PUBLISHED

UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

No. 22-1008
SIERRA CLUB; WEST VIRGINIA RIVERS COALITION; WEST VIRGINIA HIGHLANDS CONSERVANCY; INDIAN CREEK WATERSHED ASSOCIATION; APPALACHIAN VOICES; CHESAPEAKE CLIMATE ACTION NETWORK,
Petitioners,
$\mathbf{v}.$
WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION; HAROLD WARD, in his official capacity as Secretary of the West Virginia Department of Environmental Protection,
Respondents,
MOUNTAIN VALLEY PIPELINE, LLC,
Intervenor.
On Petition for Review of a Certification Issuance of the West Virginia Department of Environmental Protection. (FERC Docket No. WQC-2021-005)
Argued: October 25, 2022 Decided: April 3, 2023
Before GREGORY, Chief Judge, WYNN, and THACKER, Circuit Judges.
Petition for review granted and certification vacated by published opinion. Chief Judge Gregory wrote the opinion, in which Judge Wynn and Judge Thacker joined.

ARGUED: Derek Owen Teaney, APPALACHIAN MOUNTAIN ADVOCATES, INC., Lewisburg, West Virginia, for Petitioners. Lindsay Sara See, OFFICE OF THE ATTORNEY GENERAL OF WEST VIRGINIA, Charleston, West Virginia, for Respondents. George Peter Sibley, III, HUNTON ANDREWS KURTH, LLP, Richmond, Virginia, for Intervenor. ON BRIEF: Benjamin A. Luckett, Elizabeth A. Bower, APPALACHIAN MOUNTAIN ADVOCATES, INC., Lewisburg, West Virginia, for Petitioners. Patrick Morrisey, Attorney General, Michael R. Williams, Senior Deputy Solicitor General, Caleb A. Seckman, Assistant Attorney General, OFFICE OF THE ATTORNEY GENERAL OF WEST VIRGINIA, Charleston, West Virginia, for Respondents. J. Pierce Lamberson, Richmond, Virginia, Deidre G. Duncan, HUNTON ANDREWS KURTH LLP, Washington, D.C.; Robert G. McLusky, Jennifer L. Hughes, JACKSON KELLY PLLC, Charleston, West Virginia; Justin W. Curtis, AQUALAW PLC, Richmond, Virginia, for Intervenor.

2

GREGORY, Chief Judge:

This appeal is the latest installment in a series of challenges to Mountain Valley Pipeline, LLC's ("MVP") plans to build a natural gas pipeline. Because it intends to construct a portion of the pipeline in West Virginia, MVP obtained a Clean Water Act ("CWA") certification from the West Virginia Department of Environmental Protection (the "Department"). The certification reflected the Department's conclusion that MVP's activities during the pipeline's construction would not violate the state's water quality standards. Disagreeing with that determination, landowners and members of various environmental organizations in the state (collectively, "Petitioners") have petitioned for this Court's review of the Department's certification. We find the Department's justifications for its conclusions deficient and vacate the certification.

I.

A.

In 2018, MVP began building an approximately 304-mile, forty-two-inch diameter pipeline. Spanning Virginia and West Virginia, the pipeline is intended to be an essential conduit for delivering natural gas to markets in the mid-Atlantic, Southeastern, and Appalachian regions of the United States. Approximately 197 miles of the pipeline will be constructed in West Virginia, crossing many of the state's aquatic resources along its path.

Pipelines can cross waterbodies in two ways. One construction method uses trenchless crossings to conduct conventional boring under waterbodies, which do not require digging and excavating the soil. MVP will use this method for a portion of its

crossings. For most crossings, though, MVP has chosen to trench through waterbodies using open-cut crossings. The open-cut crossing method allows MVP to "work in the dry." As the name suggests, working "in the dry" entails dewatering the streambeds to achieve dry working conditions. Once dry conditions are established, MVP would excavate trenches through the streambeds to bury the pipeline beneath the surface. After placing the pipeline in the trenches, MVP would then backfill the trenches, attempt to restore the streambeds, and allow normal streamflow to resume.

All told, MVP expects the project to have unavoidable permanent and temporary impacts on the West Virginia ecosystem. The permanent effects would likely stem from restoring the pipeline's right of way, constructing permanent access roads, and installing culverts along these roads to maintain stream connectivity. MVP represents that these impacts will be limited to less than a mile of stream channels and less than half-an-acre of wetland. The project will carry broader temporary impacts to almost four miles of stream channels and more than eleven-and-a-half acres of wetland due to excavation and backfilling of trenches as the pipeline crosses wetlands and streams.

Whether temporary or permanent, these activities threaten serious harm in the absence of proper environmental controls. Some stream crossings require in-stream blasting, which could "injure or kill aquatic organisms during blast-hole drilling operations, and temporarily increase stream turbidity." J.A. 1295. The removal of crossing-construction infrastructure poses an additional concern that sedimentation may build up downstream through the introduction of fill material into the water. Unmitigated in-stream crossing activity could be quite environmentally dangerous given that "[s]edimentation is

responsible for nearly 40 percent of fish imperilment problems" by disrupting their reproduction and feeding habits. J.A. 1061.

B.

1.

The pipeline project's success depends on its adherence to a complex regulatory scheme. The Natural Gas Act ("NGA") delegates to the Federal Energy Regulatory Commission ("FERC") final approval authority for the construction of natural gas pipelines by authorizing FERC to issue certificates of public convenience and necessity. 15 U.S.C. § 717f(c)(1)(A). FERC, in turn, will issue a certificate of public convenience and necessity only after ensuring that a proposed natural gas pipeline complies with both the NGA and the National Environmental Policy Act. *See* 42 U.S.C. §§ 4321 *et seq.*; 15 U.S.C. §§ 717 *et seq.* MVP procured a certificate of public convenience and necessity in October 2017. The certificate of public convenience and necessity was MVP's initial hurdle, but it was not the only challenge.

2.

Under the NGA, MVP must also obtain "any permits, special use authorizations, certifications, opinions, or other approvals as may be required under Federal law." *Sierra Club v. United States Dep't of Interior*, 899 F.3d 260, 267 (4th Cir. 2018) (internal citation and quotations omitted). Because MVP's waterbody crossings involve the discharge of fill material into federal waters, the CWA requires MVP to obtain approval from the Army Corps of Engineers ("Army Corps") before beginning construction. MVP may satisfy that requirement in one of two ways: by complying with an existing nationwide permit, "which

acts as a standing authorization for developers to undertake an entire category of activities deemed to create only minimal environmental impact," or by acquiring an individual permit issued on a "case-by-case basis" after a "resource-intensive review." *Crutchfield v. Cnty. of Hanover, Va.*, 325 F.3d 211, 214 (4th Cir. 2003).

MVP initially attempted to gain approval to build its pipeline under the scope of the more generalized Nationwide Permit ("NWP") 12. Sierra Club v. United States Army Corps of Eng'rs, 909 F.3d 635, 639–43 (4th Cir. 2018) ("Sierra Club I"). Those who wish to use NWP 12 for a potential project must submit pre-construction notifications to the Army Corps and apply for "verifications" that the project would meet the criteria for operation imposed by NWP 12. Id. at 641. A successful verification under NWP 12 would excuse a project from the more arduous individual CWA permitting process tailored to specific projects. See 33 C.F.R. §§ 330.1(b)–(d).

Every CWA permit applicant "shall provide the [Army Corps] a certification from the State in which the discharge originates or will originate," unless the state waives its right to independently certify the project. 33 U.S.C. § 1341(a)(1); *see also* 33 C.F.R. § 325.2(b)(1)(ii). So, along with the general permitting conditions of NWP 12, MVP had to satisfy any special conditions imposed by West Virginia. *Sierra Club I*, 909 F.3d at 640 (citing 33 C.F.R. §§ 330.4(c)(1)–(2)). On December 22, 2017, the Army Corps issued a verification that MVP's pipeline met the criteria of NWP 12, provided that it "compl[ies] with all terms and conditions of the enclosed material and the enclosed special conditions." *Id.* at 641.

However, in *Sierra Club I*, we held that MVP could not satisfy a special condition of NWP 12 that large-diameter pipelines, such as this project, possess a state water quality

certification under CWA Section 401. *Id.* at 651–55. Although MVP had previously received a conditional West Virginia water quality certification, the Department later sought voluntary remand with vacatur of that action. *Id.* at 641. The Department represented that "the information used to issue the Section 401 Certification needs to be further evaluated and possibly enhanced' and that it 'needs to reconsider its antidegradation analysis in the Section 401 Certification." *Id.* (citation omitted). Rather than reevaluating the information on which it based its initial certification, however, the Department purported to waive its authority to issue an individual certification under Section 401. *Id.* Accordingly, we vacated the NWP 12 verification given that there was no dispute that MVP did not possess the necessary individual state certification. *Id.* at 648, 652. We noted in conclusion that "an individual permit [under CWA Section 404] will likely be necessary." *Id.* at 655.

In September 2020, after the Department and the Army Corps implemented changes to the NWP 12 conditions, the Army Corps reissued its verifications of MVP's authorization to construct stream crossings under NWP 12. *See Sierra Club v. United States Army Corps of Eng'rs*, 981 F.3d 251, 260 (4th Cir. 2020) ("*Sierra Club IP*"). This Court stayed MVP's latest NWP 12 verifications on November 9, 2020. After the stay, MVP began to consider widespread use of trenchless crossing methods, which have proven to be the least destructive approach for waterbody crossings. MVP asked FERC to amend its certificate of public convenience and necessity to allow it to use trenchless technologies, such as conventional boring, to bore under every waterbody along the first seventy-seven miles of its route, citing our November 9, 2020 stay order as the reason for its proposal.

Before FERC acted on MVP's November 2020 application, we issued *Sierra Club II* in December 2020 outlining the reasons underlying our decision to stay MVP's NWP 12 verifications. Thereafter, MVP altered its plans once more, requesting an individual CWA Section 404 permit from the Army Corps to construct open-cut crossings at most of its waterbody crossings, and to submit yet another certificate amendment to FERC. Under MVP's new plan, it asked the Army Corps to revoke the 2020 NWP 12 verifications and it withdrew the November 2020 FERC Application. When MVP submitted its new crossing application to FERC on February 19, 2021, it no longer sought to bore under every waterbody along the first seventy-seven miles of the route. Instead, the February 2021 application proposed to implement trenchless methods for just three of the thirty-eight West Virginia crossings it previously sought to bore under.

3.

Now that MVP seeks an individual permit under CWA Section 404 from the Army Corps, it must receive a certification from West Virginia under Section 401.¹ Although federal law generally preempts environmental regulation of interstate natural gas pipelines by states, it "expressly preserves State authority to regulate pipelines under the Clean Water

¹ Pursuant to its authority under 33 U.S.C. § 1341(a)(1), the Department previously attempted to waive its own requirement that MVP receive an individual state water quality certification as a part of the NWP 12 process. However, in *Sierra Club I*, we rejected the Department's waiver because that action was not taken after public notice and comment. 909 F.3d at 653 (citing 33 U.S.C. § 1341(a)(1) (providing that each state "shall establish procedures for public notice in the case of all applications for certification by it and, to the extent it deems appropriate, procedures for public hearings in connection with specific applications.")). The Department does not contend that it waived any such requirement with respect to the CWA Section 404 permitting process.

Act." Mountain Valley Pipeline, LLC v. N.C. Dep't of Envtl. Quality, 990 F.3d 818, 823 (4th Cir. 2021) (citation omitted). Section 401 of the CWA allows West Virginia to certify, after notice and comment, its "reasonable assurance" that discharges into waters within the state will comply with state water quality standards. 33 U.S.C. § 1341(a)(1). A Section 404 permit may not be granted if a state denies a Section 401 certification, but if a state "fails or refuses to act on a request for certification, within a reasonable period of time (which shall not exceed one year) after receipt of such request, the certification requirements of this subsection shall be waived." *Id*.

The Department administers water quality standards for West Virginia. These water quality standards list protected water uses and criteria to ensure the appropriate level of protection. State narrative water quality criteria prohibit discharges that cause or contribute to sedimentation, solids, and sludge. *See* W. Va. Code R. § 47-2-3.2.

Recognizing the importance of water quality standards to the CWA's scheme, federal law also requires the state's water quality standards to adopt an antidegradation policy. See 40 C.F.R. § 131.12; see also 33 U.S.C. § 1313(d)(4)(B). According to West Virginia's antidegradation policy, state waters are divided into three "tiers" of water quality, each of which is subject to a different standard of review and protections modeled after the Environmental Protection Agency's ("EPA") federal antidegradation provisions. Those tiers of review (1) prohibit lowering of water quality in waters already "impaired," (2) prevent "significant degradation" in most waters absent a detailed socio-economic analysis, and (3) allow only a "temporary lowering of water quality" in the most protected waters. W. Va. Code R. §§ 60-5-4 to -6. For permanent fills that displace portions of

waters and their corresponding "uses" altogether, the Department ensures compliance with water quality standards by relying on the Army Corps' application of the CWA Section 404 permit program to prevent significant degradation to the whole ecosystem. A component of that program includes mitigation to compensate for the unavoidable losses. *See* W. Va. Code R. § 47-5A-3.2.

Additionally, West Virginia subjects the oil and gas industry to its own state general permit program. The Oil & Gas Construction General Permit ("O&G CGP") allows instream construction activities so long as they meet water quality standards with the proper installation of the minimum standards set forth therein. It requires permittees to submit for review and approval detailed stormwater pollution prevention plans ("SWPPP"). The SWPPP requires permittees to describe site-specific best management practices ("BMPs"), including structural controls and vegetative stabilization, designed to "divert flows around exposed soils, store flows or otherwise limit runoff from exposed areas and eliminate sediment-laden runoff from the site." J.A. 1933–36. Permittees must also detail inspection and maintenance procedures "to identify and address conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters." J.A. 1932. In order to be effective, the SWPPP should be revised as necessary to include additional or modified controls to correct problems.

C.

1.

MVP applied to the Department for an individual Section 401 certification. That application reflected MVP's new position that trenchless crossings are impracticable for most

of the waterbody crossings that it had previously certified to FERC were "well-suited" for conventional bores. J.A. 1470–74. In defense of the change, MVP explained that "construction practices have continued to evolve, various costs have changed, and [MVP] has gained valuable experience with crossings in the terrain crossed by the Project." J.A. 1384.

Before acting on MVP's application, the Department solicited public comments. Opponents to the pipeline project took issue with what they viewed as MVP's conflicting positions about the feasibility of trenchless crossings. They claimed that MVP's flip-flopping undermined the credibility of its assertions that its proposed open-cut crossings are the least environmentally damaging practicable alternative.

They also raised concerns about violations of multiple water quality standards that MVP committed while its NWP 12 verifications were in effect. During that time, MVP completed open-cut crossings on twenty-three streams and nine wetlands in West Virginia—activities subject to West Virginia's oil and gas permit programs. Department inspectors found numerous water quality standards violations at the sites where MVP conducted work. Among the infractions were repeated failures to properly implement controls to prevent sediment-laden water from leaving eleven different worksites. MVP's construction activities allowed deposits of in-stream sedimentation in addition to other water quality violations. Based on those violations, the Department brought two administrative enforcement actions against MVP, resulting in fines. Its opponents argued that MVP's history of water quality standards violations precluded the Department from finding that MVP will not violate water quality standards going forward.

Despite public concerns, the Department issued a Section 401 certification to MVP on December 30, 2021. In short, the Department determined that there "is reasonable assurance that [MVP's] activity will be conducted in a manner which does not violate [West Virginia's] water quality standards" and that "the discharges from the Proposed Project will comply with [those] water quality standards." J.A. 2. It observed that MVP planned to combine "the O&G CGP, enhanced erosion and sediment controls, frequent [Department] inspections, and the Mitigation Framework," a six-part plan to "restore temporary impact sites, react to unplanned impacts, and . . . obtain supplemental mitigation credits." J.A. 9–10. In theory, these controls would ensure compliance "with water quality standards, prevent any significant degradation of regulated waters, restore aquatic habitat in wetlands and streams, and provide additional compensatory mitigation for the temporary impacts." J.A. 10.

Detailing the Department's rationale, the certification first described MVP's sediment-control efforts. The Department looked to EPA for guidance in regulating stormwater and fill material, drawing from EPA's CWA Section 402 Construction General Permit (which applies to stormwater runoff from certain upland construction projects). Under that permit, EPA "relies on the use of [BMPs] to protect water quality." J.A. 5. EPA recommends instituting certain enhanced BMPs, including faster stabilization and more frequent inspections, to meet federal antidegradation requirements. The Department concluded that West Virginia's O&G CGP similarly "relies on engineering controls and adaptive management processes to control sediment and its constituents." *Id.* The

Department found that "application of these programs to MVP's [covered] activities will prevent any significant degradation of water quality or water uses." *Id.*

The Department then predicted how it expected MVP would manage permanent and temporary impacts on the environment. As to permanent effects, "engineering controls required by [the Department's] O&G CGP" and "construction plans" MVP submitted to the Army Corps would "protect water quality from sediment." *Id.* The Department also relied on an assumption that MVP would purchase "mitigation bank credits and in-lieu fee credits" to restore affected water habitats. *Id.* For temporary effects, the Department noted that MVP's construction activities were "subject to extensive engineering and process controls described in the plans approved as part of MVP's O&G CGP registration, its Section 404 application to [the Army Corps], its request for State 401 water quality certification, and a supplemental monitoring, restoration, and mitigation plan." J.A. 7.

In response to public comments, the Department described MVP's efforts to conduct "a detailed location-specific review of practicable alternatives to open cut crossings" and its discussions with MVP about alternatives to those methods. J.A. 55. The Department affirmed its belief that these methods were sound given its assumption that MVP will use BMPs, O&G CGP, and SWPPP controls—obviating the need to conduct additional site-specific antidegradation reviews. While the Department considered "MVP's past violations of the O&G CGP," it did "not agree that . . . [those violations] demonstrate that discharges from the Project will not comply with water quality standards." J.A. 69. Instead, because it viewed the violations as relatively infrequent, the resulting

environmental harm as minimal, and MVP's curative responses as diligent, the Department gave MVP's violation history little weight in its decision.

Ultimately, the Department imposed thirty-one conditions on the certification. The Department included these conditions to protect aquatic life and resources, reduce turbidity, avoid unauthorized discharges, preserve stream stability, ensure proper monitoring, and mitigate other harms. Absent from the list of conditions is a requirement that MVP comply with the O&G CGP and SWPPP.

Petitioners appealed the Department's grant of the certification.

II.

Before we assess Petitioners' claims, we must address the Department's contention that we lack jurisdiction to review the certification. It posits that the certification was not final when Petitioners filed this action because it was subject to an administrative appeals process. Consequently, under the Department's view, our jurisdiction to evaluate its merits has not yet vested. We disagree.

This Court possesses exclusive jurisdiction to review state administrative agency grants of water quality certifications under the CWA Section 401. *See* 15 U.S.C. § 717r(d)(1). But our jurisdiction attaches only to final agency decisions. "As a general matter, two conditions must be satisfied for agency action to be final: First, the action must mark the 'consummation' of the agency's decisionmaking process," meaning that "it must not be of a merely tentative or interlocutory nature. And second, the action must be one by which rights or obligations have been determined, or from which 'legal consequences

will flow." *Bennett v. Spear*, 520 U.S. 154, 178 (1997) (cleaned up).² While an agency appeals process may render an agency decision not final, the "mere possibility that an agency might reconsider [its action] . . . does not suffice to make an otherwise final agency action nonfinal." *Sackett v. EPA*, 566 U.S. 120, 127 (2012); *see also* 5 U.S.C. § 704 (providing that agency action is final unless the agency requires an appeal, during which time the agency action is inoperative).

West Virginia's regulations allow directly affected persons to "request a hearing within 15 days after notification of the certification decision." W. Va. Code. R. § 47-5A-7.1.a. Petitioners appealed the decision to this Court prior to the end of the fifteen-day notice period. That much is not in dispute. The Department maintains that Petitioners leapfrogged West Virginia's administrative appeals process by filing this appeal before requesting the hearing provided by West Virginia law or letting the period to do so lapse.

But the Department's certification was not interlocutory in nature because West Virginia's regulations do not provide a meaningful administrative appeals process. For example, the Department's Secretary is under no obligation to grant a requested hearing. *Id.* § 47-5A-7.1.c ("The Secretary shall decide whether to hold such hearing."). Nor does

² Although *Bennett* decided the issue of finality as contemplated by the Administrative Procedure Act ("APA"), the Third Circuit has "appl[ied] a federal finality standard to determine whether Congress has made the results of [a state § 401] process reviewable," seeing "no reason why finality under the [NGA] should be evaluated any differently" than under the APA. *Del. Riverkeeper Network v. Sec'y, Pa. Dep't of Envtl. Prot.*, 903 F.3d 65, 72 & n.2 (3d Cir. 2018). As no party questions the Third Circuit's reasoning, we find it persuasive.

the Secretary have the duty or explicit authority to stay the certification pending that hearing.

West Virginia's process is different from the agency review regulations at issue in *Berkshire Environmental Action Team, Inc. v. Tennessee Gas Pipeline Company, LLC*, which the Department cites to support its view. 851 F.3d 105 (1st Cir. 2017). In *Berkshire*, the First Circuit concluded that a Massachusetts Department of Environmental Protection Section 401 certification letter was not final before its effective date. *Id.* at 112. The court reasoned that the "substance of the Massachusetts regulatory regime" showed that the certification was not the final agency decision. *Id.* Most persuasive to the court was an administrative appeals process that preserved a challenger's right to present evidence and argue against the certification to the agency head, who would not defer to the certification when evaluating the challenger's claims. *Id.*

Critically, the Massachusetts scheme in *Berkshire* guaranteed "the parties' rights to such proceedings when sought," and "the agency's review of the proposed project continue[d] more or less as though no decision has been rendered at all." *Id.* By comparison, West Virginia's regulations leave the decision to hold a hearing to the Secretary of the Department's discretion. When there is no assurance that the Department's decision will be reviewed, it "for all practical purposes 'has ruled definitively" on the matter. *United States Army Corps of Eng'rs v. Hawkes Co., Inc.*, 578 U.S. 590, 599 (2016) (quoting *Sackett*, 566 U.S. at 131). At best, West Virginia regulations provide for the "mere possibility" that the Department could reconsider its Section 401

certification. But a mere possibility will not strip the Court of its jurisdiction. *Sackett*, 566 U.S. at 127.

Petitioners did not need to sit on their hands for fifteen days, during which time the Secretary *might* have revisited the certification, before petitioning for our review. The Department's certification was final on the day it issued. ³ Accordingly, we will address Petitioners' arguments.

III.

A.

Moving to the merits, we review a state agency's CWA Section 401 certification decision under the APA's arbitrary and capricious standard. *See Mountain Valley Pipeline, LLC*, 990 F.3d at 826 (citing *Appalachian Voices v. State Water Control Bd.*, 912 F.3d 746, 753 (4th Cir. 2019)). Under that standard, a court will "set aside agency action, findings,

³ That conclusion is supported by the drafting history of West Virginia's regulations. The 1999 regulation provided that persons with interests "directly affected by the [Department's] proposed certification or certification denial . . . may request a hearing within fifteen (15) days after notification of such proposed certification decision." W. Va. Code R. § 47-5A8.1.a (1999) (emphasis added). That language suggests that before the fifteen-day notice period, the certification letter was not the Department's final decision. In 2002, the regulations were amended to eliminate references to a "proposed certification." See W. Va. Code R. § 47-5A-7.1.a (2002) ("[Certain persons] directly affected by the Department's certification or certification denial, may request a hearing within fifteen (15) days after notification of the certification decision." (emphasis added)). The elimination of "proposed" indicates that Department certification letters are final upon issuance. A change in regulatory language bears legal consequence particularly in this instance, where an operative word has been removed. See Banker v. Banker, 474 S.E.2d 465, 477 (W. Va. 1996) ("Just as courts are not to eliminate through judicial interpretation words that were purposely included, we are obliged not to add to statutes something the Legislature purposely omitted.").

and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). Put differently, an agency violates the APA if it "relie[s] on factors outside those Congress intended it to consider; failed to consider an important part of the problem; offered an explanation contradicted by the evidence before the agency; or 'is so implausible that it could not be ascribed to a difference in view on the product of agency expertise." *Mountain Valley Pipeline, LLC*, 990 F.3d at 826 (quoting *Defs. of Wildlife v. Dep't of the Interior*, 931 F.3d 339, 345 (4th Cir. 2019)).

While our "[r]eview under this standard is highly deferential," *Defs. of Wildlife*, 931 F.3d at 345, we will not "rubber stamp" an agency's decision, *N.C. Wildlife Fed'n v. N.C. Dep't of Transp.*, 677 F.3d 596, 601 (4th Cir. 2012); *see also United States Dep't of Interior*, 899 F.3d at 270 ("Nevertheless, we must conduct a 'searching and careful' review to determine whether the agency's decision 'was based on a consideration of the relevant factors and whether there has been a clear error of judgment.""). In short, we "must ensure that the agency has examined the relevant data and articulated a satisfactory explanation for its action." *Defs. of Wildlife*, 931 F.3d at 345 (internal quotations omitted).

В.

Petitioners contend that the Department's Section 401 certification of MVP's stream crossing activity should be vacated for five reasons: (1) the Department's decision ignored MVP's history of violating state water regulations; (2) it failed to make compliance with the O&G CGP and SWPPP a condition of certification; (3) MVP's plans do not comport with West Virginia's BMPs, contrary to the Department's conclusions; (4) the Department misconstrued EPA upland construction standards and misapplied those standards in its

evaluation of MVP's in-stream construction plans; and (5) the Department did not conduct location-specific antidegradation review as required by West Virginia regulations. We evaluate each claim independently.

1.

Turning to Petitioners' first argument, we find the Department's reasonable assurance determination to be arbitrary and capricious because it failed to provide a reasoned explanation as to why it believes MVP's past permit violations will not continue to occur going forward.

The Department's procedures recognize that an applicant's "historic noncompliance with its permit" constitutes a "circumstance[] warrant[ing] . . . review." W. Va. Code R. § 60-5-5.6.a.2. In the face of such a history, it is arbitrary and capricious for an agency to predict compliance without a rational explanation. *Animal Legal Def. Fund v. Perdue*, 872 F.3d 602, 620 (D.C. Cir. 2017). An agency must "examine[] the relevant data and articulate[] a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *Friends of Buckingham v. State Air Pollution Control Bd.*, 947 F.3d 68, 83 (4th Cir. 2020). Record evidence contrary to an agency's conclusion requires "further elaboration" and must be "grapple[d] with." *United States Dep't of Interior*, 899 F.3d at 293.

In its certification, Department assumed MVP's compliance with its O&G CGP and SWPPP will ensure compliance with water quality standards going forward. Yet the record is replete with evidence contrary to the Department's conclusion. Not only had MVP violated the O&G CGP 139 times over the course of two years, but Department inspectors

found that MVP committed at least forty-six narrative water quality standards violations and assessed civil penalties against MVP for permit and water quality violations totaling \$569,678.

Although the Department acknowledged MVP's violation history, it failed to dispel the tension between MVP's checkered past and its confidence in MVP's future compliance. In response to public comments regarding MVP's history, the Department stated that given the project's size and nature and the fact that the Department's "inspectors monitor the sites frequently and immediately respond to citizen complaints," it "does not regard the number of violations its inspectors issued as surprising." J.A. 69. In other words, it appears that the Department simultaneously expects MVP to *both* violate the O&G CGP because of the size and nature of the project *and* comply with the permit's requirements moving forward to ensure the applicable water quality standards and antidegradation requirements are met. The Department cannot have it both ways and the blatant contradiction in its reasoning leaves its explanation wanting.

The certification itself does nothing to resolve the inconsistency. In its limited consideration of MVP's past water quality standards violations, the Department dismissed the violations as "minor" because "none alleged any significant adverse impacts to the aquatic ecosystems." J.A. 9, 69. But the Department was required to declare its reasonable assurance that MVP's stream-crossing construction would "be conducted in a manner which [would] not violate applicable water quality standards." 40 C.F.R. § 121.2(a)(3) (2019); see also 40 C.F.R. § 121.7(c) (2020) (requiring that a certifying authority "determine[] that a the discharge from the proposed project will comply with water quality

requirements" to grant Section 401 certification).⁴ Given West Virginia's narrative water quality standards, that means the Department needed to be reasonably assured *no* violation of *any* applicable water standards would occur, not just assured no violation that caused "significant adverse aquatic impacts" would occur.

"[T]he CWA requires strict compliance with water quality standards," and water quality standards "are legally required to be met [at] all times." National Pollutant Discharge Elimination System Permit Regulations, 49 Fed. Reg. 37,998, 38,038 (Sept. 26, 1984) (to be codified at 40 C.F.R. §§ 122.41(n), 122.60(h)). And we have previously recognized that "the CWA creates a regime of strict liability for violations of its standards." *Am. Canoe Ass'n v. Murphy Farms*, 412 F.3d 536, 540 (4th Cir. 2005).

Moreover, West Virginia's narrative water quality criteria prohibit discharges that cause or contribute to, inter alia, the following:

- 3.2.a. Distinctly visible floating or settleable solids, suspended solids, scum, foam or oily slicks; . . .
- 3.2.b. Deposits or sludge banks on the bottom; . . .
- 3.2.e. Materials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life; . . .
- 3.2.i. Any other condition . . . which adversely alters the integrity of the waters of the State, including wetlands; no significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed.

⁴ Before 2020, EPA required a state agency to find "reasonable assurance that the activity [would] be conducted in a manner which [would] not violate applicable water quality standards." 40 C.F.R. § 121.2(a)(3) (2019). Although a California district court vacated the 2020 certification regulations, the Supreme Court stayed the vacatur pending appeal, *see Louisiana v. Am. Rivers*, 142 S. Ct. 1347 (2022). The Department applied both the 2019 and the 2020 standards in its certification decision. J.A. 2.

W. Va. Code R. §§ 47-2-3.2.a–b, 47-2-3.2.e, 47-2-3.2.i. These standards do not include any exceptions for violations that do not cause "significant adverse impacts to the aquatic ecosystem." J.A. 9.

The Department argues that the final clause in section 3.2.i imports a "significant adverse impact" element on the rest of the independent criteria in section 3.2.a through However, that interpretation is logically inconsistent with the Department's insistence that none of MVP's past violations alleged "any significant adverse aquatic impacts." J.A. 9. The Department previously cited MVP for numerous violations of narrative criteria—at least forty-six times—that the Department now claims can only be violated if there are significant adverse effects on aquatic ecosystems. If there is a "significant adverse impacts" element in section 3.2.a or section 3.2.b, then the Department's claim that there were no significant adverse aquatic impacts runs directly counter to its previous findings of water quality standards violations. If there is no "significant adverse impacts" element in section 3.2.a or section 3.2.b, then the Department applied the wrong legal standard in its reasonable assurance finding by focusing on the severity of MVP's water quality standards violations rather than their existence. Again, the Department cannot have it both ways.

Nor does the certification's discussion of MVP's noncompliance history identify any additional steps MVP certified it would take to ensure there would be no future violations of water quality standards. And, to the extent the Department claims to rely on the existence of modified controls, such reliance is unfounded. The Department suggests in its briefing that "more frequent inspections," "enhanced practices," and MVP's

"Mitigation Framework" are among the methods MVP "proposed to head off similar [violations] in the future." Department's Resp. Br. at 29.

First, although it is unclear whether the Department means more frequent inspections by its enforcement staff or self-inspection by MVP, neither entity has actually committed to conducting more frequent inspections. In 2017, the Department vaguely committed to conducting inspections "as often as time and resources allow." J.A. 1684. The 2021 certification does not mandate more Department inspections, nor does it provide for additional inspection resources, thereby leaving the Department's inspection frequency unchanged from the equivocal commitment in 2017. Likewise, MVP's 2021 application shows that MVP's proposed self-inspections are no more frequent than they were in 2017. Compare J.A. 81 ("[MVP] will employ enhanced ["BMPs"] for the entire project by increasing the inspection frequency . . . to within 24 hours after any storm event greater than 0.25 inches per 24-hour period. These inspections are in addition to the regular site inspections that will occur at least once every 7 calendar days for disturbed areas and at least once every 14 days for restored areas."), with W. Va. Dep't of Env't Prot., Responsiveness Summary, WV Permit No. WV0116815, Registration Application No. WVR310667, Mountain Valley Pipeline, LLC, at 77 (Nov. 1, 2017) ("MVP has also indicated in the SWPPP that the inspection frequency for the entire project will be seven calendar days and within 24 hours after any storm event of greater than 0.25 inches of rain per 24-hour period."). Indeed, MVP actually proposed *reducing* self-inspection frequency from once a week to "every 14 days for restored areas." J.A. 81.

Second, as for "enhanced practices," MVP's 2021 proposals remained unchanged from its 2016 Erosion and Sediment Control Plan—part of MVP's SWPPP. The "enhanced practices" the Department cites are the very practices MVP was already bound to perform pursuant to its SWPPP and that previously led to repeated water quality violations.⁵

Third, MVP argues that it "bolstered the enhanced erosion and sediment controls and inspections already mandated by the O&G CGP with a state-of-the-art 'Mitigation Framework.'" MVP's Resp. Br. at 2. However, the Mitigation Framework does not bolster anything. Rather, it merely re-packages the measures already in place. Indeed, the declared purpose of the Mitigation Framework "is to consolidate the Project's proposed stream and wetland monitoring, restoration, and mitigation measures into a comprehensive framework" because "those measures were dispersed among various existing regulatory documents and actions proposed in the application and may not have been readily apparent

⁵ The Department describes "enhanced practices" as MVP's commitments to do the following: (1) use "[e]nhanced erosion and sediment controls, such as reinforced filtration devices" at crossings at or near Tier 3 or trout streams and "in watersheds with TMDLs"; (2) initiate "[s]tabilization measures . . . as soon as practicable in areas where construction has temporarily or permanently ceased, but in no case more than 7 days after construction has permanently ceased or will not resume within 21 days"; (3) accomplish "seeding and mulching . . . within 4 days in areas that have reached final grade and areas that will not be disturbed for more than 14 days" at stream crossings at or near Tier 3 or trout streams; and (4) immediately install "permanent stream bank stabilization . . . following completion of pipeline installation at each stream crossing." J.A. 82-83. However, MVP's 2016 Erosion and Sediment Control plan already required MVP to perform every one of these practices. See id. at 1949 (requiring reinforced filtration devices at Tier 3 and trout streams); Id. at 1954 (requiring stabilization within 7 days after construction completed or Total paused for more than 21 days); Id. at 1955 (requiring seeding and mulching within 4 days of final grade at Tier 3 and trout streams); *Id.* at 1958 (committing to permanent stream bank stabilization immediately after pipeline installation at each stream crossing); Id. at 2122-23 (2017) amendment requiring "advanced erosion and sediment engineering controls" in TMDL watersheds).

Framework is the "Supplemental Credit Determination Methodology," which "provide[s] voluntary supplemental compensatory mitigation." *Id.* at 137. But "compensatory mitigation" does not assure compliance with water quality standards violations in the first instance, *see* W. Va. Code R. § 47-5A-2, and Section 401 was designed to prevent violations of federal law in the first instance, not mitigate the effects after they occur.

At best, the Mitigation Framework modifies MVP's obligations *after* trenches have been excavated and the pipeline has been put in, but it does not address the "stream and wetland construction practices" that increase "suspended sediment concentration and sedimentation" and underlie MVP's past water quality standards violations. J.A. 22–24, 210. Accordingly, the Mitigation Framework alone cannot justify the Department discounting MVP's past sediment-related violations.

None of the Department's explanations either in this litigation, or—more importantly—in the certification itself reflect its *reasonable* assurance that MVP's past violations will not be an impediment to its compliance with state water quality standards. This is not to say that previous violations of water quality standards create a per se bar against certification. But because the fact of MVP's compliance runs counter to the actual record evidence, the Department has a duty to give a reasoned explanation for its continued reliance on MVP's compliance with the O&G CGP in the face of MVP's violation history. The Department has failed to do so, and that failure was arbitrary and capricious.

We also agree with Petitioners that the Department's choice to exclude compliance with the O&G CGP and SWPPP from its special conditions for certification rendered its reasonable assurance determination arbitrary and capricious.

The Department repeatedly indicated that its reasonable assurance determination relied on MVP's observance of the O&G CGP and SWPPP "to control potential sediment discharges from the Project to ensure appropriate protection of aquatic resources, water quality and prevent degradation of State waters." J.A. 74. And for good reason. West Virginia's state level pipeline construction permits provide a battery of environmental safeguards. The O&G CGP the Department issued to MVP aims "to control discharges of sediment and other pollutants that may be entrained with sediment so that discharges from the Project comply with West Virginia's . . . water quality criteria." J.A. 56. The SWPPP provides additional protection "to ensure[that] 'stormwater discharges [are] controlled as necessary to meet applicable water quality standards." J.A. 56.

States may certify a project "with or without imposing any additional conditions." State Water Control Bd., 898 F.3d at 388. But a state must "set forth any effluent limitations and other limitations, and monitoring requirements necessary to assure that any applicant for a Federal license or permit will comply with . . . any appropriate requirement of State law." 33 U.S.C. § 1341(d). The CWA instructs that any necessary limitations and requirements identified by a state agency "become a condition on" a Section 401 certification. Id.

The Department understood its obligation to impose those monitoring requirements and limitations which it felt were necessary to the protection of West Virginia waters. It incorporated thirty-one in its certification. Inexplicably, it failed to include compliance with the O&G CGP and SWPPP among the certification conditions, leaving out of the federal permit a central justification for its reasonable assurance determination. Lacking an adequate explanation, the Department's conclusion that the pipeline project will not violate water quality standards appears wholly unreasonable. *See Mountain Valley Pipeline, LLC*, 990 F.3d at 833 (remanding because the agency "did not offer [] any explanation to reconcile" an obvious internal inconsistency).

Neither MVP's nor the Department's post hoc explanations cure this inconsistency. MVP claims that Special Condition 26, which requires it to implement the Mitigation Framework, incorporates by reference the O&G CGP and SWPPP into the certification. The Mitigation Framework is a "six-part plan to assess pre-construction conditions, restore temporary impact sites, react to any unplanned impacts, and to obtain supplemental migration credits." J.A. at 9. The Mitigation Framework, however, describes itself as a "supplement for temporary impacts associated with" the pipeline and "does not replace the mitigation that is required for permanent fills." J.A. 128. What's more, although the Mitigation Framework contemplates the assessment of pre-construction baseline conditions, it primarily addresses post-construction restoration. In other words, the Mitigation Framework is inadequate to ensure compliance with water quality standards during trenching and blasting through streams and wetlands during construction.

The Department's position fares no better. It argues that including a condition requiring compliance with the O&G CGP and SWPPP would be redundant because it maintains independent authority to enforce state regulations. That argument misconstrues the states' function in the federal water quality regulatory framework. While states play an "essential role" in "protecting their own waters," in the context of natural gas pipelines, that role is largely constrained to the permissive certification process established by the CWA's implementing regulations. *Mountain Valley Pipeline, LLC*, 990 F.3d at 823. Beyond an express exemption, federal law otherwise preempts most state environmental regulation of certain interstate natural gas pipeline determinations. *See AES Sparrows Point LNG, LLC v. Smith*, 527 F.3d 120, 125–26 (4th Cir. 2008); *see also* 15 U.S.C. § 717b(d). Thus, the Department's certification authority represents West Virginia's primary opportunity to enshrine indispensable state permitting protocol into MVP's federal obligations.

Given the Department's clear reliance on the O&G CGP and SWPPP to make its reasonable assurance determination, compliance with those permits should have been a condition of the certification. That omission was arbitrary and capricious because no evident justification supports it.

3.

We disagree, however, with Petitioners' contention that the Department erroneously concluded that MVP's in-stream construction plans comply with West Virginia's BMP

Manual.⁶ Petitioners argue that MVP's plans fail to comply with two important aspects of the BMP Manual: (1) MVP's stream crossing methods diverge from the Manual's preference for trenchless crossings without credibly establishing the impracticability of such crossings, and (2) MVP intends to trench through streams with drainage areas greater than one square-mile.

West Virginia's BMP Manual provides "guidance for developing sediment control plans" for construction activities like MVP's pipeline project. J.A. 2147. Although the BMP Manual expresses a preference for trenchless crossing methods, such as drilling below the surface of the streambed, it acknowledges that alternatives may be appropriate. When in-stream activity is "unavoidable" the Manual suggests several "dry ditch" methods "that completely isolate the work area from the stream flow." J.A. 2176. Still, it recognizes that there should be a "give and take" for larger streams "where isolation techniques become difficult or impossible to install" and when in-stream construction "will take an extended period of time." *Id.* In those instances, the Manual emphasizes the use of "substantial in-stream controls" and "stream diversion." *Id.*

MVP changed positions in its applications with the Army Corps regarding the feasibility of trenchless methods. MVP explained in its Army Corps application that it

⁶ The Department argues that Petitioners waived this argument by failing to raise it during notice and comment. However, arguments may be considered, even if not raised during the notice and comment period, given the Department's duty to "fully consider the Pipeline's potential [water quality effects] before approving it." *Wild Virginia v. United States Forest Serv.*, 24 F.4th 915, 928 (4th Cir. 2022). In any event, Petitioners' basic argument at the heart of this issue—that MVP's stream crossing plans violate West Virginia's water quality standards—was raised during notice and comment.

revised its crossing methods due to evolving construction practices and submitted a stream-by-stream alternatives analysis that explained its crossing methods in its Section 401 application. The Department noted during notice and comment that it engaged in discussions with MVP and the Army Corps about MVP's stream-crossing methodology. J.A. 55. Given MVP's explanation, MVP's site-specific review of practicable alternatives to open cut crossings pursuant to its Army Corps application, and MVP's commitment to using dry-ditch techniques, the Department was justified in its confidence that the project conformed with the BMP Manual.

Following similar reasoning, we disagree with Petitioners that the Department "entirely failed to evaluate the drainage areas of MVP's crossings." Opening Br. at 45–46. In its discussion of best practices for in-stream construction, the BMP Manual provides that MVP's drainage areas "should be no greater than one square mile (640 acres)." J.A. 2177. While the Department did not mention MVP's drainage areas specifically, its discussion of MVP's stream-crossing plans necessarily included every aspect of MVP's in-stream construction.

Petitioners concede that an agency may "base its analysis 'entirely upon information supplied by the applicant." Opening Br. at 44 (quoting *Crutchfield*, 325 F.3d at 223). They argue, however, that the Department had an affirmative duty to verify whether the crossing methods that MVP supplied complied with the BMPs. *See Friends of the Earth v. Hintz*, 800 F.2d 822, 835 (9th Cir. 1986). Yet *Hintz* involved a federal regulation that conferred an independent duty on the Army Corps to verify the information supplied. *Id.* West Virginia Code § 47-5A-4.2, on which Petitioners rely, speaks only to requirements

of an *application* for a Section 401 certification; it does not impose any affirmative duties on the Department. Therefore, the Department was entitled to consider MVP's alternatives analysis, its application, and ongoing dialogue with the Army Corps in its determination that MVP's crossing methods adhered to the BMP Manual.

4.

Petitioners also argue that the Department erroneously relied on standards EPA has approved for *upland* construction in its CGP to support its reasonable assurance determination that MVP's *in-stream* activities would comply with state water quality regulations. We agree.

The Department justified its decision in part because the "controls" required by West Virginia's stormwater permits are "nearly identical" to EPA's standards for upland construction. J.A. 5. It appears that the Department relied on EPA's CGP in part because it believed that the document applied to in-stream construction. In response to public comment, the Department included in a footnote its view that "EPA's CGP and the agency's determination of the effectiveness of its requirements extends to both upland *and water crossing activities*." J.A. 65 n.5 (emphasis added).

A state agency may draw confidence "from the EPA's judgment regarding the effectiveness of [its] protections in preventing construction from negatively impacting water quality." *State Water Control Bd.*, 898 F.3d at 404. But the Department's reliance on a demonstrably false impression of that judgment seriously undermines that confidence. *See Friends of Buckingham*, 947 F.3d at 92–93. Its notice and comment response about EPA's CGP, although just a footnote in the record, betrayed the Department's ignorance about the

meaning of that guidance. Thus, the Department's conclusion that EPA's CGP applied to the in-stream context required a more thoroughly reasoned analysis to place beyond doubt that it had made a rational connection between EPA's CGP for upland construction and the certification of MVP's in-stream construction. *See United States Dep't of Interior*, 899 F.3d at 293 (finding an agency decision devoid of reasonable reflection because it was "not accompanied by any explanation, let alone a satisfactory one").

5.

Finally, we agree with Petitioners' claim that the Department's failure to conduct location-specific antidegradation review before it made its reasonable assurance determination was arbitrary and capricious.

Under federal law, state water quality standards must include an antidegradation policy, which is "a policy requiring that state standards be sufficient to maintain existing beneficial uses of navigable waters, preventing their further degradation." *PUD No. 1 of Jefferson Cnty v. Wash. Dept. of Ecology*, 511 U.S. 700, 704 (1994); *see also* 33 U.S.C. § 1313(d)(4)(B). In West Virginia, antidegradation review of activities requiring a Section 401 certification falls under the Department's discretion. W. Va. Code R. § 60-5-3.8. It is required only when "[t]he regulated activity is a new or expanded activity that would significantly degrade water quality." *Id.* § 60-5-5.6.a.1. Even then, "[t]he level of review required will depend on the existing uses of the water segment, the nature of the activity, and the extent to which existing water quality would be degraded." *Id.* § 60-5-1.5a.

West Virginia's water quality regulations prohibit any activity "that would degrade (result in a lowering of water quality)" its most protected waters in tier 3, except when the activity

will cause only "temporary lowering of quality." W. Va. Code R. § 60-5-6.1. When the state does not consider temporary sources of pollution a violation of its water quality regulations in "[e]ven the most protected sources of water," it is not necessary to conduct a separate antidegradation review before issuing a Section 401 certification. *Appalachian Voices*, 912 F.3d at 757. Because "a temporary lowering of water quality is allowed in the highest quality waters of the state," the Department interpreted the "[a]ntidegredation policy as also allowing short-term, temporary lowering of water quality in Tier 1 and 2 waters." J.A. 61.

Normally, if we can "discern a rational connection between [the Department's] decision-making process and its ultimate decision, we will let its decision stand." *Crutchfield*, 325 F.3d at 218. But the reason the Department decided to forgo location-specific antidegradation review was that it deemed the O&G CGP, SWPPP, and certification requirements "sufficient to prevent a lowering of water quality, rendering individualized Tier 2 and Tier 3 review unnecessary." J.A. 63. In other words, it relied upon MVP's obedience to permitting programs it left out of its conditions on certification instead of antidegradation review.

Without substantive assurance that MVP will comply with those policies, the Department's sanguine outlook is troubling—especially given MVP's prior violations. Public comments also put the Department on notice of sedimentation downstream from an MVP open-cut, dry-ditch crossing in Virginia "nearly 40 months after the completion of the crossing." J.A. 1190–92. Not only that, but EPA specifically warned the Army Corps that MVP's pipeline project merited some form of antidegradation review. *See* J.A. 1065.

If MVP follows the protocols set out in, *inter alia*, the O&G CGP and SWPPP, then it would be reasonable to conclude that the project threatens to do at most temporary damage to the quality of West Virginia's waters. But the O&G CGP and SWPPP retain uncertain efficacy so long as they are not incorporated as conditions to the certification. Thus, the Department's explanation for its decision to forgo location-specific antidegradation review constitutes an arbitrary application of the discretion afforded by West Virginia regulations. *See Mountain Valley Pipeline, LLC*, 990 F.3d at 833 (remanding because the agency "did not offer [] any explanation to reconcile" an obvious internal inconsistency).

IV.

In sum, the Department's reasonable assurance determination suffers from four interrelated failures: It did not (1) sufficiently address MVP's violation history, (2) include conditions requiring compliance with the O&G CGP and SWPPP, (3) provide a reasoned basis for relying on EPA's upland CGP, or (4) articulate an adequate explanation for forgoing location-specific antidegradation review. Considering these oversights, the Department's conclusion that MVP's in-stream construction would be conducted in a manner which will not violate state water standards was arbitrary and capricious.

PETITION FOR REVIEW GRANTED AND CERTIFICATION VACATED