Thompson, Forest Supervisor, U.S. Forest Serv. (Feb. 22, 2017), included as **Attachment 17**.

¹²⁷ DEQ Draft 401 Certification, *supra* note 36, at 5.

¹²⁸ Dr. Chris Groves, Crawford Hydrology Laboratory, Comments on Karst-Related Environmental Issues in the Atlantic Coast Pipeline (ACP) Response (5/31/17) and Second Response (6/23/17) and (6/27/17) to the Virginia Department of Environmental Quality Request for Information for Developing and Evaluating Additional Conditions for Section 401 Water Quality Certification for Interstate Natural Gas Infrastructure Project (2017), included as **Attachment 18**.

¹²⁹ *Id.*

¹³⁰ *Id.* at 4.

will be protected.¹³¹ The results of dye trace tests are therefore highly relevant to the 401 Certification decision.

However, DEQ did not require that plan to be submitted in time to play a role in the 401 Certification process itself. Rather, the Certification only includes a condition that the plan be submitted before construction. DEQ's failure to require dye tracing before a draft decision was made on the 401 Certification mirrors the Department's failure to consider erosion and sediment control and stormwater management plans as part of the 401 Certification process. Yet again, DEQ is deferring analysis of crucially important information until after the project makes it through the 401 Certification process. As with erosion and sediment control and stormwater management plans, the Department has put the cart before the horse, wrongly relying on the *assumption* that dye tracing plans will be adequate, rather than the *conclusion* that they are. The proper process is for DEQ to first determine, by examining the results of the dye tracing study, whether water quality standards are likely to be violated. Only then can the Department have any basis for finding "reasonable assurance."¹³²

There are specific problems related to the fact that the dye tracing studies are necessary to understand the extent of the karst systems that may be impacted. First, Atlantic has said that "surveys will include a groundwater inventory of all wells or springs within 500 feet of the proposed pipeline in karst areas."¹³³ It is not clear why an arbitrary distance of 500 feet was selected, nor is there any indication that DEQ made a water-quality based determination that 500 feet was sufficiently protective of resources.¹³⁴ In the absence of adequate data on water flow through karst, there can be no basis for selecting 500 feet as the survey boundary.¹³⁵ When there was a diesel spill associated with a Columbia Pipeline in West Virginia in 2015, a spring located a ½-mile (2,640 feet) away was contaminated.¹³⁶ There may well be larger drainage systems along the proposed Atlantic Coast Pipeline route, but there is no way to determine that without

¹³¹ *Id.* at 5.

¹³² *Id.* at 10.

¹³³ June 27 Atlantic Response, *supra* note 34, at 29.

¹³⁴ *Id.* at 7.

¹³⁵ *Id.*

¹³⁶ *Id.*

proper dye trace studies.¹³⁷ These studies must be performed before 401 Certification in order to properly inform the Department's conclusion of reasonable assurance.

Second, the karst mitigation plan focuses on karst *features* rather than karst *drainage* systems.¹³⁸ What is relevant with regard to water quality is only karst features such as sinkholes, cave entrances, and springs—the features the mitigation plan focuses on. Rather, karst drainage systems are relevant.¹³⁹ As discussed above, water moves underground much as it does aboveground, so it is necessary to understand the nature of that movement in order to assess potential impacts to water quality. Again, dye tracing prior to certification is needed to ensure protection of water quality.

C. The draft 401 Certification fails to ensure protection of sensitive brook trout populations.

The impacts of construction of the Atlantic Coast Pipeline across steep slopes in western Virginia threaten brook trout and other biota inhabiting the mountain streams that the pipeline would traverse.¹⁴⁰ Brook trout are already vulnerable to extirpation as a result of the cumulative effects of habitat disturbance.¹⁴¹ As discussed throughout these comments, construction on steep slopes will likely result in delivery of excess runoff and sediment to the stream channel, which may produce short-term and long-term declines in water quality and risk pushing vulnerable brook trout toward extirpation.¹⁴²

In Virginia, brook trout populations occupy only about 30% of their historic watersheds in abundances that are not already greatly reduced, and they are absent or extirpated from 54% of their historic distribution.¹⁴³ According to the Virginia Department of Game and Inland Fisheries, most trout habitat loss occurs through increased stream temperature, siltation, and stream channel alteration.¹⁴⁴ Construction and operation of the Atlantic Coast Pipeline is likely to result in these effects on aquatic

¹³⁷ *Id.*

¹³⁸ See Groves, *supra* note 128, at 2-3.

¹³⁹ *Id.*

¹⁴⁰ See Hilderbrand, *supra* note 61 at 1.

¹⁴¹ *Id.* at 2.

¹⁴² *Id.* at 1.

¹⁴³ *Id.* at 3.

¹⁴⁴ Va. Dep't of Game & Inland Fisheries, *Wild Trout Program*, <https://www.dgif.virginia.gov/fishing/trout/wild-trout-program/> (last visited Aug. 18, 2017).

systems along the proposed route.¹⁴⁵ The mountain streams crossed by the proposed pipeline or new access roads will likely experience increased siltation and altered stream channels, and could also experience increased stream temperatures at critical times.¹⁴⁶

The draft 401 Certification does not sufficiently address these threats to brook trout populations. A primary reason for DEQ's deficient analysis of impacts to trout is its decision to defer consideration of erosion and sediment control and stormwater management plans until after the 401 Certification process, discussed above. Construction of the pipeline and access roads will increase runoff into streams. Increased stream flow will increase erosion and sediment delivery in the channel and downstream, thus degrading trout habitat. While riparian buffers can help to mitigate smaller-scale impacts, they will not be sufficient to mitigate large, concentrated amounts of water such as those that will arise from the construction of the pipeline and access roads. This problem will be exacerbated on steeper slopes.

Further, the effects of sedimentation will continue long after construction has been completed—which may be unrecognized due to deficiencies in the Water Quality Management Plan, discussed above. Due to the potential for significant and long-term consequences from increased runoff, some form of hydrologic or geomorphic monitoring should be implemented. This technology could also be used to monitor water temperature. Even small increases in stream temperatures may have dramatic effects on brook trout if that stream is already near the population's physiological threshold. Requirements established by Virginia Water Quality Standards reflect the importance of limiting increases in temperature in wild trout streams: In Class VI natural trout waters, any rise above natural temperature may not exceed 1 degree Celsius, and the maximum hourly temperature change cannot exceed .5 degrees Celsius.¹⁴⁷ There is no indication in the draft 401 Certification that DEQ has found “reasonable assurance” that such construction of the pipeline will not lead to an exceedance of those water quality standards.

Were this project being certified under the Virginia Water Protection Permit program, one basis for denial of the 401 Certification would be if DGIF “indicates that natural or stockable trout waters would be permanently and negatively impacted by the proposed activity.” But as it stands, it is unclear whether the Board will have the opportunity to

¹⁴⁵ Hilderbrand, *supra* note 61 at 1-3.

¹⁴⁶ *Id.* at 3.

¹⁴⁷ 9VAC25-260-70.

consider whether impacts from the pipeline rise to a level that would merit a denial of the Certification.

DEQ itself recognized the importance of Class VI wild trout waters in its second information response on June 15, 2017. The Department expressed concern that Atlantic had failed to identify several Class VI wild trout waters that may be impacted by upland construction, noting that those waters “are important not only for the trout populations themselves, but because they exhibit sufficiently high water quality and ecological integrity necessary to support wild trout.”¹⁴⁸ In recognition of the importance of these high quality waters, DEQ requested that Atlantic “evaluate” a list of five Class VI streams “for potential impacts due to upland construction.”¹⁴⁹

It is not clear precisely what DEQ was asking Atlantic to do, but Atlantic changed nothing between its first and second responses. Rather, Atlantic simply stated that “[a] complete list of waterbodies within 50 feet of project workspace was included as Table 3.0-1 in Atlantic’s May 2017 response.”¹⁵⁰ No change was made to that information in the June response, despite DEQ’s concerns in its second information request. For instance, the table identifying perennial water bodies within 50 feet of workspace not crossed by the pipeline (Table 3.0-1) does not identify Erwin Draft as Class VI wild trout water as requested by DEQ, nor does it confirm that there would be impacts from upland activities on Laurel Run (Class VI wild trout stream).¹⁵¹

There are at least two problems here. The primary one is that DEQ only seems interested in identification of wild trout streams for monitoring purposes—not for the purposes of determining whether upland activities will lead to violates of water quality that threaten trout populations. Second, DEQ has moved ahead with the draft Certification despite Atlantic’s apparent failure to address the concerns DEQ expressed in its second information request regarding even *identification* of Class VI wild trout waters.

D. The draft 401 Certification’s riparian buffer requirements do not provide “reasonable assurance” that water quality will be protected.

¹⁴⁸ June 15 DEQ Information Request, *supra* note 33.

¹⁴⁹ *Id.*

¹⁵⁰ June 27 Atlantic Response, *supra* note 34, at 1.

¹⁵¹ *Id.* at 7.

We appreciate that the 401 Certification addresses protection of riparian buffers and that these protections extend to “perennial, intermittent, or ephemeral surface waters.”¹⁵² However, the requirement that land-disturbing activities retain a 50-foot distance from surface waters is undermined by the Certification itself. Specifically, the riparian buffer condition says that “[d]isturbance and removal of riparian buffers from Project-related upland land disturbing activities that would occur within 50 feet of any . . . surface waters,” but only “where possible.”¹⁵³ If a 50-foot buffer is determined, seemingly by Atlantic, to not be possible, they need only to minimize disturbance or removal “to the maximum extent practicable.”¹⁵⁴

The Certification provides no guidelines for determining when retaining a 50-foot buffer is not possible, which appears to leave that determination to Atlantic during construction. It also leaves a determination of what constitutes minimizing impacts “to the maximum extent practicable.” By failing to specify who is responsible for identifying or determining whether the 50-foot buffer is possible, and what circumstances must support such a finding, the seemingly protective 50-foot condition lacks enforceability and is therefore insufficient to ensure protection of water quality.

E. The Water Quality Monitoring Plan on which the draft 401 Certification is conditioned is insufficient to provide “reasonable assurance” that water quality standards will not be violated.

We have several concerns regarding the draft 401 Certification’s monitoring requirements. By DEQ’s own admissions, several aspects of the Water Quality Monitoring Plan submitted to the Department by Atlantic are inadequate.

First, DEQ explicitly stated in its second information request that “[t]he proposed monitoring frequency for chemical parameters is *far less* than normally relied on to make water quality determinations.”¹⁵⁵ The Department elaborated that “[o]ne reading for [dissolved oxygen], pH, conductivity, and turbidity done before, during, and after construction is *insufficient to determine if there is an actual water quality impairment*.”¹⁵⁶ This position is consistent with DEQ’s own comments on the draft EIS for the project. In

¹⁵² DEQ Draft 401 Certification, *supra* note 36, at 4.

¹⁵³ *Id.*

¹⁵⁴ *Id.*

¹⁵⁵ June 15 DEQ Information Request, *supra* note 33, at 5 (emphasis added).

¹⁵⁶ *Id.* (emphasis added).

those comments, DEQ said it wanted “real-time temperature, dissolved oxygen and turbidity monitoring (such as that done in VA by USGS) which could allow the public and all agencies involved to access the data real-time.”¹⁵⁷ In other words, DEQ has repeatedly acknowledged that the proposed single reading plan is insufficient to provide reasonable assurance that water quality standards will be met. To address this concern, DEQ requested in its second information request that Atlantic conduct “continuous monitoring of these parameters for a duration of one month to occur before, during, and after construction.”¹⁵⁸

Despite the explicit recognition that Atlantic’s proposed monitoring plan was insufficient to protect water quality, the Department nevertheless went on to note that “at a minimum,” Atlantic must provide “three grab samples [to] be collected at each site before, during, and after construction.”¹⁵⁹ Why would DEQ give Atlantic an option that in the preceding sentence it had identified as “far less than normally relied upon” and “insufficient” to detect water quality impairment? Rather than providing Atlantic with an easy out, DEQ could and should have simply required continuous monitoring. Unsurprisingly, in its June response to that information request, Atlantic took the easy out it was offered and simply ignored the Department’s request for continuous monitoring, opting instead to conduct the insufficient three discrete monitoring events before, during, and after construction.

DEQ issued the draft 401 Certification several days later, never addressing Atlantic’s refusal to conduct continuous monitoring sufficient to protect water quality.¹⁶⁰ Again, the position of the Department in its April 6, 2017 draft EIS comments and June 15, 2017 information request is wholly inconsistent with its July 3, 2017 draft 401 Certification incorporating the Water Quality Monitoring Plan as a condition of the Certification. This inconsistency suggests arbitrary and capricious decision-making. On April 6¹⁶¹ and June 15,¹⁶² DEQ believed Atlantic’s monitoring plan was insufficient to protect water quality and wanted continuous, real-time monitoring. On July 3, DEQ was apparently satisfied with a monitoring approach it had previously referred to as “insufficient” just two weeks

¹⁵⁷ Va. Dep’t of Env’tl. Quality, *supra* note 45, Att. B, DEQ Consolidated Program Comments at 13.

¹⁵⁸ *Id.* at 12-13.

¹⁵⁹ June 15 DEQ Information Request, *supra* note 33, at 5.

¹⁶⁰ *See* DEQ Draft 401 Certification, *supra* note 36.

¹⁶¹ Va. Dep’t of Env’tl. Quality, *supra* note 45, Att. B., DEQ Consolidated Program Comments at 12-13.

¹⁶² June 15 DEQ Information Request, *supra* note 33, at 5.

earlier. An insufficient approach cannot provide reasonable assurance that water quality will be protected. The only possible explanation for the agency's apparent change of position is that it needed to approve the project on Atlantic's preferred schedule.

Second, the Water Quality Monitoring Plan fails to provide for monitoring that would assess long-term impacts of the pipeline. Atlantic has committed to monitoring each location once after stabilization, which Atlantic refers to as "seeding and mulching of the construction right-of-way."¹⁶³ That monitoring event will take place as early as one month after construction.¹⁶⁴ Again, this aspect of the Monitoring Plan falls short of what DEQ itself believes is adequate to ensure protection of water quality. In its April 2017 comments on the Draft EIS, the Department critiqued the monitoring plan that had been submitted to FERC, asserting that the "scope of this plan does not address water quality monitoring comprehensively for the project."¹⁶⁵ To remedy the plan's deficiencies, DEQ said that the final EIS "should include a requirement for a comprehensive Water Quality Monitoring Plan that describes how water quality monitoring will be conducted before, during project construction *and up to five years after construction is completed.*"¹⁶⁶

About a month later, when DEQ issued its first information request to Atlantic, the Department made no mention of a request for monitoring up to five years. If the Department believed in April that monitoring should continue up to *five years* after construction, why did it abandon that belief by May in favor of a WQM Plan into the 401 Certification that allows monitoring to cease *one month* after construction? Again, this demonstrates arbitrary and capricious decision-making and evinces an unjustified effort on the Department's part to simply shepherd the project through to approval.

Third, not only is the frequency of monitoring insufficient, but so is the number of monitoring locations. Atlantic's Plan commits to monitoring "a minimum of one stream for each category of stream, where available." However, in order to provide greater accuracy, DEQ should require Atlantic to monitor at least three streams per stream category¹⁶⁷. The relevant categories are: waters that occur in a watershed with an established TMDL for sediment or nutrient related impairment; waters that potentially contain federally listed threatened or endangered species; waters occurring within a

¹⁶³ June 27 Atlantic Response, *supra* note 34, App. F, Water Quality Monitoring Plan at 6.

¹⁶⁴ *Id.*

¹⁶⁵ Va. Dep't of Env'tl. Quality, *supra* note 45, at 12.

¹⁶⁶ *Id.* (emphasis added).

¹⁶⁷ Hilderbrand, *supra* note 61, at 6.

geologic unit containing potentially significant acid-producing sulfide minerals; waters occurring within a local watershed with a public water surface intake within 5 miles of the project; and naturally occurring or stocked trout waters. DEQ should require Atlantic to expand its monitoring to as many sites as necessary beyond the seven it has selected to ensure monitoring on at least three streams of each category.

Finally, Atlantic has committed to monitoring water quality above, directly adjacent to, and below the project area to determine the effects of pipeline construction and evaluate whether changes in water quality occurred. Until its June 23 and 27 response to DEQ's second information request, neither Atlantic nor DEQ had defined "directly adjacent." Atlantic's May 31, 2017 response to DEQ's first information request was silent on that point, but its second information response parenthetically defined "directly adjacent" as "generally within 50 feet of construction workspace, but not directly impacted [by construction]."¹⁶⁸ At the outset, it is concerning that there is no indication that DEQ analyzed the sufficiency of monitoring areas only 50 feet from construction. It is unclear whether DEQ considered whether monitoring within that defined area would be sufficient to ensure discovery of water quality degradation or even whether choosing a set number of feet the proper approach. We are concerned that it is not. The concept of erosion and sediment control is based on drainage areas,¹⁶⁹ which the U.S. Geological Service defines as "the land area where precipitation falls off into creeks, streams, rivers, lakes, and reservoirs."¹⁷⁰ Drainage areas can be much larger than 50 feet, so it is possible—if not likely—that Atlantic's unsupported selection of 50 feet to define the limits of monitoring is insufficiently protective. At the very least, DEQ must demonstrate that it has analyzed this issue and did not simply defer to Atlantic without further analysis, as it appears the Department has done.

¹⁶⁸ June 27 Atlantic Response, *supra* note 34, App. F, Water Quality Monitoring Plan at 4.

¹⁶⁹ Hirschman, *supra* note 84, at 6.

¹⁷⁰ U.S. Geological Survey, *Drainage Area*, <https://waterdata.usgs.gov/wa/nwis/current?type=basinda> (last visited Aug. 18, 2017).