No. 16-1024

### IN THE UNITED STATES COURT OF APPEALS FOR THE FOURTH CIRCUIT

OHIO VALLEY ENVIRONMENTAL COALITION, ET AL.,

Plaintiffs-Appellees,

v.

FOLA COAL COMPANY, LLC,

Defendant-Appellant.

Appeal from the United States District Court for the Southern District of West Virginia, No. 2:13-CV-05006, Chief Judge Robert C. Chambers

BRIEF OF THE UNITED STATES AS AMICUS CURIAE

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# GLOSSARY

CWA	Clean Water Act (Federal Water Pollution Control Act)
EPA	United States Environmental Protection Agency
J.A.	Joint Appendix
NPDES	National Pollutant Discharge Elimination System
OVEC	Ohio Valley Environmental Coalition
WVDEP	West Virginia Department of Environmental Protection
WV/NPDES	West Virginia NPDES
WVSCI	West Virginia Stream Condition Index

#### INTEREST OF THE UNITED STATES

This Clean Water Act ("CWA" or "Act") citizen suit concerns discharges from Defendant-Appellant Fola Coal Company, LLC's surface mine to a tributary of Twentymile Creek allegedly in violation of Fola's West Virginia National Pollutant Discharge Elimination System ("WV/NPDES") permit. Plaintiffs-Appellees Ohio Valley Environmental Coalition, *et al.* ("OVEC") allege that Fola's discharges violate the following condition from Section C of Fola's permit: "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 promulgated by [W. Va. Code R. § 47-2]." J.A. 1257 (incorporating by reference W. Va. Code R. § 47-30-5.1.f, "Rule 5.1.f").

This Court's order of September 6, 2016 (Doc. No. 56) asked the United States to file a brief as amicus curiae, addressing: (1) the "relationship between water quality requirements and effluent limits"; (2) "whether Fola's permit includes water quality requirements"; and (3) "what methodology should be used to gauge compliance," including as to "whether and how conductivity relates to compliance."<sup>1</sup> The United States Environmental Protection Agency ("EPA") administers the NPDES program, including oversight of approved State programs, and generally has authority to enforce the requirements of the CWA. The United States thus has an interest in providing this Court its views on the CWA's proper application, including with

<sup>&</sup>lt;sup>1</sup> We have grouped and re-ordered the Court's questions for analytical clarity. Also, we interpret "water quality requirements" to refer to "water quality standards."

respect to the Fola permit provision at issue here, which is similar to narrative water quality limits in EPA-issued permits.

#### **RESPONSE AND ANALYSIS**

#### I. THE RELATIONSHIP BETWEEN WATER QUALITY REQUIREMENTS AND EFFLUENT LIMITATIONS

Through the CWA, Congress sought to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251. To that end, the CWA prohibits the discharge of pollutants except under prescribed conditions, including an NDPES permit. *Id.* § 1311(a). EPA, or States such as West Virginia with EPA-approved programs, may issue an NPDES permit for the discharge of any pollutant to navigable waters, so long as the discharge meets the Act's applicable requirements. *Id.* § 1342(a)(1).

NPDES permits issued by approved States must include conditions ensuring that the discharge complies with the substantive provisions of the Act, *id.* § 1342(a)(2), including limitations "necessary to meet [state] water quality standards."

*Id.* § 1311(b)(1)(C). State water quality standards include two principal elements: "the designated uses of the navigable waters involved *and* the water quality criteria for such waters based upon such uses." *Id.* § 1313(c)(2)(A) (emphasis added). Designated "uses" include water uses like the "protection and propagation of fish and wildlife" or "recreational purposes," while "criteria," which may be in numerical or narrative form and specify the quality of water necessary to support the designated uses. *Id.* 

EPA regulations further provide that NPDES permits must include any requirements "necessary to ... [a] chieve water quality standards established under section 303 of the CWA, including State narrative criteria for water quality." 40 C.F.R. § 122.44(d)(1); see also id. § 122.4(d) (permits must "ensure compliance with the applicable water quality requirements of all affected States."); 54 Fed. Reg. 23,868, 23,875 (June 2, 1989) ("Narrative water quality criteria have the same force of law as other water quality criteria"). Accordingly, all NPDES permits must contain: (1) technology-based effluent limitations (or limits) that reflect the pollution reduction achievable based on several levels of pollution control or process changes, without reference to the effect on the receiving water; and (2) any more-stringent limits representing the level of control necessary to ensure that the receiving waters attain and maintain state water quality standards. 33 U.S.C. §§ 1311(b), 1313(c). EPA regulations recognize that such limits need not be numeric or end-of-pipe limitations. *See, e.g.*, 40 C.F.R. § 122.44(k)(3).

The type of limit in Rule 5.1.f, known as a water quality-based effluent limit, differs from a technology-based limit in that it is formulated with reference to the quality of the receiving water and is designed to ensure that the discharge will meet state water quality standards. 33 U.S.C. § 1311(b)(1)(C). Water quality-based limitations may be written as either (1) a numeric limit on the quantity, rate, and concentration of discharged substances; or (2) a narrative limit, such as a condition prohibiting discharges that cause or contribute to violations of state water quality

standards. Rule 5.1.f falls within this latter category and is a type of limitation that appears commonly in State- and EPA-issued permits.

Two statutory definitions further inform what constitutes a CWA "effluent limitation." First, the CWA citizen-suit provision authorizing enforcement against any person "alleged to be in violation of . . . an effluent standard or limitation under this chapter," 33 U.S.C. § 1365(a)(1)(A), defines "effluent standard or limitation" to include, *inter alia*, "(2) An effluent limitation or other limitation under section [301 or 302]; . . . [and] (6) A permit or condition thereof issued under [section 402]." *Id.* § 1365(f)(2), (6). Second, the Act's General Provisions define "effluent limitation" as "*any restriction* . . . on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged." *Id.* § 1362(11) (emphasis added); *see also Citizens Coal Council v. EPA*, 447 F.3d 879, 895-96 (6th Cir. 2006) (upholding EPA's interpretation that the term "effluent limitations" is not limited to numeric limits but encompasses "any restriction on discharges").

#### II. RULE 5.1.f IS A REQUIREMENT OF FOLA'S PERMIT

Fola's permit incorporates by reference as "Terms and Conditions" *all* of Rule 5.1 of Title 40, Series 30 of the West Virginia Code of State Rules, which is entitled "Duty to Comply, Penalties." J.A. 1257 (Section C). Rule 5.1.a states that a permittee must "comply with all conditions of a WV/NPDES permit" and that noncompliance "is grounds for enforcement action." Addendum 59. Rule 5.1.f, in the same section, states that discharges under the permit may not "cause violation of applicable water

quality standards" in W. Va. Code R. § 47-2. *Id.* Of those applicable standards, OVEC specifically alleges that Fola's discharges have violated narrative water quality criteria that prohibit discharges from surface mining operations that "cause . . . or materially contribute to . . . [m]aterials in concentrations . . . harmful, hazardous or toxic to man, animal or aquatic life" or a condition that "adversely alters the integrity of the waters of the State." W. Va. Code R. §§ 47-2-3.2.e, 3.2.i. The criteria also provide that "no significant adverse impact to the chemical, physical, hydrologic, or biological components of aquatic ecosystems shall be allowed." *Id.* § 2-3.2.i.<sup>2</sup> Nothing differentiates Rule 5.1.f from the other terms and conditions incorporated by this section of Fola's permit.

By their plain terms, these are requirements of Fola's permit subject to enforcement. *PUD No. 1 of Jefferson Cty. v. Wash. Dep't of Ecology*, 511 U.S. 700, 716 (1994) ("The Act permits enforcement of broad, narrative criteria") (citing favorably U.S. amicus brief example of "there shall be no discharge of toxic pollutants in toxic

<sup>&</sup>lt;sup>2</sup> This Court need not reach Fola's invocation of the CWA permit shield, 33 U.S.C. § 1342(k), which will be rendered moot by the Court's finding on the applicability of Rule 5.1.f. This Court has held that the applicability of the permit shield is predicated on a showing that "the permit holder complies with the express terms of the permit." *Piney Run Pres. Ass'n v. Cnty. Comm'rs*, 268 F.3d 255, 259 (4th Cir. 2001); *see also S. Appalachian Mountain Stewards v. A & G Coal Corp.*, 758 F.3d 560, 564 (4th Cir. 2014) ("shield protection" only if in "full compliance . . . with the conditions of the permit"). If the Court agrees that Rule 5.1.f is a requirement and sustains the district court's application of it, Fola is not in compliance with its permit and cannot invoke the shield. If, on the other hand, this Court rejects the district court's application of Rule 5.1.f or accepts Fola's argument that Rule 5.1.f is not an applicable requirement in the first instance, there is no violation to "shield" from liability.

amounts"). Courts routinely have enforced narrative water quality-based limits in State-issued NPDES permits. *See, e.g., Natural Res. Def. Council v. Cty. of Los Angeles,* 725 F.3d 1194, 1205-06 (9th Cir. 2013) (enforcing California permit requirement prohibiting "discharges . . . that cause or contribute to the violation of the Water Quality Standards or water quality objectives"); *Nw. Envtl. Advocates v. City of Portland,* 56 F.3d 979, 985 (9th Cir. 1995) (enforcing Oregon permit condition that "no wastes shall be discharged and no activities shall be conducted which will violate water quality standards"); *see also* OVEC Br. at 17 n.3 (citing cases).

Such provisions are effluent limits subject to enforcement in a citizen suit both because they are "a permit or condition thereof," 33 U.S.C. § 1365(f)(6), and because they constitute "any restriction" upon a permitted discharge. *Id.* § 1362(11). Many EPA-issued NPDES permits, both individual permits and widely applicable general permits, are similarly structured with comparable narrative water quality-based effluent limits.<sup>3</sup> Moreover, EPA and WVDEP have pursued civil enforcement actions

<sup>&</sup>lt;sup>3</sup> See, e.g., EPA NPDES Permit No. NH0100099 for the Town of Hanover, New Hampshire, Part I.A.2 and .4 ("[t]he discharge shall not cause a violation of the water quality standards of the receiving water" and "the permittee shall not discharge into the receiving water any pollutant or combination of pollutants in toxic amounts"), <u>https://www3.epa.gov/region1/npdes/permits/2015/finalnh0100099permit.pdf;</u> see also EPA, 2015 Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, Part 2.2.1 ("Your discharge must be controlled as necessary to meet applicable water quality standards of all affected states (*i.e.*, your discharge must not cause or contribute to an exceedance of applicable water quality standards in any affected state)."), <u>https://www.epa.gov/sites/production/files/2015-10/documents/msgp2015\_finalpermit.pdf</u>.

to enforce such permit provisions. In 2011, EPA filed an action in the Northern District of West Virginia against Consol Energy, Inc., *et al.*, to enforce the very same water quality-based limit at issue here. *United States v. Consol Energy, Inc.,* No. 1:11-CV-28 (N.D. W.V.), Compl., Doc. 2, at 10-12. Notably, West Virginia filed a Complaint in Intervention alleging the same permit violations. *Id.*, Doc. 6-1, at 12-15.

#### **III. METHODS TO GAUGE COMPLIANCE**

Evaluating compliance with a narrative water quality-based limit can require rigorous technical judgment and case-specific analysis, as the voluminous discovery and trial record in this case attests. EPA has issued neither regulations nor guidance on the methods to measure compliance with narrative water quality-based limits (such as those embodied by Rule 5.1.f) specifically for the purposes of enforcement. However, the process for ascertaining whether a water is meeting narrative criteria for aquatic life and identifying causative stressors is well-established. EPA has applied this process in two settings: (1) periodically reviewing States' identification of waters that are "impaired" because they do not meet water quality standards, pursuant to CWA section 303(d); and (2) providing guidance to States with NPDES permitting authority to aid establishing permit conditions implementing State water quality standards, including narrative criteria.

For impaired-waters listing under section 303(d), in 2013, EPA reviewed West Virginia's 2012 list and identified the waters that EPA concluded were impaired, including proposed additions to West Virginia's list. J.A. 637. In doing so, EPA

explained that it would use at that time a methodology that had been developed by West Virginia (the West Virginia Stream Condition Index ("WVSCI")) "for assessing compliance with narrative water quality criteria," J.A. 548, noting that WVDEP had used WVSCI from 2002 to 2010 and WVDEP had acknowledged the method as "valid." J.A. 652.

In the context of NPDES permitting for discharges from surface mining, EPA issued guidance in 2011 to help State permit writers (subject to EPA oversight) interpret narrative water quality criteria, evaluate whether a discharge has a reasonable potential to cause or contribute to a violation of water quality standards and, where necessary, establish numeric effluent limits to prevent such a violation, including for conductivity.<sup>4</sup> The 2011 Guidance provides scientific data and recommendations to permit writers in assessing the effects of ionic pollution (such as from salts of sulfate and bicarbonate) from surface coal mining operations on downstream water quality and aquatic life measured by the indicator of conductivity. While the 2011 Guidance emphasized that application of narrative water quality criteria is a case-specific determination, the peer-reviewed studies discussed in the 2011 Guidance establish that "high levels of salts, measured as TDS [total dissolved solids]or conductivity, are a primary cause of water quality impairments downstream from mine discharges."

<sup>&</sup>lt;sup>4</sup> See EPA, Improving EPA Review of Appalachian Surface Coal Mining Operations, July 21, 2011, <u>https://www.epa.gov/sc-mining/july-2011-memorandum-improving-epa-review-appalachian-surface-coal-mining-operations-under</u> ("2011 Guidance").

2016 Guidance, Appendix 1, at ii. The 2011 Guidance is limited to the Appalachian region, and EPA explained that the conductivity levels that coincide with the impairment of aquatic life use will vary from region to region. *Id.* at 5, 16. The 2011 Guidance also identifies bioassessment indices, such as WVSCI, as one approach for setting numeric water quality limits in NPDES permits. *Id.* at 20.

Thus, in its oversight role under CWA sections 303(d) and 402 (which approved States administer in the first instance), at the time the district court considered the issue, EPA had identified certain methods and relevant scientific information that could be used in appropriate circumstances to assess whether a waterbody meets a State's narrative water quality criteria and whether a discharge is causing or contributing to a violation of standards. While assessing compliance with a narrative permit condition in an enforcement setting is a different task, the analytical steps are analogous as both require, among other things, consideration of the best available scientific and technical analysis.

The district court undertook a two-step, fact-specific inquiry to ascertain Fola's compliance with the narrative limit of Rule 5.1.f, which included a multi-day trial on liability, review of relevant EPA and other peer-reviewed scientific studies, and expert testimony. *See* J.A. 589-611. The first step addressed whether the waterbody is meeting the narrative criteria (*i.e.*, whether there is a violation of state standards), and the second examined whether the discharge of ionic pollution by surface coal mining, generally, and by Fola, specifically, is causing or contributing to that violation. For the

first step – determining whether the waterbody is meeting the narrative criteria – the district court determined that compliance "must be determined based on a reasoned and meaningful methodology," which the district court reasonably determined to be "WVDEP's prescribed WVSCI methodology." J.A. 577-78.

In step two, the district court used conductivity to evaluate whether Fola's discharges caused or contributed to the stream impairment indicated by the WVSCI score. See J.A. 590, 608-09. While the United States takes no position on the district court's specific findings or the details of its analysis (which would go beyond the Court's questions), the district court's choice of conductivity, generally, as a metric for evaluating compliance was a reasonable one. As established in numerous peerreviewed scientific studies addressing mining discharges in Appalachia, including several by EPA, evaluating conductivity levels, while not legally-mandated, can be useful for interpreting narrative criteria and is "one option that would generally be an appropriately protective and scientifically defensible approach consistent with the CWA." 2011 Guidance at 16; see also J.A. 589, 593 (WVDEP "accepts that increased conductivity causes or materially contributes to decreases in aquatic life"). Furthermore, the United States agrees that a "multifold increase in conductivity" consistent with surface mine drainage to an impaired waterbody would give rise to a reasonable inference, at least, that the mining discharges cause or contribute to the impairment. See J.A. 607-09.

Respectfully submitted,

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Dated: October 6, 2016 DJ # 90-12-14788

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s/ David S. Gualtieri DAVID S. GUALTIERI COUNSEL FOR THE UNITED STATES

DATED: October 6, 2016

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S/ David S. Gualtieri DAVID S. GUALTIERI COUNSEL FOR THE UNITED STATES

DATED: October 6, 2016

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