

UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF
WEST VIRGINIA, HUNTINGTON DIVISION

**Coal River Mountain Watch, Appalachian Voices, West Virginia
Highlands Conservancy, and Sierra Club v. Colonel Phillip J. Valenti,
in his official capacity as District Engineer, U.S. Army Corps of
Engineers, Huntington District, William H. Graham, in his official
capacity as Commander and Chief of Engineers, U.S. Army Corps of
Engineers, and United States Army Corps of Engineers**

Coal River Mountain Watch v. Valenti · No. 3:25-0103 · Decided April 21, 2026

OPINION

IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA HUNTINGTON DIVISION COAL RIVER MOUNTAIN WATCH, APPALACHIAN VOICES, WEST VIRGINIA HIGHLANDS CONSERVANCY, and SIERRA CLUB, Plaintiffs, v. CIVIL ACTION NO. 3:25-0103 COLONEL PHILLIP J. VALENTI, in his official capacity as District Engineer, U.S. Army Corps of Engineers, Huntington District, WILLIAM H. GRAHAM, in his official capacity as Commander and Chief of Engineers, U.S. Army Corps of Engineers, and UNITED STATES ARMY CORPS OF ENGINEERS, Defendants.

MEMORANDUM OPINION AND ORDER Plaintiffs¹ challenge the decision by the United States Army Corps of Engineers to issue a Clean Water Act (CWA) § 404 permit to Republic Energy, LLC to discharge fill material into streams for the purpose of conducting surface coal mining at the Turkeyfoot Surface Mine in Raleigh County, West Virginia. Plaintiffs and the Corps have filed cross-motions for summary judgment.

Because the Corps's decision to issue the permit to Republic was arbitrary and capricious, the Court GRANTS Plaintiffs' Motion in part² and DENIES the Corps's Motion. ¹ Plaintiffs are the environmental groups Coal River Mountain Watch, Appalachian Voices, West Virginia Highlands Conservancy, and Sierra Club. ² The Court denies Plaintiffs' Motion as moot with respect to Counts 2 and 3 of their Complaint.

See *infra*, n.7. LEGAL BACKGROUND A. Surface Mining Control and Reclamation Act The Surface Mining Control and Reclamation Act of 1977 (SMCRA) "was enacted to strike a balance between the nation's interests in protecting the environment from the adverse effects of surface coal mining and in assuring the coal supply essential to the nation's energy requirements." *Bragg v. W. Va. Coal Ass'n*, 248 F.3d 275, 288 (4th Cir.

2001); 30 U.S.C. § 1202(f). “This is accomplished through ‘cooperative federalism’ in which responsibility for regulation of surface mining is shared between the states and the United States Secretary of the Interior.” *Ohio Valley Env’t Coal. v. U.S. Army Corps of Eng’rs*, 883 F. Supp. 2d 627, 630 (S.D. W. Va. 2012), *aff’d*, 716 F.3d 119 (4th Cir. 2013) (“OVEC”).

In West Virginia, the West Virginia Department of Environmental Protection (WVDEP) issues SMCRA permits. See 30 C.F.R. § 948.10 (2026). B. Clean Water Act The CWA prohibits discharging any pollutant into the navigable waters of the United States without a permit. See 33 U.S.C. § 1311(a).

The CWA has two primary permitting regimes. The first is the National Pollutant Discharge Elimination System (NPDES). The NPDES governs permits for discharging pollutants into navigable waters. See *id.* § 1342(a). In West Virginia, NPDES permits are issued by the WVDEP. *OVEC*, 883 F. Supp. 2d at 630.

The second permitting regime is § 404 of the CWA, which governs permits allowing the placement of “dredged” or “fill” material into navigable waters. See 33 U.S.C. § 1344(a). Section 404 permits are issued by the U.S. Army Corps of Engineers. See *id.* § 1344(a), (d).

The Corps issues § 404 permits in compliance with certain regulations, commonly referred to as the “404(b) Guidelines.” See *id.* § 1344(b). The regulations are issued by the Environmental Protection Agency (EPA) in consultation with the Corps. See *id.* § 1344(b).

The 404(b) Guidelines prohibit the Corps from issuing a permit if it will cause or contribute to violations of state water quality standards or to the significant degradation of waters of the United States. 40 C.F.R. § 230.10(b)(1), (c).

The Guidelines also prohibit the discharge of dredged or fill material “unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem.” *Id.* § 230.10(d). Section 401 of the CWA requires “any applicant for a Federal license or permit to conduct any activity... which may result in any discharge into the navigable waters, [to] provide... a certification from the State in which the discharge originates... that any such discharge will” not violate any effluent limitation³ established by the state and will not violate state water quality standards.

Id. § 1341(a)(1); *OVEC*, 883 F. Supp. 2d at 630. In West Virginia, the WVDEP issues § 401 certifications. See *OVEC*, 883 F. Supp. 2d at 639. A Corps regulation provides that a state § 401 certification “will be considered conclusive with respect to water quality considerations unless the [EPA] advises of other water quality aspects to be taken into consideration.” 33 C.F.R. § 320.4(d).

FACTUAL BACKGROUND Surface coal mining extracts coal from horizontal seams in mountains by removing the “overburden”—rock, soil, and vegetation—that sits above the seams.

OVEC, 883 F. Supp. 2d at 631. After the overburden is removed, its volume increases by up to 25%. Id. at 632. While the 3 “[E]ffluent limitation’ means any restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters....” 33 U.S.C. § 1362(11). “[P]oint source’ means any discernible, confined and discrete conveyance... from which pollutants are or may be discharged.” Id. § 1362(14). mine operator uses some of the overburden to partially restore the original contour of the mountain, the swelling forces the operator to dispose of excess overburden in nearby valleys, thereby creating “valley fills” that bury mountain streams.

See id. “Ordinarily, a sediment pond is constructed below a valley fill to collect the flow of water as it comes off of a valley fill.” Id. The pond allows particles in the water to settle, which in turn reduces downstream pollution released by the exposed overburden.

The Army Corps must issue a permit authorizing the construction of a valley fill. Id. Also, the WVDEP must issue an NPDES permit for water discharged from the associated sediment pond. Id. Intervenor-Defendant Republic operates the Turkeyfoot Surface Mine in Raleigh County, West Virginia. See ECF 37, Corps’s Resp. 4; A.R. 4765.4 The Mine occupies 1,085.70 acres.

A.R. 284. Republic plans to build four valley fills on the site. See id. 4972–75. The fills are expected to fill 20,356 linear feet (3.86 miles) of streams and 1.79 acres of wetlands. See id. at 4763, 4815. Most of the streams that would be filled with overburden are “intermittent” streams—streams that contain water for only part of the year. See id. at 4759–63.

Three of the streams that would be filled are “perennial” streams—streams that contain water year-round. See id. at 4761, 4763. Another handful are “ephemeral” streams—streams that only flow in response to precipitation. See id. at 4760–62.

In 2023, the Army Corps issued a permit authorizing construction of the fills.⁵ Id. at 4972. Republic has already begun constructing two of the fills. ECF 34, Republic’s Resp. 5–6. 4 Throughout this Memorandum Opinion and Order, the Court will use “A.R.” to refer to specific parts of the administrative record. ⁵ The Corps issued the permit to Republic’s parent company, Alpha Met Resources.

See A.R. 4972; ECF 30, at 3. The Mine is located within the Clear Fork and Upper Marsh Fork watersheds. A.R. 4907. Due to past mining activity, the area includes miles of unclaimed highwalls—rock faces exposed during mining—and hundreds of acres of unreclaimed spoil piles, sediment ponds, and ditches. Id. These unreclaimed features release thousands of tons of sediment into downstream waters each year.

Id. at 4763. Republic plans to reclaim the area while mining. See id. According to the Corps, the reclamation will reduce the annual sediment discharges to about five tons. See id. In addition, the

§ 404 permit requires Republic to establish wetlands and streams to compensate for the loss of waterways filled with overburden. See *id.* at 4732. Republic plans to ensure adequate compensation by, among other things, monitoring the West Virginia Stream Condition Index (WVSCI) scores⁶ for the established streams.

See *id.* at 4741. The Mine's § 404 permit provides that "[a]ll mitigated stream reaches must be constructed and maintained to promote a progressive increase in aquatic habitat and diversity as measured by the... WVSCI... score[] and must be consistent with or better than the baseline...." *Id.* 4741.

In 2021, the WVDEP issued an SMCRA permit for the Turkeyfoot Mine. See *id.* at 4722. The following year, the WVDEP issued an NPDES permit for the Mine. See *id.* at 4229. The NPDES permit requires regular water monitoring and provides that all discharges must comply with applicable effluent limits. See *id.* at 4229–66, 4274–76.

The permit also incorporates an Aquatic Ecosystem Protection Plan (AEPP), which "outlines control measures for maintaining the health of the aquatic ecosystem and complying with the State's narrative water quality standards." *Id.* at 4283; see *id.* at 4294.

In addition to the NPDES permit, the WVDEP issued a CWA § 401 certification for the Mine. See *id.* at 4179, 4182. 6 WVSCI assesses the biological condition of streams based on six quantitative metrics. See Biological Monitoring, West Virginia Department of Environmental Protection, <https://perma.cc/R8PY-EWY8> (last visited March 13, 2026).

After Republic applied for a § 404 permit from the Corps, the EPA sent a letter to the Corps recommending that a permit not be issued until certain "modifications" had "been addressed and incorporated into the project." *Id.* at 2074.

The EPA noted that the Mine's "discharges as proposed [did] not appear consistent with the [404(b)] Guidelines." *Id.* at 2072. It expressed skepticism "that the project ha[d] been designed to prevent potential for significant degradation," noting that "[f]illing streams causes direct loss of aquatic habitat and will likely lead to secondary and cumulative impacts to the biogeochemical and hydrologic conditions of the receiving streams, which for this proposal, could exacerbate already impaired downstream waters." *Id.* at 2072–73.

The EPA made a number of recommendations, including that "the applicant provide a robust analysis of secondary and cumulative impacts, such as... increased concentrations of pollutants, including... ions...." *Id.* at 2076.

The EPA noted that the Corps's discussion of secondary impacts could "be supported by information from other nearby operations utilizing the same mining methods in a similar strata." *Id.* The EPA also recommended that "the applicant... identify the specific [best management

practices] being incorporated and implemented to minimize adverse effects to the aquatic ecosystem to ensure the fill associated with the proposed mine by itself or in combination with past, existing, or anticipated activities in the watershed do not result in significant degradation of aquatic resources within the project area or downstream.” Id.; see also id. at 2075 (“EPA recommends that... the alternatives analysis should incorporate all practicable design and operational measures that could be used to minimize impacts to water quality and to the downstream aquatic ecosystem....”).

Finally, the EPA recommended “that compliance with the AEPP and similar measures in the NPDES or SMCRA permits be included as special conditions or the CWA permit....” Id. Despite the EPA’s letter, the Corps concluded that the EPA “did not advise of other water quality aspects that should be taken into consideration for the proposal.” Id. at 4817.

In deciding to issue the § 404 permit to Republic, the Corps concluded that discharge from the valley fills would not “cause or contribute to violations of any applicable water quality standards[.]” Id. at 4806. But in public comments they submitted to the Corps, Plaintiffs asserted that “[t]he Corps has a long history of inaccurately predicting whether the valley fill permits it issues will cause or contribute to water quality standards violations and significant degradation of aquatic ecosystems.” Id. at 3311–12.

Like the EPA, Plaintiffs warned that the Turkeyfoot Mine’s valley fills could harm aquatic life. Id. at 3290. Plaintiffs’ comments summarized dozens of studies showing that surface mining and valley fills increase “specific conductivity” downstream. See id. at 3262–84. High specific conductivity can indicate the presence of high ion content in water. See EPA, Ionic Strength, <https://perma.cc/X3N4-HK7G> (last updated Mar.

10, 2025). Water with elevated ionic strength can harm aquatic organisms. See id. In 2011, the EPA released a report which concluded that conductivity above three hundred $\mu\text{S}/\text{cm}$ significantly harms aquatic macroinvertebrate life. See A.R. 3434–35. Plaintiffs sued the Army Corps, asking the Court to declare the Corps’s decision to issue the permit arbitrary and capricious.

See ECF 1, at 28–29. Plaintiffs and the Corps both filed motions for summary judgment. See ECF 29; ECF 37. Plaintiffs also filed a Motion for the Admission of Extra-Record Evidence. See ECF 28. The Court granted the Motion in part, admitting a report prepared by Dr. Matthew E. Baker. See ECF 46, at 9.

The Court noted that, in response to public comments on Republic’s permit application, the Corps asserted it relied on “new studies” to “devise best management practices” what would prevent degradation downstream of the Mine. Id. at 7 (quoting A.R. 4870).

The Corps never said what those “new studies” are. Id. Accordingly, the Court admitted the report “for the purposes of illuminating what ‘new studies’ the Corps may have relied on and explaining

what those studies say.” *Id.* at 9. Plaintiffs’ comments discuss studies published between 2008 and 2018. See A.R. 3432– 3451. Altogether, these studies reflect a scientific consensus that valley fills increase downstream conductivity.

See *id.* Dr. Baker’s report confirms that more recently published studies concur in this finding. See ECF 28, Ex. 1, at 9–12. Neither the Corps nor Republic identified studies which reached a different conclusion. **STANDARD OF REVIEW** Under the Administrative Procedure Act, a court may set aside agency actions only if they are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law....” 5 U.S.C. § 706(2)(A). “Under this narrow standard of review, a court is not to substitute its judgment for that of the agency, but instead to assess only whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.” *Dep’t of Homeland Sec. v. Regents of the Univ. of Cal.*, 591 U.S. 1, 16 (2020) (cleaned up).

APA review is “highly deferential, with a presumption in favor of finding the agency action valid.” *Ohio Valley Envt’l Coal. v. Aracoma Coal Company*, 556 F.3d 177, 192 (4th Cir. 2009). **ANALYSIS** Plaintiffs assert that the Corps’s decision to issue the § 404 permit violated the CWA, the Corps’s own regulations, and the National Environmental Policy Act (NEPA).

See ECF 30, Pls.’ Mem. 1. But in the Memorandum of Law accompanying their Motion for Summary Judgment, Plaintiffs press arguments under only the CWA. See *id.* They explain the arguments in favor of their other counts “are not materially different” than their arguments for the CWA claim.⁷ *Id.* They also concede that, “if the Court denies summary judgment” on their CWA claim, “it should also deny summary judgment” on their regulatory and NEPA claims.

Id. Accordingly, the Court will limit its analysis to determining whether the Corps’s decision to issue the permit violated the CWA. Plaintiffs argue that the Corps’s decision to issue the permit was arbitrary and capricious for several reasons.

Before discussing those reasons, however, the Court must evaluate Defendants’ assertion that the Mine’s § 401 certification is conclusive with respect to water-quality considerations. A. The Mine’s § 401 Certification Is Not Conclusive 33 C.F.R. § 320.4(d) directs the Corps to evaluate “[a]pplications for permits for activities which may adversely affect the quality of waters of the United States... for compliance with applicable effluent limitations and water quality standards, during the construction and subsequent operation of the proposed activity.” But since “the Clean Water Act assigns responsibility for control of non-point sources of pollution to the states”: Certification of compliance with applicable effluent limitations and water quality standards required under provisions of section 401 of the Clean Water Act will be considered conclusive with respect to water quality considerations unless the Regional Administrator, Environmental Protection Agency (EPA), advises of other water quality aspects to be taken into consideration.

33 C.F.R. § 320.4(d). Even though the EPA's letter to the Corps raised several concerns about the Turkeyfoot Mine's potential effects on water quality, Defendants maintain that the Mine's § 401 permit is conclusive regarding water-quality considerations. Republic asserts that the EPA never "advised 7 The Corps asserts that Plaintiffs have waived their NEPA claim by not separately discussing it in their Motion.

See Corps's Resp. 17–18. The Court disagrees. But since Plaintiffs have not separately analyzed their regulatory or NEPA claims, the Court will deny their summary-judgment motion as moot with respect to those claims. of other water-quality aspects" within the meaning of § 320.4(d). See Republic's Resp. at 10–12.

The Corps, meanwhile, argues that even if the EPA raised other water-quality concerns, the § 401 permit remains conclusive because Defendants addressed those concerns. See Corps's Resp. at 16. The Court discusses each argument in turn. Republic, citing this Court's decision in OVEC, asserts that the EPA's "advice to the Corps must be exacting before it overrides the Corps'[s] obligation to defer to State § 401 certifications." Republic's Resp. at 10 (internal quotation marks omitted).

Republic says a state permit remains conclusive unless the EPA expressly invokes 33 C.F.R. § 320.4(d) and advises that the proposed project could "lead to an excursion from narrative water quality standards." Id. at 10–11 (cleaned up) (quoting OVEC, 883 F. Supp. 2d at 641). Republic also asserts that a mere "passing reference" to a potential pollutant cannot lift a permit's conclusive effect.

See id. Republic misreads OVEC. There, the Court found that the EPA's communications regarding a proposed coal mine removed the conclusive effect of the proposal's § 401 certification. See OVEC, 883 F. Supp. 2d at 641.

The Court did note that the EPA had (1) "unequivocally invoked 33 C.F.R. § 320.4(d)" and (2) warned of "an excursion from West Virginia's narrative water quality standard." Id. But the Court never suggested that citing § 320.4(d) or warning of "an excursion" is necessary to lift a permit's conclusive effect. Such a rule would contravene the plain language of § 320.4(d), which asks only whether the EPA has "advise[d] of other water quality aspects to be taken into consideration." As Republic points out, OVEC held that a passing reference to selenium in an EPA letter did not constitute "advice" for the purpose of § 320.4(d).

See Republic's Resp. 10 (citing OVEC, 883 F. Supp. 2d at 641). But here, the EPA expressed its concerns about the Turkeyfoot Mine's potential effects on water quality at length and in detail. See A.R. 2073–78; see, e.g., id. at 2073 ("Filling streams causes direct loss of aquatic habitat and will likely lead to secondary and cumulative impacts to the biogeochemical and hydrologic conditions of the receiving streams...."); id. ("[S]tream channels established after cessation of mining-related

activities may not gain the full functions of the resources eliminated, and may convey pollutants, thereby having negative effects on downstream aquatic resources...."); id. at 2076 ("The provided information has not yet demonstrated that the proposed project will not cause or contribute to water quality standards exceedances....") id. at 2078 ("EPA is concerned that the proposed water source and the proximity of the streams to the refuse fill may result in the established and re-established streams becoming sources of pollution adversely affecting... downstream aquatic resources....").

Accordingly, the Court finds that the EPA advised the Corps of other water quality aspects to be taken into consideration. The Corps argues that the Mine's § 401 permit is nevertheless conclusive because Defendants "took EPA's recommendation into consideration and acted upon it." Corps's Resp. at 16.

The Corps cites no authority in support of this argument, and its position is at odds with the plain language of § 320.4(d). Section 320.4(d) does not indicate the Corps can restore a § 401 certification's conclusive effect by acting on the EPA's advice.

Accordingly, the Court finds that the Mine's § 401 certification is not conclusive with respect to water-quality considerations. Therefore, the Corps was required to demonstrate that it considered the EPA's concerns by adequately responding to them.

The Corps discussed the effect of the WVDEP's certification and the EPA's comments when it responded to Plaintiffs' comment that iconic pollution would impact water quality. First acknowledging that "numerous studies regarding the effect of mining and conductivity on streams" show "increased conductivity" at surface mines, the Corps swept aside these facts as old news no longer significant.

A.R. 4872. Instead, the Corps asserted unidentified "new studies" and seemingly new requirements developed by the regulatory agencies and mining companies will "reduce the potential for elevated conductivities." Id. at 4858.

The Corps concluded that the § 401 certification remained "conclusive with respect to the water quality parameter of concern." Id. at 4859. The Corps then stated that "neither WVDEP nor the USEPA identified any specific issues of concern." Id. This conclusion is contradicted by the EPA's comment letter.

The EPA explicitly noted the "secondary and cumulative impacts" likely exacerbate already impaired waters. Id. at 2076. The EPA recommended that the applicant provide a "robust analysis" of these impacts including "sediment" and "sulfates." Id. As part of that analysis, the EPA urged that "information from other nearby operations using the same mining methods" and "specific BMPs", along with the state § 402 permit and the AEPP, be incorporated into the Corps permit.

Id. The EPA concluded that the project did not appear to meet the guidelines and recommended modifications. Id. at 2073–74. B. Issuing the § 404 Permit Was Arbitrary and Capricious Plaintiffs argue that the Corps’s decision to issue a § 404 permit for the Turkeyfoot Mine was arbitrary and capricious for six reasons: (1) the Corps ignored its own past erroneous decisions, see Pls.’ Mem.

8, (2) the Corps failed to grapple with studies showing valley fills harm water quality, see id. at 12, (3) data collected after the Corps approved the permit shows the agency’s prediction about water-quality impacts was wrong, see id. at 15, (4) the Corps improperly relied on the Mine’s § 401 certification, see id., (5) the Corps set an improper performance standard for the project, see id. at 18, and (6) the Corps relied on the mistaken belief that Republic’s § 401 certification included limits for total dissolved solids (TDS), see id. at 20.

Plaintiffs’ third argument is based on evidence outside the administrative record. See id. at 14. Since the Court has declined to admit this evidence, see ECF 46 at 8–9, this argument lacks a basis in the record. The Court addresses Plaintiffs’ remaining arguments in turn. 1.

The Corps Failed to Adequately Explain Why It Would Not Repeat Past Mistakes In their public comments, Plaintiffs suggested that, given the Corps’s history of erroneously predicting that valley fills will not cause violations of water-quality standards, the Corps’s prediction about the Turkeyfoot Mine will also be wrong.

The Corps responded to the comment as follows: The Corps acknowledges that elevated levels of these metals and compounds have occurred at surface mines, specifically the older mines where not much care was given to environmental [sic] sensitive construction and mining methods. These pre- SMCRA and early post-SMCRA mining practices have resulted in degradation of water quality throughout the West Virginia mining region.

However, with the advent of new studies on the effects of surface mining on water quality, including those studies highlighted by [Plaintiffs] in their comment letter, the Corps along with other regulatory agencies, in coordination with mining companies, have worked together to devise best management practices, adaptive management plans, mining construction methods, improved water quality effluent limitations, and the development of smaller surface mines with fewer valley fills, to help reduce the potential for elevated conductivities.

The applicant would utilize the “bottom-up” construction method for the valley fills and would utilize weathered sandstone to construct the underdrain structures to minimize the development of the cations/anions which could contribute to elevated conductivity levels. A.R. 4870–71.

The Corps’s response is flawed for three reasons. First, Plaintiffs’ comments did not discuss mining that occurred “pre-SMCRA and early post-SMCRA.” SMCRA was enacted in 1977; Plaintiffs discussed permits challenged between 2009 and 2016, see id. 3315–16. Their comments included specifically identified mines which were granted § 404 permits during this period, but

which later reported numerous violations of water quality based on poor WVSCI scores and elevated conductivity.

See id. 3316-17. Second, “bottom-up” construction and the use of weathered sandstone do not distinguish the Turkeyfoot Mine from the Reylas Mine and Black Castle Mine, two surface mines Plaintiffs discussed in their comments, see id. at 3312 n.174. When deciding to issue a § 404 for the Reylas Mine, the Corps predicted that “bottom-up” construction and a weathered-sandstone underdrain would prevent downstream pollution.

See id. at 6969. But after the Mine’s valley fill was constructed, downstream WVSCI scores fell, and discharge from the fill’s sediment pond increased in conductivity. See id. at 3318. The Corps also issued a § 404 permit for the Black Castle Mine. See id. at 7401. But despite the Mine’s use of the “bottom-up” construction method, see id. at 7436, waters downstream of the Mine now have elevated conductivity, as well as WVSCI scores indicating impairment, see id. at 3324–26.8 Third, Dr. Baker’s report undermines the Corps’s claim that “new studies” allowed it to develop adequate best management practices.

The report reaffirms what Plaintiffs stated in their comments: that scientific research consistently links valley fills with harm to the aquatic environment. See ECF 28, Ex. 1, at 12 (“[D]ozens of scientists in the field of ecology and ecological causation have reviewed the evidence establishing that conductivity in mine drainage is a cause of biological degradation in Appalachian streams....

There are no peer-reviewed studies with reliable study designs that contradict any of these findings.); id. (“Altogether, nine different scientific methods have been used in these different studies by different scientists to reach the same conclusion about the causal link between conductivity and downstream impairment.” (emphasis in original)). None of the studies discussed in Dr. Baker’s report and published after 2018 reveal how a mine operator like Republic might prevent valley fills from violating water-quality standards.

See id. at 9–12. In fact, one of these studies, Brady et al. (2023), undercuts the Corps’s 8 These measurements are from the “Checkmate Mine,” which, according to Plaintiffs’ comments, is another name for the Black Castle Mine. See A.R. 3316 n.183. prediction, finding that three streams experienced “changes in macroinvertebrate composition and organic matter processing rates” even though those streams were “reclaimed under SMRCRA [sic] guidance,” id. at 10.

Accordingly, the Corps’s response does not rationally distinguish its prediction about the Turkeyfoot Mine from its past predictions about other surface mines. In their Cross-Motion for Summary Judgment, the Corps asserts that “downstream measurements from the Reylas Mine... indicate nothing about the expected performance of the Turkeyfoot Mine valley fills” because the “water quality downstream of the Reylas Mine is indicative of the totality of its impacts, not just the impacts of the valley fill(s),” Corps’s Resp.

9. The Corps does not identify any part of the administrative record showing it relied on this reasoning when issuing the Turkeyfoot permit. Nowhere did it explain how it distinguished the Reylas Mine from the Turkeyfoot Mine. Since the Court must ignore “post hoc rationalizations for agency action,” the Corps’s argument is unavailing. *Motor Vehicle Mfrs. Ass’n of the U.S., Inc. v. State Farm Mut.*

Auto. Ins. Co., 463 U.S. 29, 50 (1983). Republic, for its part, argues that Reylas and Turkeyfoot are meaningfully different because “the Turkeyfoot mine plan will address [the] blights” left by past mining. Republic Resp. 14. This argument suffers from the same flaw. While the Corps certainly recognized that on-site reclamation would reduce downstream conductivity, see A.R.

4791, it did not identify reclamation as a reason it would avoid making past mistakes. Improving conditions that currently exist is laudable, but it does not explain away Plaintiffs’ and the EPA’s concerns that conductivity and other water quality issues will remain as a consequence of the Corps’s permit. “Agency action is arbitrary and capricious ‘if the agency... offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.’” *Defs. of Wildlife v. U.S. Dep’t of the Interior*, 931 F.3d 339, 345 (4th Cir.

2019) (quoting *Defs. of Wildlife v. N.C. Dep’t of Transp.*, 762 F.3d 374, 396 (4th Cir. 2014)). Here, the Corps’s explanation for believing it was not making the same mistakes it had in the past was implausible and ran counter to the evidence included in Plaintiffs’ comments.

Accordingly, the Corps’s decision to issue the § 404 permit was arbitrary and capricious. 2. The Corps Failed to Adequately Grapple with Relevant Studies Plaintiffs’ comments summarized studies linking surface mining to downstream biological impairment. See A.R. 3262–84.

In response to Plaintiffs’ comments, the Corps said it was “aware of the numerous studies regarding the effect of mining and conductivity on streams....” *Id.* 4872. The Corps explained it nevertheless believed the mine would have minimal effects on water quality because Republic would use an AEPP and implement “best management practices.” See *id.* at 4870–71.

There are two problems with this. First, the Corps never explained how the “best management practices” Republic would use differ from mining techniques used for the mines analyzed in the scientific literature. As Plaintiffs point out, “most of the practices” are “basic requirements of mining operations that have long been required under SMCRA,” and thus were probably also used for the studied mines.

Pls.’ Mem. 13 n.4. Second, despite the EPA recommending that it do so, the Corps declined to make the AEPP a special condition of the § 404 permit. See A.R. 4848. The Corps tried to explain its refusal by (1) asserting the Corps would be unable to enforce the AEPP even if it were a special

condition of the § 404 permit and (2) pointing out that complying with the NPDES permit—of which the AEPP is a part—is already a special condition of the § 404 permit.

See *id.* Neither explanation is reasonable. The Corps has not cited any authority in support of its claim that the AEPP would be unenforceable as a special condition. Further, given the state's ability to change the NPDES permit and the AEPP “at any time,” *id.* at 4274, requiring compliance with the NPDES permit does not ensure Republic will implement the AEPP as it currently stands.

The Corps's response to Plaintiffs' summary of the scientific literature fails to explain why the Turkeyfoot Mine's valley fills will not harm downstream aquatic life despite the scientific consensus that valley fills have that effect.

Accordingly, the Corps's decision to issue the § 404 permit was arbitrary and capricious. See *Friends of Buckingham v. State Air Pollution Control Bd.*, 947 F.3d 68, 85 (4th Cir. 2020) (finding an action arbitrary and capricious because the agency had “not ‘articulated a satisfactory explanation for its action including a rational connection between the facts found and the choice made’” (quoting *Appalachian Voices v. State Water Control Bd.*, 912 F.3d 746, 753 (4th Cir.

2019))). 3. The Corps Improperly Relied on the Mine's § 401 Certification The parties do not dispute that the Corps relied on the Turkeyfoot Mine's § 401 certification in deciding to issue a § 404 permit. See *Pls.' Mem.* 15; *Corps's Resp.* 12–13; *Republic Resp.* 13; see also A.R. 4817 (“The USEPA has reviewed the NDPEs permit and did not advise of other water quality aspects that should be taken into consideration for the proposal.”) Plaintiffs argue that, because the § 401 certification was not conclusive, relying on it was arbitrary and capricious.

See *Pls.' Mem.* 15. Republic, citing this Court's decision in *OVEC*, asserts that the Corps could validly rely on the § 401 certification even if it were not conclusive. See *Republic Resp.* 13 (citing *OVEC*, 883 F. Supp. 2d at 645). Republic misinterprets *OVEC*. There, the Court determined that “EPA comment letters removed the conclusive effect of [a] State § 401 certification with regard to conductivity and cumulative impacts....” 883 F. Supp. 2d at 641.

It suggested that the Corps cannot rely on a § 401 certification when that certification is not conclusive: That the Corps can, in appropriate circumstances, rely on a State § 401 certification when assessing the cumulative impacts of a proposed permit, does not mean that the Corps could do so in this case, where EPA submitted several letters outlining “other water quality aspects to be taken into consideration.” *Id.* at 639 (quoting 33 C.F.R. § 320.4(d)).

The Court did later note that it was “not unreasonable for the Corps to rely on the expertise of the WVDEP, the agency with primary responsibility for water quality, in determining that impacts on water quality will be insignificant.” *Id.* at 645.

However, that the Corps can generally rely on the WVDEP's expertise does not mean it can rely specifically on § 401 certifications where EPA's comments can only be construed as expressing concerns. If anything, OVEC supports Plaintiffs' position. Since the Corps could not rely on the Mine's § 401 certification, it had an obligation to consider and reasonably respond to both Plaintiffs and the EPA's concerns.

It failed to do so. The EPA's letter suggested that the Mine's valley fills could "lead to secondary and cumulative impacts," including increased conductivity. A.R. 2075; see *id.* at 2076. It recommended that the Corps consider additional "design and operations measures... to minimize impacts to water quality and to the downstream aquatic ecosystem...." *Id.* at 2075.

Finally, it suggested the Corps consider the effects of similar mining methods used for nearby mines. See *id.* at 2076. Plaintiffs, too, expressed concerns that the Mine's valley fills would increase downstream conductivity. See *id.* at 2114, 2135–36, 2142. They noted that other valley fills in the area have created significant ionic pollution. See *id.* at 2164, 2167–69.

As discussed above, the Corps's responses to these comments were inadequate. It failed to reasonably explain why the Turkeyfoot Mine's valley fills will not increase downstream conductivity even though (1) the scientific consensus suggests they will and (2) other valley fills in the area, using the same pollution-mitigation methods, have increased conductivity in the past.

Since the Corps improperly relied on the Mine's § 401 certification and then failed to adequately respond to Plaintiffs and the EPA's comments, their decision to issue the § 404 permit was arbitrary and capricious. 4.

The Corps Set an Irrational Performance Standard In its letter, the EPA noted that "[v]alley fills are proposed in Wingrove Branch and Workman Creek, which have [WVSCI] scores of 75.8 and 80, respectively." *Id.* 2075. It raised a concern that "the projected WVSCI scores for these re-established streams at maturity (20 years) are predicted to be below those pre-mining levels." *Id.* at 2077.

In response, the Corps stated that, "provided the WVSCI scores at the end of the monitoring period indicate an un-impaired macroinvertebrate community..., the Corps would determine the mitigation stream would meet the success criteria." *Id.* at 4850.

The problem, say Plaintiffs, is that the projected WVSCI scores for Workman Creek and parts of Wingrove Branch are both 70, see *id.* 4741–43, 4744, which is below the WVSCI impairment threshold. See Pls.' Mem. 18. Defendants argue there was nothing wrong with the Corps selecting a WVSCI score of 70 as a performance standard because their goal was not to render mitigation streams biologically unimpaired but to ensure the streams' WVSCI scores did not fall below their respective baselines.

See Corps's Resp. 14–15; Republic's Resp. 15–17. After all, the § 404 permit suggests as much. See A.R. 4741 (“All mitigated stream reaches must be constructed and maintained to promote a progressive increase in aquatic habitat and diversity as measured by the... WVSCI... score[] and must be consistent with or better than the baseline....”).

However, in response to the EPA pointing out that the projected WVSCI scores for two streams were below those streams' baselines, the Corps said those streams “would meet the success criteria” if “the WVSCI scores at the end of the monitoring period indicate an un-impaired macroinvertebrate community....” Id. at 4850. This demonstrates that, at least for Wingrove Branch and Workman Creek, the Corps was focused on ensuring the mitigation streams remained un-impaired.

Even if the Corps were concerned about keeping WVSCI scores at or above their baseline, it did not explain why predicted WVSCI scores below pre-mining levels were acceptable. Republic noted that “WVSCI scores of 70 at maturity were selected based on one standard deviation (6.95) below the mean” of the streams' baseline WVSCI scores. Id. at 4851. But neither the Corps nor Republic explained why a WVSCI score one standard deviation below baseline would align with the goal of maintaining the streams' WVSCI scores.

Accordingly, the Corps's performance standard for those streams was arbitrary and capricious. The Corps used a WVSCI of 70 as a performance standard for Workman Creek and parts of Wingrove Branch, but a WVSCI score of 72 is necessary to indicate an unimpaired macroinvertebrate community, see id. 3314.9 The Corps, then, based their decision to issue the § 404 permit on an “infirm ground.” See *Vecinos*, 745 F.3d at 330.

5. The Corps's Assertion that the Mine's § 401 Certification Included TDS Limits Was Harmless Error Finally, Plaintiffs argue the Corps's decision to issue the § 404 permit was arbitrary and capricious because the “Combined Decision Document” for the permit included the incorrect statement that, “[a]s part of the NPDES permit [for the Mine], specific limits for...

TDS have 9 The Corps argues that a WVSCI of 68 indicates an unimpaired macroinvertebrate community. See Corps's Resp. 14 n.4. Its argument is based on evidence that is not in the record, see id., so the Court disregards the Corps's argument. been set such that an exceedance of [that] limit[] would constitute a violation of the NPDES permit.” A.R. 4804.

The NDPEs permit does not, in fact, set a specific limit for TDS. Defendants argue the misstatement was harmless error. See Corps's Resp. 13; Republic's Resp. 17; see also 5 U.S.C. § 706 (providing that, in deciding whether an agency action is arbitrary and capricious, “due account shall be taken of the rule of prejudicial error”).

The Court agrees. Despite the Corps's misstatement, the record indicates that the Corps understood the NPDES permit did not include a TDS limit. See A.R. 4871 (“[T]he state of West

Virginia does not have numeric water quality standards for conductivity, not has WVDEP assigned effluent limits for conductivity in the approved NPDES permit.”).

Accordingly, the misstatement does not independently render the Corps’s decision to issue the permit arbitrary and capricious. CONCLUSION The Court GRANTS in part and DENIES as moot in part Plaintiffs’ Motion for Summary Judgment (ECF 29).

The Court grants the Motion insofar as it seeks summary judgment on Plaintiffs’ CWA claims. It denies the Motion as moot insofar as it seeks summary judgment on Plaintiffs’ regulatory and NEPA claims. The Court DENIES the Army Corps’s Cross-Motion for Summary Judgment.

The Court HOLDS UNLAWFUL and SETS ASIDE the CWA § 404 permit the Army Corps issued for the Turkeyfoot Surface Mine. Since the Court has issued Plaintiffs’ requested relief, it DISMISSES Counts 2 and 3 of their Complaint.

The Court DIRECTS the Clerk to send a copy of this Order to counsel of record and any unrepresented parties. ENTER: April 21, 2026 ROBERT C. CHAMBERS UNITED STATES DISTRICT JUDGE -2)-