

PUBLISHED

UNITED STATES COURT OF APPEALS
FOR THE FOURTH CIRCUIT

No. 16-1024

OHIO VALLEY ENVIRONMENTAL COALITION; WEST VIRGINIA
HIGHLANDS CONSERVANCY; and SIERRA CLUB,

Plaintiffs - Appellees,

v.

FOLA COAL COMPANY, LLC,

Defendant - Appellant.

AMERICAN FOREST AND PAPER ASSOCIATION; AMERICAN PETROLEUM
INSTITUTE; NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES;
NATIONAL ASSOCIATION OF HOME BUILDERS; NATIONAL ASSOCIATION
OF MANUFACTURERS; NATIONAL MINING ASSOCIATION; UTILITY WATER
ACT GROUP,

Amici Supporting Appellant.

Appeal from the United States District Court for the Southern
District of West Virginia, at Charleston. Robert C. Chambers,
Chief District Judge. (2:13-cv-05006)

Argued: October 27, 2016

Decided: January 4, 2017

Before MOTZ and DIAZ, Circuit Judges, and Gerald Bruce LEE,
United States District Judge for the Eastern District of
Virginia, sitting by designation.

Affirmed by published opinion. Judge Motz wrote the opinion, in
which Judge Diaz and Judge Lee joined.

ARGUED: Michael Shane Harvey, JACKSON KELLY PLLC, Charleston, West Virginia, for Appellant. Joseph Mark Lovett, APPALACHIAN MOUNTAIN ADVOCATES, Lewisburg, West Virginia, for Appellees. Thomas M. Johnson, Jr., OFFICE OF THE ATTORNEY GENERAL OF WEST VIRGINIA, Charleston, West Virginia, for Amici The State of West Virginia and West Virginia Department of Environmental Protection. **ON BRIEF:** Robert G. McLusky, Jennifer L. Hughes, JACKSON KELLY PLLC, Charleston, West Virginia, for Appellant. J. Michael Becher, APPALACHIAN MOUNTAIN ADVOCATES, Lewisburg, West Virginia; James M. Hecker, PUBLIC JUSTICE, Washington, D.C., for Appellees. Karen C. Bennett, Samuel L. Brown, Brian R. Levey, Kristy Bulleit, HUNTON & WILLIAMS LLP, Washington, D.C.; Jan A. Poling, AMERICAN FOREST & PAPER ASSOCIATION, Washington, D.C.; Amanda Waters, Erica Spitzig, NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES, Washington, D.C.; Linda E. Kelly, Quentin Riegel, NATIONAL ASSOCIATION OF MANUFACTURERS, Washington, D.C.; Peter Tolsdorf, AMERICAN PETROLEUM INSTITUTE, Washington, D.C.; Tom Ward, NATIONAL ASSOCIATION OF HOME BUILDERS, Washington, D.C., for Amici American Forest & Paper Association, American Petroleum Institute, National Association of Clean Water Agencies, National Association of Home Builders, National Association of Manufacturers, National Mining Association and Utility Water Act Group. John C. Cruden, Assistant Attorney General, David S. Gualtieri, Jennifer Neumann, Environment and Natural Resources Division, UNITED STATES DEPARTMENT OF JUSTICE, Washington, D.C., for Amicus United States Environmental Protection Agency. Patrick Morrissey, Attorney General, Elbert Lin, Solicitor General, Erica N. Peterson, Assistant Attorney General, OFFICE OF THE ATTORNEY GENERAL OF WEST VIRGINIA, Charleston, West Virginia; Kristin Boggs, General Counsel, Thomas L. Clarke, Senior Policy Advisor and Counsel, WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION, Charleston, West Virginia, for Amici The State of West Virginia and West Virginia Department of Environmental Protection.

DIANA GRIBBON MOTZ, Circuit Judge:

Several environmental groups brought this action against a coal company, alleging that the company had violated the Clean Water Act and seeking appropriate injunctive relief. After a bench trial, the district court found that the company had indeed violated the Act and ordered it to take corrective measures. The company appeals, principally asserting that its National Pollution Discharge Elimination System ("NPDES") permit shields it from liability. Because the company did not comply with the conditions of its permit, the permit does not shield it from liability under the Clean Water Act, and the district court properly ordered appropriate remedial measures. Accordingly, we affirm the judgment of the district court.

I.

A.

The Clean Water Act forbids all discharges of pollutants into waters of the United States, unless the discharger holds a permit. 33 U.S.C. §§ 1311(a), 1342, 1362 (2012). The Act shields NPDES permit holders from liability if their discharges comply with their permits. 33 U.S.C. § 1342(k). A typical NPDES permit lists numerical limitations on specific types of effluents and includes other conditions required for compliance with state and federal law. The Act requires that effluent

limits reflect applicable water quality standards. See 33 U.S.C. § 1312(a). These water quality standards may be numerical or narrative, 40 C.F.R. § 131.3(b) (2016), and may, but need not be, contained in a permit.

Under the Act, if a state receives approval from the Environmental Protection Agency ("EPA"), it can administer its own NPDES permitting program. See 33 U.S.C. § 1342(b). EPA reviews and must approve any substantive changes to a state's permit program. See id. In 1981, West Virginia received EPA approval to administer its own permit program and has done so ever since.

West Virginia has promulgated a number of regulations necessary to comply with the national NPDES program. All West Virginia NPDES permits incorporate (either expressly or by reference) numerous provisions of the West Virginia Code of State Rules. These include a series of regulations governing NPDES permits in general, as well as a separate series of regulations governing NPDES permits for coal mining. Compare W. Va. Code R. § 47-10 (2016) (general NPDES regulations), with W. Va. Code R. § 47-30 (coal mine NPDES regulations).

In 1996, Fola Coal Company, LLC obtained a West Virginia NPDES coal mine permit to discharge into Stillhouse Branch, a tributary of Twentymile Creek and a waterway adjacent to Fola's surface mining facility in central West Virginia. Fola applied

for and received a renewed NPDES permit in 2009. The provisions of that permit lie at the heart of this case.

B.

On March 13, 2013, three environmental groups -- Ohio Valley Environmental Coalition, West Virginia Highlands Conservancy, and Sierra Club (collectively "the Coalition") -- filed this action under the Clean Water Act's citizen suit provision, 33 U.S.C. § 1365. The Coalition alleged that Fola violated 5.1.f, a West Virginia regulation incorporated in Fola's permit. At the time Fola's renewal permit was issued in 2009, 5.1.f provided:

The discharge or discharges covered by a WV/NPDES permit are to be of such quality so as not to cause violation of applicable water quality standards adopted by the Department of Environmental Protection, Title 47, Series 2.

W. Va. Code R. § 47-30-5.1.f (2009). The Coalition alleged that Fola violated 5.1.f by discharging ions and sulfates in sufficient quantities to cause increased conductivity in Stillhouse Branch, which resulted in a violation of water quality standards. Specifically, the Coalition asserted that Fola's discharges violated two narrative water quality standards contained in Fola's permit. See id. §§ 47-2-3.2.e, -3.2.i (2016); see infra n.8.

In response to the Coalition's allegations, Fola pointed out that it disclosed the nature of its discharges when it

applied for the 2009 renewal permit. At that time, Fola had stated that its discharges would include ions and therefore be highly conductive. Despite this disclosure, the West Virginia Department of Environmental Protection ("WVDEP") set no specific limitations on conductivity in Fola's permit. By declining to do so, Fola asserted, WVDEP made an affirmative choice not to impose any limit on conductivity. According to Fola, it followed that 5.1.f did not obligate Fola to limit the conductivity of its discharges even if that conductivity resulted in a violation of water quality standards. Fola reasoned that, because it complied with the effluent limits expressly set out in its permit, the permit shielded it from all liability under the Act.

To gain support for its view that 5.1.f imposed no obligation on it, in 2013 Fola sought clarification from WVDEP regarding a new West Virginia law enacted a year earlier, involving the permit shield. The new law provided that "Notwithstanding any rule or permit condition to the contrary, . . . compliance with a permit issued pursuant to this article shall be deemed compliance for purposes of" the Clean Water Act's permit shield. 2012 W. Va. SB 615 (formerly codified at W. Va. Code § 22-11-6(2) (2013)). WVDEP responded that, in its view, this legislation did not substantively change existing law but simply clarified West Virginia's consistent

interpretation of the permit shield. Under this assertedly consistent view, a permit holder need only disclose its discharges of effluents to WVDEP and comply with the effluent limits in the permit. If the permit holder did this, according to WVDEP, the permit would shield the permit holder from all liability under the Clean Water Act.

In 2015, WVDEP attempted to remove from 5.1.f the language at issue in this case, which requires permit holders to comply with water quality standards. In doing so, WVDEP admitted that when the agency had issued Fola a renewal permit in 2009, 5.1.f "require[d] coal NPDES permittees to meet water quality standards, whether or not such standards are delineated in the permit or contained in the administrative record of the permitting process." WVDEP, Response to Comments, 47 CSR 30, WV/NPDES Rule for Coal Mining Facilities, at 1 (2014), <http://apps.sos.wv.gov/adlaw/csr/readfile.aspx?DocId=26342&Format=PDF>. Nonetheless, WVDEP opined that its removal of the relevant language from 5.1.f "does nothing more than make [state law] consistent with" the Clean Water Act, which, according to WVDEP, did not require compliance with water quality standards. Id.

Notwithstanding WVDEP's views, EPA did not approve WVDEP's attempted changes to 5.1.f. Instead, in a series of letters to WVDEP, EPA explained its concerns that the elimination of the water quality standards language in 5.1.f could cause state law

to conflict with federal law and weaken the state's NPDES program. WVDEP's explanations did not assuage EPA's concerns, and EPA did not approve any changes to 5.1.f or to any other language incorporated in Fola's permit. In 2015, the West Virginia Legislature enacted another provision similar to SB 615 that explicitly prohibited enforcing water quality standard violations against permit holders. But again, EPA did not approve the removal of the relevant portion of 5.1.f or any similar changes to the state's NPDES permit program that might affect Fola's permit.

Nevertheless, armed with WVDEP's interpretation of SB 615 and the legislative actions outlined above, Fola urged the district court to hold that permit provision 5.1.f did not prohibit Fola from violating West Virginia water quality standards. Fola further contended that it could not be held accountable for increased conductivity and resulting water quality violations because the effluents it discharged fell within the numerical levels allowed in its permit or were disclosed during the permitting process.

C.

After a bench trial, at which the district court considered mountains of expert testimony, reports, and charts, the court issued a thorough written opinion. The court found that 5.1.f constituted an enforceable permit provision that required Fola

to refrain from violating West Virginia's water quality standards, including the narrative water quality standards contained in §§ 47-2-3.2.e and -3.2.i.

The court found that mine drainage like that which Fola discharged into Stillhouse Branch deposited significant amounts of ions into the receiving water.¹ Ohio Valley Env'tl. Coalition, Inc. v. Fola Coal Co., 82 F. Supp. 3d 673, 686-87 (S.D. W. Va. 2015). These ions are measured by conductivity, id. at 687, and the conductivity of Stillhouse Branch had markedly increased since Fola began discharging mine drainage into the water, id. at 696-98.

As conductivity in Stillhouse Branch increased, the experts explained and the court found, sensitive insect species, which could not adapt to the sudden and dramatic change, died. Id. at 687. The decrease in aquatic diversity caused a decrease in the stream's score on the West Virginia Stream Condition Index ("the

¹ In order to extract coal, Fola blasted rock and dumped it into Stillhouse Branch. See Gregory J. Pond et al., Downstream Effects of Mountaintop Coal Mining: Comparing Biological Conditions Using Family- and Genus-Level Macroinvertebrate Bioassessment Tools, 27 J. N. Am. Bentholological Soc'y 717, 718 (2008) (explaining surface coal mining). The minerals in the rock reacted with the flowing water to release calcium, bicarbonate, and sulfate ions. See Emily S. Bernhardt et al., How Many Mountains Can We Mine? Assessing the Regional Degradation of Central Appalachian Rivers by Surface Coal Mining, 46 Env'tl. Sci. & Tech. 8115, 8115 (2012).

Index"),² which WVDEP and EPA had long used to measure the health of streams. The court noted that EPA considered Index scores below 68 to indicate impairment and that, in 2009 when WVDEP issued Fola's renewal permit, WVDEP had generally shared that view. See id. at 677, 679 & n.4. The trial evidence established that since 2003 Stillhouse Branch had consistently scored well below 68, ranging from 31.6 to 58.17. Id. at 696.

The district court concluded that "when conductivity reaches 300 [μ S/cm], it is more likely than not that" the Index score will drop below 68 and "the subject stream will be biologically impaired." Id. at 687 (citing EPA, A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams (Final Report), EPA/600/R-10/023F, at A-36 (2011)). Samples from Stillhouse Branch reported conductivity that was ten times higher than this 300 μ S/cm threshold. Id. at 696-98. The court found that Fola's mining increased conductivity in Stillhouse Branch and that "high conductivity in downstream Stillhouse Branch is causing -- or, at the very least materially contributing to -- a significant adverse impact to the chemical and biological components of the stream's aquatic ecosystems" in

² See A Stream Condition Index for West Virginia Wadeable Streams 1-2 (2000), http://www.dep.wv.gov/WWE/watershed/bio_fish/Documents/WVSCI.pdf.

violation of the West Virginia narrative water quality standards incorporated into Fola's permit. Id. at 698.

With respect to remedy, the district court, at Fola's urging, rejected the Coalition's proposed remedy as too burdensome. Instead, the court appointed a Special Master of Engineering to monitor Fola's implementation of less burdensome methods Fola proposed. Fola timely noted this appeal.

D.

A court must interpret an NPDES permit as it would a contract. Piney Run Pres. Ass'n v. Cty. Comm'rs, 268 F.3d 255, 269 (4th Cir. 2001). Thus, to the extent that the judgment of the district court rests on interpretation of Fola's NPDES permit, that interpretation constitutes a legal question, which we review de novo. Id. But to the extent that judgment rests on factual findings made after a bench trial, we can reverse only if those findings are clearly erroneous. Id.

II.

Fola principally contends that the district court misinterpreted its permit.

In doing so, Fola presents a narrow argument. The company expressly acknowledges that its permit "incorporates" 5.1.f. Reply Br. at 3. Fola admits that "permit holders are not shielded from violations of permit conditions." Id. at 1. And

the company forgoes any claim that 5.1.f does not impose water quality standards, including those found in 3.2.e and 3.2.i. Fola's sole argument is that 5.1.f controls the conduct of WVDEP, the state regulator, and imposes no requirements on Fola, the regulated entity.

Fola offers three points assertedly supporting this argument. First, the company maintains that 5.1.f is ambiguous but is best interpreted as a regulation of the permitting authority, not the permit holder. Second, Fola contends that the district court failed to examine "extrinsic evidence," which it argues eliminates any ambiguity and demonstrates that, in the "contemplation of the parties," 5.1.f clearly imposed no obligation on the permit holder. Finally, Fola claims that our holding and analysis in Piney Run requires a court to conclude that 5.1.f imposes obligations only on the permitting authority. We consider each of these arguments in turn.

A.

We initially examine the language of Fola's permit to determine if it is indeed ambiguous. As we recognized in Piney Run, "if 'the language [of a permit] is plain and capable of legal construction, the language alone must determine' the permit's meaning." Piney Run, 268 F.3d at 270 (quoting FDIC v. Prince George Corp., 58 F.3d 1041, 1046 (4th Cir. 1995)).

Contrary to Fola's assertions, the text of 5.1.f of the permit seems straightforward and unambiguous. The provision prohibits "discharges covered by" the permit from violating water quality standards. Of course, it is the permit holder that generates "discharges covered by" the permit. Thus, the provision controls the activities of the permit holder -- here Fola. The state agency simply drafts the permit. That agency, WVDEP, has no control over the permit holder's discharges.

Further, there is no mention in 5.1.f of "regulating," "drafting a permit," or "determining effluent limits," all core activities of the state regulator. Rather, the language of 5.1.f focuses on the discharges themselves. One would have to rewrite 5.1.f substantially to read it as imposing obligations on WVDEP.³ As written, the plain language of 5.1.f indicates it applies to Fola, the permit holder, not WVDEP, the agency granting the permit.

Review of the provisions surrounding 5.1.f further supports this conclusion. 5.1.f is contained in a section of the permit

³ For example, if 5.1.f imposed requirements on the state regulator rather than the permit holder, it would more naturally read: "The discharge or discharges covered by a WV/NPDES permit are to be ~~of such quality~~ regulated by the Department of Environmental Protection so as not to cause violation of applicable water quality standards adopted by ~~the Department of Environmental Protection~~ that agency, Title 47, Series 2." Notably, these changes would require both insertions and deletions.

entitled "Conditions Applicable to All Permits," and in a subsection entitled "Duty to Comply; Penalties." The first mandate of the subsection states, "The permittee must comply with all conditions of a WV/NPDES permit." See W. Va. Code R. § 47-30-5.1.a (2009) (emphasis added).

This subsection then lists several ways a permit holder can violate the permit separate and apart from violations of the permit's effluent limits. For example, under this subsection, a permit holder violates the permit when it "falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under a WV/NPDES permit." Id. § 47-30-5.1.d. And a permit holder violates a permit when it "knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit." Id. § 47-30-5.1.e.

It seems unlikely that immediately following these clear restrictions on permit holders, in a subsection specifically addressed to permit holders, the drafters inserted in 5.1.f a directive not to permit holders, but only to the regulating agency. Indeed, it makes little sense for 5.1.f to be incorporated into all coal mining permits, see id. § 47-30-5, if 5.1.f does not obligate the permit holder in any way.

Accordingly, the district court's conclusion that 5.1.f unambiguously regulates permit holders seems entirely warranted.⁴

B.

Furthermore, rather than supporting Fola's interpretation, all relevant extrinsic evidence points to the conclusion that 5.1.f imposes obligations on the permit holder, not the state permitting agency.

Fola's argument to the contrary relies almost entirely on statements from WVDEP and the West Virginia Legislature. Fola contends that these statements prove that neither body intended 5.1.f to create an obligation on permit holders to meet water quality standards beyond the numerical effluent limits in the permit. The Legislature's 2013 and 2015 amendments and WVDEP's statements certainly evince West Virginia's present desire to cease enforcement of water quality standards against permit holders. But neither WVDEP's current interpretation nor the Legislature's actions in amending state law in 2013 and 2015 constitute extrinsic evidence supporting Fola's interpretation of its 2009 permit.

⁴ Fola contends that the district court's holding renders the effluent limits in the permit superfluous. But by Fola's own admission, the effluent limits do not delineate all the discharges disclosed to the regulating agency. 5.1.f captures those discharges, not explicitly regulated by effluent limits, which nonetheless decrease water quality and harm the aquatic ecosystem.

And Fola is simply wrong in contending that “[t]here is no evidence that West Virginia ever intended” to hold permit holders liable for violations of water quality standards. Br. of Appellant at 34 (emphasis added). In fact, Fola has provided no evidence that the Legislature or WVDEP lacked this intent when Fola’s renewal permit was issued in 2009. Rather, the record evidence indicates this was precisely what was intended.

In 2011, two years after the issuance of Fola’s current permit, WVDEP pursued an enforcement action against Fola’s parent company based on violations of the exact water quality standards at issue here as incorporated into the NPDES permit through 5.1.f. See Complaint in Intervention at 12, United States v. Consol Energy, Inc., No. 1:11-cv-0028 (N.D. W. Va. Mar. 14, 2011), ECF No. 6-1. And Fola’s parent company agreed to injunctive relief to remedy these violations. Consent Decree, Consol Energy, No. 1:11-cv-0028 (N.D. W. Va. Jun. 15, 2011), ECF No. 3-1. Moreover, as late as 2015, WVDEP interpreted 5.1.f to require coal companies holding NPDES permits to meet water quality standards. See WVDEP, Response to Comments, at 1. This was the very reason why WVDEP attempted to amend 5.1.f. See id.

Fola nonetheless insists that 5.1.f cannot subject it to any substantive obligations because, during the formal rulemaking in which 5.1.f was added to West Virginia’s NPDES

program, EPA stated that the new rules would not alter any "substantive rights or obligations." Revision of West Virginia's NPDES Program Transferring Authority over Coal Mines and Coal Preparation Plants from the West Virginia Department of Natural Resources; Division of Water Resources to Its Division of Reclamation, 50 Fed. Reg. 2996, 2997 (Jan. 23, 1985). That argument both misreads the history of 5.1.f and ignores important record evidence.

5.1.f's prohibition against violating water quality standards originated in pre-1984 West Virginia surface coal mining regulations. See West Virginia Surface Mining Reclamation Regulations, ch. 20-6, ser. VII, § 6B.04 (1983) ("Effluent Limitations - Discharge from the permit area shall not violate effluent limitations or cause a violation of water quality standards."). At that time, the surface coal mining regulations clearly recognized that permit holders were subject to enforcement actions for violating both effluent limitations and water quality standards. Id. In 1984, West Virginia consolidated its surface coal mining regulations with its water pollution regulations. See Preamble to Proposed Regulations Consolidating the Article 5A and Article 6 Program (filed Nov. 9, 1984). As a result of this consolidation, the regulations governing NPDES permits for coal mines thereafter included

provisions like 5.1.f that were previously found in the surface mining regulations. See WVDEP, Response to Comments, at 1.

The origin of 5.1.f renders untenable Fola's reliance on EPA's determination that the consolidated new regulations did not alter "substantive rights or obligations." EPA was correct. The new regulations did not alter any obligations under a permit; they simply brought existing obligations on surface coal mines into a single regulatory scheme. Surface coal mining facilities were already subject to substantively identical obligations prior to the consolidation of the regulations. Thus, EPA had no reason to conclude that the consolidated regulations altered any "substantive rights or obligations."

Moreover, although ignored by Fola, EPA's view as to the reach of 5.1.f has been consistent, as has the acceptance by courts of EPA's view when interpreting similar water quality provisions. In contrast to WVDEP's recent change of heart, EPA has remained clear through the years that 5.1.f imposes obligations on permit holders. Before us, EPA has filed an authoritative amicus brief pointing this out and reiterating its position. As EPA notes in its brief, some of the NPDES permits that EPA itself has issued impose narrative water quality

standards like those in Fola's permit.⁵ That water quality standards have been enforced against NPDES permit holders demonstrates the error in Fola's contention that 5.1.f cannot reasonably be interpreted to impose obligations on permit holders like Fola.

In sum, both the plain language of the provision and the extraneous evidence support the district court's holding that 5.1.f constitutes, as it has for decades, a regulation enforceable against NPDES permit holders, not the state permitting agency.

C.

Finally, Fola argues that our holding in Piney Run somehow prohibits this conclusion. According to Fola, Piney Run held that permit holders "who disclose their pollutants to the permitting agency and thereafter comply with the effluent limits

⁵ See, e.g., EPA NPDES Permit No. NH0100099 for the Town of Hanover, New Hampshire, pt. I.A.2, .3 and .6, <https://www3.epa.gov/region1/npdes/permits/2015/finalnh0100099permit.pdf>; EPA 2015 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, pt. 2.2.1, https://www.epa.gov/sites/production/files/2015-10/documents/msgp2015_finalpermit.pdf. Moreover, courts have enforced water quality standards provisions when, as here, the NPDES permit incorporates these standards. See, e.g., Nat. Res. Def. Council, Inc. v. Cty. of Los Angeles, 725 F.3d 1194, 1199, 1205 (9th Cir. 2013); Nw. Env'tl. Advocates v. City of Portland, 56 F.3d 979, 985-90 (9th Cir. 1995); Nat. Res. Def. Council v. Metro. Water Reclamation Dist. of Greater Chicago, 175 F. Supp. 3d 1041, 1049-54 (N.D. Ill. 2016). In support of its contrary view, Fola relies on inapposite, unpublished, and overruled cases.

in their NPDES permits are shielded from liability" under the Clean Water Act. Br. of Appellant at 43. Therefore, Fola contends, since it "disclosed the presence of conductivity in its discharges and has complied with the effluent limits established by . . . WVDEP," it too is shielded from liability under the Act, even if it violated provision 5.1.f of its permit. Id. There are multiple problems with this contention.

First, and most fundamentally, Fola misstates our holding in Piney Run. We expressly held that a permit shields "its holder from liability . . . as long as . . . the permit holder complies with the express terms of the permit and with the Clean Water Act's disclosure requirements." Piney Run, 268 F.3d at 259 (emphasis added).⁶ Fola ignores the emphasized language and wishes away its violation of one of "express terms of the permit" -- provision 5.1.f. Piney Run offers no support for this approach.

Fola attempts to bolster its misunderstanding of Piney Run by misinterpreting the careful examination of the history of the Clean Water Act we set forth in that case. See id. at 264-66. We recognized that requirements that permit holders meet water

⁶ Of course, to obtain the benefits of the permit shield a permit holder must also not discharge a pollutant in excess of the effluent limitations for that pollutant as listed in the permit. Piney Run, 268 F.3d at 259. That requirement is not at issue here.

quality standards had been the "primary means of federal regulation" prior to the 1972 enactment of the Clean Water Act. Id. at 264. The Act provided regulators with another tool -- "direct limitations on the discharge of pollutants" in the form of numerical caps on those discharges -- and a means to regulate -- NPDES permits. Id. at 265 (quoting Friends of the Earth, Inc. v. Gaston Copper Recycling Corp., 204 F.3d 149, 151 (4th Cir. 2000)(en banc)).

In Piney Run, we explained that adherence to its permit shielded a permit holder from liability under the Act. Id. But contrary to Fola's apparent belief, we did not hold that numerical limitations on specific pollutant discharges constituted the only proper subject of regulation under the Clean Water Act. Rather, we noted that, despite the Clean Water Act's "shift in focus of environmental regulation towards the discharge of pollutants, water quality standards still have an important role in the [Clean Water Act's] regulatory scheme." Id. (emphasis added).

Compounding its error, Fola refuses to recognize that Piney Run involved very different issues than those presented here. In Piney Run, we did not consider the enforceability of a permit's requirement that the permit holder adhere to water quality standards, let alone the enforceability of the specific narrative water quality standards required by West Virginia's

NPDES permit. Piney Run involved the enforcement of numerical limitations on the discharge of pollutants under a very different Maryland NPDES permit.⁷ In that context, we concluded that the holder of a Maryland NPDES permit who "discharges pollutants that are not listed in its permit" was nonetheless shielded from liability under the Clean Water Act if it "adequately disclosed" those discharges "to the permitting authority." Id. at 268.

But this conclusion in Piney Run does not allow an NPDES permit holder in West Virginia to ignore 5.1.f's requirement "not to cause violation of applicable water quality standards." Indeed, although Piney Run involved a permit that regulated only numerical effluent limitations, rather than also directing adherence to water quality standards like the permit at issue here, we iterated and reiterated that only "follow[ing] the terms of their NPDES permits" allows permit holders to avoid liability. Id. at 265; see also id. at 259 (explaining that to be shielded from liability under the Clean Water Act, a permit holder must comply "with the express terms of [its] permit"). Piney Run provides Fola no way to avoid liability if Fola has

⁷ Maryland's NPDES permits do not contain a provision similar to 5.1.f. Rather, unlike in West Virginia, the Maryland permitting agency simply will not issue a permit unless it "finds that the discharge meets . . . applicable State and federal water quality standards." Md. Code Ann., Envir. § 9-324(a)(1) (West 2016).

not complied "with the express terms of its permit," including provision 5.1.f.

Nothing in Piney Run forbids a state from incorporating water quality standards into the terms of its NPDES permits. Rather, Piney Run held, as we do today, that a permit holder must comply with all the terms of its permit to be shielded from liability. The terms of Fola's permit required it to comply with water quality standards. If Fola did not do so, it may not invoke the permit shield.

III.

Having rejected Fola's principal contention that 5.1.f imposes no obligations on it, we turn to Fola's remaining argument -- that the district court erred in finding that Fola violated 5.1.f.

A.

Through 5.1.f., Fola's permit incorporates narrative water quality standards prohibiting discharges into Stillhouse Branch that are "harmful" or have a "significant adverse impact" on aquatic ecosystems.⁸ In a long, remarkably thorough opinion, the

⁸ These standards provide in relevant part:

3.2 No sewage, industrial wastes or other wastes present in any of the waters of the state shall cause therein or materially contribute to any of the following conditions . . .

(Continued)

district court explained its reasons for concluding that Fola's discharges into Stillhouse Branch violated these narrative water quality standards in Fola's permit. The court relied on the testimony, reports, charts, studies, and exhibits from experienced scientists who had published extensively in peer-reviewed journals. All of the experts supported the Coalition's contention that Fola violated the permit's narrative water quality standards.⁹

In doing so, the experts used the West Virginia Stream Condition Index to determine whether Fola's discharges biologically compromised Stillhouse Branch. Both EPA and WVDEP have long used the Index to measure water quality. When a

. . . .
 3.2.e. Materials in concentrations which are harmful, hazardous or toxic to man, animal or aquatic life;

. . . .
 3.2.i. Any other condition, including radiological exposure, 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.

W. Va. Code R. § 47-2-3 (2016).

⁹ Fola offered a witness whom the district court found "h[eld] no training in the study of ecology" and, prior to being retained by Fola as an expert in this litigation, "had never analyzed the type of ecological data" at issue here. Fola, 82 F. Supp. 3d at 681. On appeal, Fola does not suggest that the district court should have credited this witness's testimony.

stream's Index score falls below 68, EPA considers the stream impaired under 33 U.S.C. § 1313(d). See infra n.11. The experts explained that the release of ions from Fola's discharges caused the conductivity in Stillhouse Branch to increase and sensitive insect species to die, thereby causing the stream's Index score to fall well below 68. Fola, 82 F. Supp. 3d at 696. On the basis of the expert evidence, the district court found that Fola's discharges caused or materially contributed to the impairment of Stillhouse Branch by increasing the conductivity of the stream.

On appeal, Fola makes no contention that the district court erred in finding that Fola's discharges in fact caused or materially contributed to the biological impairment in Stillhouse Branch. And Fola does not argue that narrative water quality standards cannot be enforced; it could not do so given that the Supreme Court has held to the contrary. See PUD No. 1 of Jefferson Cty. v. Wash. Dep't of Ecology, 511 U.S. 700, 716 (1994) (explaining that the Clean Water Act "permits enforcement of broad, narrative criteria" and "only one class of criteria, those governing 'toxic pollutants listed pursuant to section 1317(a)(1),' need be rendered in numerical form").

Instead, Fola offers brief and largely derivative "process" arguments. A substantial portion of those arguments involve Fola's mischaracterization of the district court's careful and

detailed fact-finding. Fola attempts to treat that fact-finding, which of course can only be reversed if clearly erroneous, as "rulemaking" subject to de novo review.

B.

First, Fola maintains that it was deprived of "fair notice" that water quality standards were enforceable provisions of its permit. This assertion rests on Fola's own misinterpretation of the language in its 2009 permit and a studied refusal to acknowledge that language's history, all of which we detail above. Suffice it to say again that, when the Coalition filed this lawsuit in March 2013, Fola had been bound by the 2009 permit at issue here for four years. Moreover, in 2011, two years prior to the commencement of this action, WVDEP brought suit to enforce the water quality standards at issue here against Fola's parent company. And, prior to initiation of this case, Fola's parent company had in fact agreed to take measures to remedy its violations of those water quality standards. Fola thus had ample, personalized notice that the water quality standards in a West Virginia NPDES permit were enforceable, and would be enforced, against a permit holder.

Fola next contends that it relied on guidance from WVDEP that the State would not pursue any enforcement action based on conductivity or water quality standards. But again as explained above, Fola offers no evidence that WVDEP made any such

assurance in 2009 when WVDEP last renewed Fola's permit. Moreover, such contemporaneous assurances seem unlikely given WVDEP's decision in 2011 to bring an enforcement action based on these very water quality standards. Further, even if Fola had offered evidence that WVDEP made such assurances when it issued Fola's renewal permit in 2009, that would not foreclose the Coalition from bringing this lawsuit. For Congress enacted the citizen suit provision of the Clean Water Act to address situations, like the one at hand, in which the traditional enforcement agency declines to act. See Gwaltney of Smithfield, Ltd. v. Chesapeake Bay Found., Inc., 484 U.S. 49, 53, 60 (1987). An agency's informal assurance that it will not pursue enforcement cannot preclude a citizen's suit to do so. See 33 U.S.C. § 1365(b)(1)(B).

Finally, Fola argues that the district court engaged in unlawful rulemaking. That argument is similarly unsound. Hornbook law defines "a rule" as "a generally applicable principle or standard developed by some authority including administrative authorities." 1 Admin. L. & Prac. § 1:20 (3d ed. 2016). The district court did not create any "generally applicable principle or standard." The court made factual findings based on the evidence presented in this particular case. The only rules for which the court found Fola liable are contained in its permit, specifically §§ 47-30.5.1.f and 47-2-

3.2.e and -3.2.i. These rules have long been incorporated into Fola's permit, and EPA has never approved their removal. They remain unchanged and controlling.

We must reject Fola's attempts to transform the district court's detailed fact-finding into rulemaking. After carefully assessing the record before it, the district court found as a fact that that a failing Index score indicated an impaired stream and that Fola's mining caused the increased conductivity that resulted in that impairment. These findings are well supported by the record evidence. None are clearly erroneous.

Some even rest on undisputed facts. For example, EPA has identified, and Fola does not dispute, "mining" as the source of the impairment of Stillhouse Branch. See WVDEP, 2012 Final West Virginia Integrated Water Quality Monitoring and Assessment Report List Page 14 (reviewing the 2012 Clean Water Act Section 303(d) Impaired Waters List). Moreover, Fola stipulated that its mine is the only mine that discharges into Stillhouse Branch. And WVDEP itself has explained, and Fola does not disagree, that the Index "was specifically designed for assessment of the biological component of the 47 C.S.R. 2 § 3.2.i narrative criteria" as applicable to waters such as Stillhouse Branch. WVDEP, Justification and Background for Permitting Guidance for Surface Coal Mining Operations to Protect West Virginia's Narrative Water Quality Standards, 47

C.S.R. 2 §§ 3.2.e and 3.2.i, at 4 (2010),
[http://www.dep.wv.gov/pio/Documents/Narrative/Narrative Standards Guidance Justification.pdf](http://www.dep.wv.gov/pio/Documents/Narrative/Narrative%20Standards%20Guidance%20Justification.pdf).

Despite this historic consensus, Fola argues that WVDEP has recently rejected the Index as a sole determinant of water quality, and that the court has therefore “usurped” the agency’s role in its use of the Index. This argument rests on a mischaracterization of the district court’s use of the Index. The court did not enshrine the Index as the sole acceptable method of establishing violations of water quality standards. Rather, the court explained that it only relied on the Index “[i]n the absence of [WVDEP] advancing a meaningful methodological alternative.” Fola, 82 F. Supp. 3d at 679. On appeal, neither Fola nor WVDEP points to any “methodological alternative” to the Index. In the absence of any alternative, the district court simply applied the methodology both WVDEP and EPA have applied for years.

The district court found that, until 2012, EPA and WVDEP had generally agreed to use an Index score of 68 to determine whether water quality standards were being met. If a stream scored below 68, the stream was to be listed as impaired. Id.

at 677.¹⁰ The record offers abundant support for this finding. See, e.g., Letter from Shawn M. Garvin, EPA Regional Administrator, to Randy C. Huffman, Secretary, WVDEP [hereinafter Garvin Letter], Enclosure 1, at 16 (Mar. 25, 2013) ("When determining whether to add waters to West Virginia's Section 303(d) list, EPA used West Virginia's narrative water quality criteria (W. Va. CSR §§ 47-2-3.2(e) & (i)) as applied to the aquatic life uses, and WVDEP's bioassessment listing methodology for its 2010 Section 303(d) list (i.e., [the Index])"); see also WVDEP, 2010 West Virginia Integrated Water Quality Monitoring and Assessment Report 14 (2010) (explaining the direct relationship between § 47-2-3.2.i, Index scores, and impaired water listing).

Indeed, Fola concedes that EPA and WVDEP have long used the Index. Neither agency -- nor anyone else before this case -- suggested that this use required promulgation of a formal rule. Rather, the Index has been used, as the district court used it, as a method for assessing compliance with narrative water

¹⁰ Prior to 2012 when it ceased using the Index to determine impairment, WVDEP had attempted to include a "gray-zone" listing between 60.6 and 68.0. EPA rejected this approach as "unsupportable," and continues to use 68 as the threshold. See Garvin Letter, Enclosure 1, at 12 n.3. For our purposes, this dispute is immaterial because the district court found that Stillhouse Branch had an Index score ranging from 31.60 to 58.17. Fola, 82 F. Supp. 3d at 696. Fola does not challenge these findings.

quality standards. Far from creating a rule for determining violations of water quality standards, the court simply made a factual determination using the Index as a well-established methodology. Employing this methodology, the district court came to the same conclusion as EPA had -- Stillhouse Branch was impaired.¹¹

Similarly, contrary to Fola's assertions, the district court's determinations as to conductivity also constituted findings of fact, not rulemaking. The court heard extensive expert testimony on the causal relationship between increased conductivity in Appalachian streams and impairment as evidenced by declining Index scores. Fola, 82 F. Supp. 3d at 679-86. The court credited the testimony of accepted experts and an authoritative EPA publication. All concluded that mining activities cause increases in conductivity, which in turn cause impairment. Id. at 686-96.

The court noted that peer-reviewed scientific articles first recognized the relationship of mining, conductivity, and

¹¹ While Fola focuses on notice as it relates to procedure, it is worth mention that Fola also had notice of the court's factual determination that Stillhouse Branch was impaired. WVDEP (with EPA approval) has listed Stillhouse Branch on its impaired waters list based on biological impairment since 2006. See WVDEP, 2006 Integrated Water Quality Monitoring and Assessment Report List Page 15 (2006); id. at 20 (explaining that WVDEP assessed biological impairment using the Index).

decreased Index scores in 2008, a year before issuance of Fola's renewal permit. See id. at 690 (citing Pond et al., supra n.1). Other articles strengthened these findings. Id. (citing, among others, M.A. Palmer et al., Mountaintop Mining Consequences, 327 Sci. 148 (2010) (finding that as conductivity increased, Index scores decreased)). In rebuttal, Fola offered an expert whom the district court found unqualified -- an assessment Fola does not challenge on appeal.

Finally, the relief the district court ordered belies any suggestion that it engaged in rulemaking. The court had the "discretion to determine" appropriate relief. See Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc., 528 U.S. 167, 192 (2000). In exercising that discretion, the district court refused to order Fola to implement the solution the Coalition proposed, a reverse osmosis system. The court deemed this solution "too expensive and too uncertain." Order Specifying Relief at 5, Fola, No. 2:13-cv-5006 (S.D. W. Va. Dec. 8, 2015), ECF No. 183. Instead, the court appointed a special master to oversee implementation of Fola's proposed solution, which focused on water management practices that respond to the unique characteristics of Stillhouse Branch. Id. at 6-7. The court did not require Fola to achieve any particular Index score or conductivity level, but simply ordered Fola to take appropriate measures either to reduce the conductivity in its

discharges or to increase the Index score of Stillhouse Branch. Id. at 1. The relief ordered by the district court reflects its careful fact-based findings, not unprincipled rulemaking.

In sum, Fola's arguments as to why the district court erred in finding that Fola violated its permit, like Fola's arguments as to the permit's reach, uniformly fail.

IV.

Accordingly, for the reasons set forth above, the judgment of the district court is

AFFIRMED.