

Coal and Water: Reclaiming the Clean Water Act for Environmental Protection

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*No one has the right to use America's rivers and America's waterways, that belong to all the people, as a sewer. The banks of a river may belong to one man or one industry or one state, but the waters which flow between the banks should belong to all the people.*¹

—Lyndon B. Johnson, upon signing the Clean Water Act of 1965

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1. *Environmental Quotes*, GRINNINGPLANET.COM, <http://www.grinningplanet.com/6001/environmental-quotes.htm#rivers> (last visited Sept. 19, 2011).

Developing domestic sources of carbon-based energy has long been an important policy goal for the United States. However, the extraction of energy resources can cause adverse environmental consequences. Tension between competing interests arises through the interaction of the Clean Water Act (CWA), the National Environmental Policy Act (NEPA), the Surface Mining Control and Reclamation Act (SMCRA), and related federal agency decisions. Where the CWA and NEPA set clear ideals favoring the protection of aquatic resources—respectively seeking to maintain the integrity of the nation’s waters and to promote efforts preventing damage to the environment—the government’s interest in developing domestic energy sources, per SMCRA, often overrides these ideals, in the name of cheap, bountiful energy.

This Article will analyze recent case law developments involving the interaction between the CWA, NEPA, and energy extraction, with a particular focus on the issues posed by mountaintop removal coal mining. In general, competing interests have caused a great deal of confusion for courts that have reviewed the environmental impacts of these energy-related activities. However, an overall trend of deference towards energy resource extraction is evident—to the detriment of CWA and NEPA intent. Amidst this disorder, the Environmental Protection Agency (EPA) and citizen groups are currently struggling to reclaim the CWA as an instrument of environmental protection.

I. STATUTORY AND REGULATORY BACKGROUND

Before delving into the case law, a brief examination of the relevant statutory and regulatory background is necessary.

A. NEPA

NEPA requires all federal agencies to consider the environmental impacts of major federal actions to facilitate environmentally informed decision making, minimizing environmental degradation.² NEPA does not demand any particular result—only that agencies follow the proper procedure and take a “hard look” at the possible environmental effects of their actions.³ NEPA requires that agencies proposing major federal actions “significantly affecting” the human environment complete an Environmental Impact Statement (EIS) before commencing the project.⁴

2. See National Environmental Policy Act, 42 U.S.C. §§ 4321-4370f (2006).

3. *Ohio Valley Envtl. Coal. v. Aracoma Coal Co. (OVEC II)*, 556 F.3d 177, 191 (4th Cir. 2009) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989)).

4. 42 U.S.C. § 4332(C).

The purpose of the EIS is to make detailed information about a project's environmental impacts available to both agency decision makers and the public, in order to ensure that the potential environmental impacts of a project are considered in the decision-making process.⁵ Pursuant to the Council on Environmental Quality (CEQ) regulations, the EIS must also address indirect and cumulative impacts and alternatives to the proposed action, while providing the interested public a chance to participate at various stages of the process.⁶ A “cumulative impact” is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions[, including impacts] from individually minor but collectively significant actions taking place over a period of time.”⁷

“Significance” is dependent upon the context, intensity, and severity of the impact.⁸ Prior to undertaking an EIS, in order to determine whether an action will rise to the level of “significance,” an agency may prepare an Environmental Assessment (EA).⁹ Through the EA process, an agency determines whether it must prepare a full EIS or make a “finding of no significant impact” (FONSI).¹⁰ In some instances, an agency may issue a “mitigated FONSI”—if it can impose mitigating measures that reduce the impact of an action below the level of significance.¹¹ By issuing a mitigated FONSI, the agency may avoid preparation of a full-scale EIS.¹²

B. CWA

The purpose of the CWA is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”¹³ To further this aim, the CWA prohibits the discharge of pollutants into waters of the United States without a permit.¹⁴ Section 402 of the CWA authorizes discharges under the National Pollutant Discharge Elimination System

5. *Robertson*, 490 U.S. at 349.

6. *See* 40 C.F.R. §§ 1502.3, 1502.14, 1508.7, 1508.8 (2011).

7. *Id.* § 1508.7.

8. *OVEC II*, 556 F.3d at 191 (citing 40 C.F.R. § 1508.27 (2008)).

9. *Id.* (citing 40 C.F.R. § 1501.4(b)).

10. *Id.* (citing 40 C.F.R. § 1508.9(a)(1)).

11. *Id.* at 191-92 (quoting *Spiller v. White*, 352 F.3d 235, 241 (5th Cir. 2003)) (citing *Roanoke River Basin Ass’n v. Hudson*, 940 F.2d 58, 62 (4th Cir. 1991)).

12. *Id.*

13. Federal Water Pollution Control (Clean Water) Act, 33 U.S.C. § 1251(a) (2006).

14. *Kentuckians for the Commonwealth, Inc. v. Rivenburgh (KFTC I)*, 204 F. Supp. 2d 927, 932 (S.D. W. Va. 2002) (citing 33 U.S.C. §§ 1311(a), 1362(7), (12)), *vacated*, 317 F.3d 425 (4th Cir. 2003).

(NPDES) for “point sources”¹⁵ of pollution, when the EPA has granted a permit conditioning the terms of the discharge.¹⁶ Section 404 authorizes permits for discharges of “dredged” or “fill” material, which are granted by the Army Corps of Engineers (Corps).¹⁷ However, the EPA may withdraw or prohibit specification of a section 404 permit where a discharge “will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas . . . , wildlife, or recreational areas.”¹⁸

Similarly, the Corps must follow CWA guidelines in deciding whether to issue section 404 permits. Discharges that “will cause or contribute to significant degradation of the waters of the United States” are prohibited.¹⁹ “Significant degradation” occurs where a discharge has “[s]ignificantly adverse effects on human health or welfare, on aquatic life and other wildlife dependent on aquatic ecosystems, on aquatic ecosystem diversity, productivity, and stability, or on recreational, aesthetic, and economic values.”²⁰ In addition, the Corps must “[d]etermine the nature and degree of effect that the proposed discharge will have, both individually and cumulatively, on the structure and function of the aquatic ecosystem and organisms.”²¹ To the extent that issuance of a section 404 permit will cause a violation of water quality standards, the permittee must “avoid and minimize stream impacts to the extent practicable” and “mitigate for any unavoidable loss of stream functions by restoring, recreating, or preserving other waters.”²² The Corps must also evaluate section 404 permit applications by balancing

15. “Point source” is defined by the CWA as “any discernible, confined and discrete conveyance . . . from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14). “Pollutant” is defined as “dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water.” *Id.* § 1362(6).

16. *Id.* § 1342.

17. *Id.* § 1344(a).

18. *Id.* § 1344(c). The language of CWA § 404(c) suggests that even permits that have already been granted by the Corps can be revoked by the EPA: “The Administrator is authorized to prohibit the specification (*including the withdrawal of specification*) of any defined area as a disposal site.” *Id.* (emphasis added).

19. 40 C.F.R. § 230.10(c) (2011).

20. *OVEC II*, 556 F.3d 177, 191 (4th Cir. 2009) (alteration in original) (internal quotation marks omitted) (citing 40 C.F.R. § 230.10(c) (2008)).

21. 40 C.F.R. § 230.11(e).

22. Sam Evans, *Voices From the Desecrated Places: A Journey To End Mountaintop Removal Mining*, 34 HARV. ENVTL. L. REV. 521, 539 (2010) (citing 33 C.F.R. §§ 332.1(c)(2), 332(a) (2009)).

the expected benefits of a proposed discharge against its “reasonably foreseeable detriments.”²³

The legislative history of the CWA suggests that Congress did not intend section 404 permits to apply to discharges intended for the purpose of waste or pollutant disposal.²⁴ Rather, the legislative history contemplates a bifurcated approach where section 404 “dredge and fill” permits are intended solely for “useful” purposes, “bringing an area of the navigable waters into a use,”²⁵ while section 402 NPDES permits regulate disposal of “waste, refuse, and pollutants.”²⁶ To wit, from 1977 to 2002, the Corps regulations defined “fill material”—the “discharge” regulated under section 404 permits—as:

any material used for the primary purpose of replacing an aquatic area with dry land or of changing the bottom elevation of an [sic] waterbody. The term does not include any pollutant discharged into the water primarily to dispose of waste, as that activity is regulated under section 402 of the Clean Water Act.²⁷

With litigation pending in 2002, the EPA and Corps jointly amended this section of the regulations to affirmatively embrace the inclusion of mining waste within the definition of “fill material.”²⁸ Notwithstanding this subsequent embrace, the original 1977 regulatory definition better reflected the environmentally protective legislative intent of the CWA.²⁹

While “point source” discharges are addressed by section 402 of the CWA, subject to NPDES permits, “nonpoint source discharges are not defined by the Act.”³⁰ Instead, Congress put the onus on states to develop water quality standards applicable to nonpoint discharges into intrastate waters.³¹ State standards must include the designation of a use for each

23. 33 C.F.R. § 320.4 (a)(1) (2011).

24. *KFTC I*, 204 F. Supp. 2d 927, 935 (S.D. W. Va. 2002), *vacated*, 317 F.3d 425 (4th Cir. 2003).

25. *Id.* at 937 (internal quotation marks omitted) (citing 33 U.S.C. § 1334(f)). The court cited § 1334(f) incorrectly; the correct section is § 1344(f).

26. *Id.* at 935-36 (noting the traditional distinction between the Rivers and Harbors Act and Refuse Act, upon which sections 404 and 402 of the CWA are respectively based); *see id.* at 933 (noting further that the portion of the CWA allowing for dredge and fill permits was included amid concerns that section 402 permitting would inhibit the dredging necessary to maintain the nation’s port system).

27. 33 C.F.R. § 323.2(e) (2001).

28. Final Revisions to the Clean Water Act Regulatory Definitions of “Fill Material” and “Discharge of Fill Material,” 67 Fed. Reg. 31,129 (May 9, 2002) (to be codified at 33 C.F.R. pt. 323 and 40 C.F.R. pt. 232).

29. *See* 33 C.F.R. § 323.2(e) (2001).

30. *Pennaco Energy, Inc. v. EPA*, 692 F. Supp. 2d 1297, 1300 (D. Wyo. 2009) (quoting *Am. Wildlands v. Browner*, 260 F.3d 1192, 1193-94 (10th Cir. 2001)).

31. *Id.* (quoting *Browner*, 260 F.3d at 1193-94).

water body,³² the levels of pollutants or pollutant parameters that may exist without impairing the designated use, and an antidegradation review policy “assess[ing] activities that may lower the water quality of the water body.”³³ After state adoption or revision of water quality standards, the standards are submitted to the EPA for review, and the agency then makes a determination whether they are consistent with the CWA.³⁴

C. SMCRA

SMCRA epitomizes the tension between resource extraction and environmental protection. 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.”³⁵ The Act sets out a “cooperative federalism” approach, setting minimum federal standards for surface mining and authorizing the states to promulgate plans that must at least meet the minimum federal standards when the state demonstrates it is capable of enforcing the law.³⁶ Once the Secretary of the Interior has approved a state regulatory program, the state has “primacy”—a “status under which its law exclusively regulates coal mining in the State.”³⁷

SMCRA also contains a savings clause, providing that the Act shall not “be construed as superseding, amending, modifying, or repealing the . . . Clean Water Act, the State laws enacted pursuant thereto, or other Federal laws relating to preservation of water quality.”³⁸ As a result, in order to deposit the “overburden”³⁹ resulting from mountaintop removal mining in adjacent valley watersheds, the mining operator must first apply for and receive a section 404 permit from the Corps.⁴⁰ If the

32. Such uses may include, inter alia, recreation or protection of aquatic life.

33. *Pennaco*, 692 F. Supp. 2d at 1300-01 (quoting *Browner*, 260 F.3d at 1194).

34. *Id.* at 1301 (citing *Browner*, 260 F.3d at 1194).

35. *Bragg v. W. Va. Coal Ass’n (Bragg II)*, 248 F.3d 275, 288 (4th Cir. 2001) (citing 30 U.S.C. § 1202(a), (d), (f); *Hodel v. Va. Surface Mining & Reclamation Ass’n*, 452 U.S. 264, 268-69 (1981)).

36. *Id.* (citing 30 U.S.C. § 1253(a)).

37. *Id.* at 289 (citing 30 C.F.R. § 948.10 (2000)).

38. *KFTC I*, 204 F. Supp. 2d 927, 941 (S.D. W. Va. 2002) (quoting 30 U.S.C. § 1292(a)(3)), *vacated*, 317 F.3d 425 (4th Cir. 2003).

39. “Overburden” is a term of art related to surface mining. Basically, it is the top of a mountain—the soil and rock found above a seam of coal that must be removed in the course of surface coal mining operations. See *Evans*, *supra* note 22, at 522.

40. *OVEC II*, 556 F.3d 177, 190 (4th Cir. 2009) (citing 33 U.S.C. § 1344 (2000)).

project involves a point source discharge of pollutants into navigable waters, the operator must also obtain a section 402 NPDES permit.⁴¹

At least one court has concluded that SMCRA's CWA savings clause does not contemplate overburden disposal in valley streams, as that "would be inconsistent with the CWA and it would be trumped by the CWA."⁴² SMCRA further requires that surface mining operators return overburden to the mountaintop removal site, in order to "restore the approximate original contour (AOC) of the land."⁴³ In addition, SMCRA's regulations contain a stream "buffer zone rule," which only permits mining operations within 100 feet of a perennial or intermittent stream where "[s]urface mining activities will not cause or contribute to the violation of applicable State or Federal water quality standards, and will not adversely affect the water quantity and quality or other environmental resources of the stream."⁴⁴

D. APA

Agency actions alleged to be in violation of NEPA or the CWA are subject to judicial review under the Administrative Procedure Act (APA).⁴⁵ As a general rule, agency actions challenged under the APA will be "set aside only when they are 'found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.'"⁴⁶ Although this standard is "highly deferential, with a presumption in favor of finding the agency action valid," the reviewing court must also "engage in a 'searching and careful' inquiry of the record."⁴⁷

The Supreme Court's ruling in *Chevron, U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, articulated a two-step approach for assessing the validity of an agency's statutory interpretation under APA review.⁴⁸ The reviewing court is to first determine whether the intent of

41. *Id.* (citing 33 U.S.C. §§ 1342, 1362(12)). Section 402 permits are issued either by the EPA or an EPA-approved state authority, such as the West Virginia Department of Environmental Protection. The federal permitting authority also requires certification from the approved state regulator that discharges from the mining operation will "comply with all applicable water quality standards." *Id.*

42. *KFTC I*, 204 F. Supp. 2d at 941.

43. *Id.* (quoting 30 U.S.C. § 1265(b)(3)). Waivers to the AOC requirement are only allowed where they serve a "constructive primary purpose" improving the site to an "equal or better economic or public use." *Id.* at 941-42; see 30 U.S.C. § 1265(e)(3)(A) (2006).

44. *KFTC I*, 204 F. Supp. 2d at 942 (quoting 30 C.F.R. § 816.57).

45. *OVEC II*, 556 F.3d at 192 (citing 5 U.S.C. § 702 (2006)).

46. *Id.* (quoting 5 U.S.C. § 706(2) (2000)) (citing *Citizens To Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 413-14 (1971)).

47. *OVEC II*, 556 F.3d at 192 (quoting *Natural Res. Def. Council, Inc. v. EPA*, 16 F.3d 1395, 1400 (4th Cir. 1993); *Overton Park*, 401 U.S. at 416).

48. 467 U.S. 837, 842-43 (1984).

Congress is clear as to the precise question at issue.⁴⁹ Where Congress has clearly spoken, that is the end of the analysis.⁵⁰ However, “if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency’s answer is based on a permissible construction of the statute.”⁵¹ Consequently, where statutory ambiguity exists, a court must exercise deference to agency interpretation, unless the interpretation is “plainly erroneous or inconsistent with the regulation.”⁵²

The APA also requires federal agencies to follow certain procedures when promulgating regulations. When engaging in “notice and comment” rulemaking, an agency must publish a general notice of proposed rulemaking in the Federal Register.⁵³ The published notice must include either a proposed rule or a “description of the subjects and issues involved.”⁵⁴ Following the agency’s “notice” publication, the agency must provide the opportunity for “interested persons” to participate in the rulemaking, through submissions of their views on the proposal.⁵⁵ After considering all “comment” submissions, the agency incorporates in the rules a “concise general statement of their basis and purpose.”⁵⁶

Formal “notice and comment” procedures are not required where the agency action is an “interpretative rule” or “general statement[] of policy.”⁵⁷ In assessing whether an agency action is a “legislative rule” requiring formal notice and comment rulemaking, a court will look at whether the agency action has the “force and effect of law.”⁵⁸ To reach this determination, the court analyzes whether the rule

“narrowly constrict[s] the discretion of agency officials by largely determining the issue addressed”; and “[has] substantive legal effect”. . . If an agency adopts a new position inconsistent with an existing regulation, or

49. *Id.*

50. *Id.*

51. *Id.* at 843.

52. *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410, 414 (1945).

53. 5 U.S.C. § 553(b) (2006).

54. *Id.* § 553(b)(3).

55. *Id.* § 553(c).

56. *Id.*

57. *Id.* § 553(b)(3)(A).

58. *See Nat’l Mining Ass’n v. Jackson*, 768 F. Supp. 2d 34, 48 (D.D.C. 2011) (quoting *Appalachian Power Co. v. EPA*, 208 F.3d 1015, 1020 (D.C. Cir. 2000)).

effects a substantive change in the regulation, notice and comment are required.⁵⁹

If an agency fails to follow the prescribed notice and comment procedures, the offending action may be challenged under sections 702 and 706 of the APA.⁶⁰ The reviewing court will set aside the agency action if it is found to be “arbitrary, capricious, . . . otherwise not in accordance with law; [or] in excess of statutory jurisdiction, authority, or limitations.”⁶¹

II. COAL AND WATER APPLIED: CASE STUDIES IN MOUNTAINTOP REMOVAL MINING

A. *Recent Historical Developments*

*The mining industry is dismantling the ancient mountains and pristine streams of Appalachia through a form of strip-mining known as mountaintop removal. Mining companies blow off hundreds of feet from the tops of mountains to reach the thin seams of coal beneath. Colossal machines dump the mountaintops into adjacent valleys, destroying forests and communities and burying free-flowing mountain streams in the process.*⁶²

—Robert F. Kennedy, Jr.

Since the 1990s, mountaintop removal has become the dominant form of coal mining in Appalachian America.⁶³ The process is as described above: to get at the coal buried beneath the mountain surface, holes are drilled and packed with explosives.⁶⁴ The explosives are then detonated, effectively removing the top of the mountain. The resulting mixture of dirt and rock that formerly composed the mountain’s top is artfully termed “overburden” or “spoil” and is routinely disposed of by way of “valley fills”—waste rock and dirt is dumped into adjacent valleys.⁶⁵ As a result, the mountain streams that often run into

59. *Id.* (first and third alterations in original) (quoting *Batterton v. Marshall*, 648 F.2d 694, 701-02 (D.C. Cir. 1980)) (citing *U.S. Telecom Ass’n v. FCC*, 400 F.3d 29, 35 (D.C. Cir. 2005)).

60. *See* 5 U.S.C. § 702 (“A person suffering legal wrong because of agency action, or adversely affected or aggrieved by agency action . . . is entitled to judicial review.”).

61. *Id.* § 706(2)(A), (C).

62. ROBERT F. KENNEDY, JR., *CRIMES AGAINST NATURE* 114 (2004).

63. Evans, *supra* note 22, at 523-24 (citing M.A. Palmer et al., *Mountaintop Mining Consequences*, 327 *SCIENCE* 148, 148 (2010)).

64. *Id.* at 524 (citing U.N. Comm’n on Sustainable Dev., 15th Sess., *Appalachian Coalfield Delegation Position Paper on Sustainable Energy* 9 (2007) (Harvard Ayers et al.)).

65. *KFTC I*, 204 F. Supp. 2d 927, 930 (S.D. W. Va. 2002), *vacated*, 317 F.3d 425 (4th Cir. 2003).

Appalachian valleys are effectively covered and obliterated, along with any life within.⁶⁶

Because valley fills have the effect of filling waters of the United States, mountaintop removal mining operations require CWA permits—often under both section 402 and section 404.⁶⁷ Since these discharges tend to bury mountain streams, mining permits granted under these sections have been challenged on NEPA and CWA grounds.

In *Kentuckians for the Commonwealth, Inc. v. Rivenburgh (KFTC I)*, the plaintiff citizens' group (KFTC) alleged that the Corps had improperly granted a section 404 permit on behalf of Martin County Coal Corporation (MCCC), for a proposed mountaintop removal coal mining project in Martin County, Kentucky.⁶⁸ The Corps authorized the project under a section 404 nationwide permit (NWP), which is available for actions that “will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effects on the environment.”⁶⁹ NWP-21 permits apply to activities related to surface coal mining.⁷⁰ The District Court for the Southern District of West Virginia noted that all NWP-21 permits issued in 2000 “impacted a total of 460,575 linear feet (approximately 87 miles) of stream.”⁷¹ Approximately eighty-five miles of the affected stream in this total occurred in the Huntington, West Virginia Corps' district.⁷²

The plaintiff in *KFTC I* argued that the “primary purpose of valley fills is to dispose of waste,” and therefore the section 404 permit issued to MCCC violated the Corps' own section 404 regulations.⁷³ Under these regulations, discharges with the primary purpose of “waste disposal” are specifically excluded from the definition of permissible fill material for section 404 permits.⁷⁴

The Corps defended its practice of issuing section 404 permits for valley fills under NWP-21, despite the discharge's characterization as mining waste, by arguing that its long-standing use of the EPA's definition of “fill material” allows it to grant section 404 permits for any

66. *Id.*

67. *OVEC II*, 556 F.3d 177, 190 (4th Cir. 2009) (citing 33 U.S.C. §§ 1342(c), 1344 (2000)).

68. 204 F. Supp. 2d at 930.

69. *Id.* at 930 n.2 (quoting 33 U.S.C. § 1344(e)(1)).

70. *Id.*

71. *Id.* at 930 (citing *Kentuckians for the Commonwealth, Inc. v. Rivenburgh*, 204 F.R.D. 301, 305 n.3 (S.D. W. Va. 2001)).

72. *Id.*

73. *Id.* (citing 33 C.F.R. § 323.2(e)).

74. *See* 33 C.F.R. § 323.2(e) (2011).

purpose, including waste disposal of overburden by valley fill.⁷⁵ The EPA defines “fill material” as “any ‘pollutant’ which replaces portions of the ‘waters of the United States’ with dry land or which changes the bottom elevation of a water body for any purpose.”⁷⁶ However, section 404 of the CWA nonetheless requires fill to have some type of beneficial purpose, providing for the discharge of fill material “incidental to any activity having as its purpose bringing an area of the navigable waters into a use to which it was not previously subject.”⁷⁷

The district court, applying step one of the *Chevron* test, held that the long-standing Corps practice of issuing section 404 permits for valley fills violated the clear congressional intent of the CWA and was beyond the authority of the Corps.⁷⁸ While acknowledging that the EPA definition of “fill material” introduced some ambiguity into its review,⁷⁹ the court ultimately determined, following a lengthy consideration of the legislative history and purpose of the CWA, that the text of section 404 and the Corps’ own regulatory definition of “fill material” did not support approval of section 404 permits for the purpose of mining waste disposal.⁸⁰ Holding that “Congress did not, however, authorize cheap waste disposal when it passed the Clean Water Act,” the court broadly enjoined the Huntington Corps District from issuing mountaintop removal overburden valley fill permits solely for waste disposal under section 404 and ruled that only Congress could change the definition of “fill material” under the CWA to include discharges for the purpose of waste disposal.⁸¹

On appeal, the United States Court of Appeals for the Fourth Circuit overturned the district court’s ruling. The Fourth Circuit unanimously held that the district court’s injunction blocking future issuance of section 404 permits under NWP-21 in the Huntington Corps District was overbroad.⁸² A majority of the court also held that the Corps’ general interpretation of section 404 in favor of permitting valley fills for disposal of mining waste was valid.⁸³ Because the plaintiffs in *KFTC I* had only alleged an injury-in-fact with regard to the Corps’ issuance of a

75. *KFTC I*, 204 F. Supp. 2d at 943.

76. *Id.* at 938 (citing 40 C.F.R. § 232.2).

77. 33 U.S.C. § 1344(f)(2) (2006).

78. *KFTC I*, 204 F. Supp. 2d at 946.

79. *Id.* at 938-39.

80. *Id.* at 946.

81. *Id.* at 945-46.

82. *Kentuckians for the Commonwealth, Inc. v. Rivenburgh (KFTC II)*, 317 F.3d 425, 430 (4th Cir. 2003).

83. *Id.* at 447.

section 404 permit to MCCC, the Fourth Circuit concluded that the injunction issued by the district court was “far broader than necessary to provide Kentuckians complete relief.”⁸⁴

The Fourth Circuit applied *Chevron* differently than the district court, finding that the Corps could properly issue a section 404 permit to MCCC primarily for the purpose of waste disposal. Where the district court had found clear congressional intent against permitting discharges for waste disposal under section 404, the Fourth Circuit found statutory ambiguity.⁸⁵ As a result, the Fourth Circuit moved to *Chevron* step two and deferred to the Corps’ long-standing practice of issuing such permits, holding that “it was not plainly erroneous or inconsistent with the [Corps’] regulation for the Corps to have asserted that its use of the term ‘waste’ in the 1977 Regulation was not intended to defer to the EPA on all material deposited for disposal.”⁸⁶

In sum, the Fourth Circuit majority found that because the CWA created a statutory role for both the Corps and EPA,⁸⁷ the Corps could ignore its own regulations defining the permissible scope of section 404 permits and adopt an ambiguous EPA definition of “fill material.” Thus, the Corps was allowed to act in contravention of the text of its own regulation and the statutory purpose of the CWA. Judge Luttig dissented from this part of the court’s decision.⁸⁸ While concluding that the issue of the validity of the Corps’ interpretation of section 404 was not actually presented in the litigation,⁸⁹ Judge Luttig’s dissent also expressed discomfort with the majority’s holding on the issue, stating:

As the majority correctly recites, the agency interpretation must not be “inconsistent with the text of the regulation.” . . . While the majority asserts that the Corps’ assumed interpretation is consistent with the term “waste” as used in the regulations, it completely fails to analyze whether that interpretation is consistent with the “primary purpose” test also established by the regulations. And how the deposit of mining spoil into waters of the United States for purposes of disposal has the *primary purpose* of creating dry land or elevating the waterbody is, at the very least, not immediately obvious.⁹⁰

Prior to overruling the district court in *KFTC I*, the Fourth Circuit had similarly overturned an earlier ruling—*Bragg v. Robertson* (*Bragg*

84. *Id.* at 436.

85. *Id.* at 445.

86. *Id.* at 447.

87. *Id.*

88. *Id.* at 451-52 (Luttig, J., concurring in part and dissenting in part).

89. *Id.* at 448-49.

90. *Id.* at 451.

I)—by the same District Court for the Southern District of West Virginia, in *Bragg v. West Virginia Coal Ass’n (Bragg II)*. In *Bragg I*, the district court had ruled in favor of the plaintiff, finding that mountaintop removal mining permits issued by the West Virginia Division of Environmental Protection (WVDEP) violated certain SMCRA requirements.⁹¹ In particular, the district court held that the Director of WVDEP had failed to make the requisite findings under the stream buffer rule as to the impact of granting the permit on water quality.⁹² According to the district court: “[T]he Director has a nondiscretionary duty under the buffer zone rule to deny variances for valley fills in intermittent and perennial streams because they necessarily adversely affect stream flow, stream gradient, fish migration, related environmental values, water quality and quantity, and violate state and federal water quality standards.”⁹³

On appeal, the Fourth Circuit reversed the injunction issued by the district court on the grounds that the Director was a state official acting under the authority of state law and therefore had sovereign immunity from federal lawsuits under the Eleventh Amendment of the United States Constitution.⁹⁴ Because of SMCRA’s “cooperative federalism” approach, which cedes exclusive regulatory authority to the state once the Secretary of Interior has approved the state’s parallel version of SMCRA, the Fourth Circuit held that only a West Virginia state court could properly hear the plaintiff’s challenge.⁹⁵ Alternatively, upon a finding by the Secretary of the Interior that West Virginia’s SMCRA program violated minimum federal standards, the Secretary could have initiated an enforcement proceeding to revoke West Virginia’s authority to regulate surface mining.⁹⁶ Here, the Fourth Circuit noted that West Virginia had enacted legislation with a citizen-suit provision mirroring the federal statute in SMCRA, allowing affected individuals the right to bring suit in state court, to uphold state law.⁹⁷ Thus, the federal interest in assuring compliance with the minimum SMCRA standards could be vindicated in the more appropriate state court forum.⁹⁸

91. *Bragg v. Robertson (Bragg I)*, 72 F. Supp. 2d 642, 661 (S.D. W. Va. 1999), *vacated sub nom. Bragg II*, 248 F.3d 275 (4th Cir. 2001).

92. *Id.*

93. *Id.* at 663.

94. *Bragg II*, 248 F.3d at 298.

95. *Id.* at 294-95.

96. *Id.* at 297.

97. *Id.* (citing W. VA. CODE § 22-3-25).

98. *Id.* (citing *Idaho v. Coeur d’Alene Tribe of Idaho*, 521 U.S. 261, 274 (1997) (opinion of Kennedy, J.)).

More recently, the Fourth Circuit once again overruled a decision by the United States District Court for the Southern District of West Virginia, in *Ohio Valley Environmental Coalition v. Aracoma Coal Co. (OVEC II)*. In the district court, the plaintiffs challenged four permits issued by the Corps to fill headwater streams incidental to a planned mountaintop removal coal mining operation, arguing that the Corps violated NEPA and the CWA.⁹⁹ Specifically, OVEC alleged that the Corps failed to prepare an EIS adequately assessing the environmental impacts of the proposed mining operation and improperly evaluated the “structure and function” of the streams impacted by the fill, as required by the CWA.¹⁰⁰

The district court ruled in favor of the plaintiffs on multiple claims. First, the court held that the Corps failed to comply with the CWA section 404(b)(1) Guidelines,¹⁰¹ which require the Corps to “assess the effects of the discharge on the ‘structure and function’ of the aquatic ecosystem.”¹⁰² In this case, the Corps relied upon “one-time, structural measurements” of the streams to be filled as a surrogate for the regulatory requirement that it consider effects on both “structure and function.”¹⁰³ The Corps defended its action by claiming that it was exercising its best professional judgment that the mitigation provided for in the permits would offset any lost functional value.¹⁰⁴ The court disagreed, holding that while the Corps was entitled to deference on how to measure “structure and function,” here, the Corps’ “best professional judgment” did not meet the obligations of the CWA and the section 404(b)(1) Guidelines because it failed to assess the stream functions lost under the permits.¹⁰⁵ In this regard, the court was persuaded by OVEC’s expert witnesses, who had testified that “functions better reflect the overall health and role of the stream as an aquatic resource” by providing valuable ecological services such as nutrient processing and contaminant removal.¹⁰⁶

The court also held that the Corps failed to properly consider the ecological attributes of headwater streams that would be filled under the

99. *Ohio Valley Env'tl. Coal. v. U.S. Army Corps of Eng'rs (OVEC I)*, 479 F. Supp. 2d 607, 614 (S.D. W. Va. 2007), *rev'd and vacated sub nom. OVEC II*, 556 F.3d 177 (4th Cir. 2009).

100. *Id.* at 616.

101. *See id.* at 624. The EPA promulgated the CWA section 404(b)(1) Guidelines, which the Corps subsequently incorporated into its own regulations. *Id.* (citing 33 C.F.R. §§ 320.4(b)(4), 325.2(a)(6)).

102. *Id.* at 631 (quoting 40 C.F.R. § 230.11(e)).

103. *Id.* at 633.

104. *Id.* at 634-35.

105. *Id.* at 635-36.

106. *Id.* at 632.

permits.¹⁰⁷ While the Corps reported “measurements and observations” of the impacted streams, the court noted that its FONSI did not “evaluate the loss of these resources in terms of their functional values,” offering “no discussion of the role of headwaters in the aquatic ecosystem.”¹⁰⁸ Here again, the court was persuaded by OVEC’s expert testimony that “burying substantial lengths of headwaters constituted a serious danger to the aquatic ecology in several ways, clearly a set of adverse impacts under the CWA and NEPA.”¹⁰⁹ In sum, the court determined that the Corps’ analysis of “structure and function” did not meet the requisite CWA standards. The court explained, “The Corps has evaluated the physical structure of the streams and partially considered impacts to these streams as habitat, but has given no more than lip service to the other attributes of headwaters that must be considered in assessing the structure and function of a stream.”¹¹⁰

Despite its superficial consideration of the functions of the aquatic ecosystem to be filled and the effects of filling headwater streams, the Corps argued that its mitigation plan would adequately compensate for the functions lost, rendering the overall impact of the action “not significant.”¹¹¹ The court rejected this argument, as well. Because the Corps failed to adequately consider the impacts of burying streams and failed to “assess the streams’ ecological value properly in the first place,” its conclusion that the proposed mitigation measures would offset the adverse environmental impacts of the valley fills was arbitrary and capricious.¹¹²

The court also held that the Corps’ proposed mitigation was arbitrary and capricious on independent grounds. In its mitigation plan, the Corps had proffered three mitigation techniques: stream enhancement, stream restoration, and stream creation.¹¹³ Evaluating these techniques, the court found that the Corps offered “no reasoned explanation for equating the enhancement of existing habitat in a

107. *Id.* at 639.

108. *Id.* at 638.

109. *Id.*

110. *Id.* at 636.

111. *Id.* at 631.

112. *Id.* at 642-43.

113. *See id.* at 644-45. Stream enhancement techniques include “stabilizing stream banks, placing rocks or logs in streams to improve habitat or alter flow patterns, and planting vegetation along the riparian areas.” *Id.* at 644. Stream restoration addresses segments of the stream temporarily dammed to collect sediment from the valley fills and involves the removal of dams and reconstruction of the impacted stream channels, as a replica of the original. Stream creation involves the conversion of sediment ditches used to collect runoff produced by mining operations into intermittent streams—or a facsimile thereof. *Id.* at 644-45.

perennial stream with the complete destruction of headwater streams” and that the record contained no scientific evidence that the Corps would be able to successfully create new streams from reclaimed mining sediment ditches.¹¹⁴ The court also noted comments that the United States Fish and Wildlife Service provided to the Corps, which stated that “there was no scientific support for the concept that these ditches could be considered ‘even rough approximations’ biologically of a stream.”¹¹⁵

Finally, the court held that the Corps failed to adequately consider the cumulative impacts of granting the permits, as required by NEPA.¹¹⁶ Noting the extensive mining already prevalent in the vicinity of the proposed valley fills, and the concomitant “seriously degrade[d] water quality,” the court found that the Corps had not explained how further destruction of streams in the affected watersheds would not contribute to a cumulatively adverse effect on aquatic resources.¹¹⁷ In the court’s reckoning, the Corps’ conclusory recitation finding insignificant cumulative impacts did not provide the level of analysis required by NEPA and the CWA to constitute a “hard look,” and the Corps could not merely rely on its planned mitigation to justify its conclusion.¹¹⁸ As the court opined:

Clearly, mining activities already have disturbed a sizeable area of the watershed and caused unfortunate degradation of the streams. However, this fact does not provide a license to destroy more streams without assessing the cumulative impact of this additional destruction.¹¹⁹

Accusing the district court of “[substituting] its judgment for that of the agency,” the Fourth Circuit reversed on appeal, holding that the Corps’ analyses of stream structure and function, mitigation, and cumulative impacts were not an “abuse of discretion.”¹²⁰ In particular, the Fourth Circuit agreed with the Corps that because the CWA Guidelines did not provide a definition or methodology for assessing “function,” the Corps’ use of “structure” as a surrogate was entitled to deference.¹²¹ The Fourth Circuit further found that the Corps’ methodology was reasonable under the circumstances and deferred to its professional judgment: “Having found that the Corps was not obligated to engage in a full

114. *Id.* at 647-48.

115. *Id.* at 648.

116. *Id.* at 656.

117. *Id.* at 658-59.

118. *Id.* at 659.

119. *Id.* (footnote omitted).

120. *OVEC II*, 556 F.3d 177, 198 (4th Cir. 2009) (citing 5 U.S.C. § 706(2) (2000); *Citizens To Preserve Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971)).

121. *Id.* at 199.

functional assessment, it is not our place to dictate how the Corps should go about assessing stream functions and losses.”¹²²

Next, the Fourth Circuit concluded that the Corps was not required to consider the differing functions of headwater and other stream types in determining appropriate mitigation measures.¹²³ Because the Corps followed its Regulatory Guidance letter (RGL 02-02) by providing for mitigation replacing linear feet of filled streams on a greater than one-to-one basis, the Fourth Circuit found that the Corps was justified in issuing a mitigated FONSI.¹²⁴ Here, the Fourth Circuit ignored the functional differences between the Corps’ proposed mitigation measures and the actual streams filled under the permits—even while acknowledging that the Corps had offered “limited” support to back its claim that the challenged mitigation measures had a good potential for success.¹²⁵ As the Fourth Circuit stated, “the novelty of a mitigation measure alone cannot be the basis of our decision to discredit it.”¹²⁶

The Fourth Circuit also rejected the district court’s holding that the Corps failed to consider the project’s cumulative impacts on streams and watersheds. Instead, the Fourth Circuit found that the Corps properly analyzed cumulative impacts and “articulated a satisfactory explanation for its conclusion that cumulative impacts would not be significantly adverse.”¹²⁷ In reaching this conclusion, the Fourth Circuit was persuaded by the Corps’ reliance on WVDEP’s water quality certification for the proposed mining activity, which averred that the project would “not cause or contribute to a violation of state water quality standards.”¹²⁸ Finally, while recognizing that the Corps’ finding of no cumulative adverse impacts rested to some extent on the proposed mitigation measures, the Fourth Circuit found that this reliance was not conclusory or perfunctory—particularly in light of the WVDEP’s independent analysis of cumulative impacts.¹²⁹

122. *Id.* at 201.

123. *Id.* at 203.

124. *Id.* at 204, 206.

125. *Id.* at 205.

126. *Id.*

127. *Id.* at 209.

128. *Id.* at 208 (citing 33 U.S.C. § 1341 (2000)). As part of the SMCRA permitting process, the state must prepare an assessment of probable cumulative mining impacts on the hydrologic balance in the area of the proposed mine and make a finding that the operation will not damage hydrologic balance outside the area. In addition, the state must certify, pursuant to section 401 of the CWA, that the proposed mining operation will not lead to violations of state water quality standards. *Id.* A section 401 certification is “conclusive”—the Corps does not conduct any independent analysis. *Id.* (citing 33 C.F.R. § 320.4(d) (2008); *Bering Strait Citizens for Responsible Res. Dev. v. U.S. Army Corps of Eng’rs*, 524 F.3d 938 (9th Cir. 2008)).

129. *Id.*

Judge Michael concurred in part and dissented in part with the Fourth Circuit majority opinion.¹³⁰ Specifically, Judge Michael would have affirmed the district court's judgment rescinding the permits based on the Corps' inadequate analysis of the proposed mitigation and stream "structure and function" under NEPA and the CWA.¹³¹ In contrast with the majority, the dissent found the language of the CWA Guidelines, section 230.11(e), dispositive: "If stream structure were truly an adequate surrogate for stream function, the Corps and the majority should offer some explanation as to why § 230.11(e) explicitly requires assessments of the effects of proposed fills on both the structure *and* function of the aquatic ecosystem and organisms."¹³² Based on this textual reading of the applicable regulation, the dissent argued that the Corps' use of structure as a surrogate for function was a "clear abuse of discretion."¹³³ Further, the dissent noted that the Corps' reliance on RGL 02-02 and its requirement of one-to-one mitigation, where adequate functional assessment is not feasible, was itself an implicit admission that the Corps' assessment of stream function was inadequate.¹³⁴

The dissent also criticized the Corps' proposed mitigation measures as substantively inadequate due to their failure to replace lost stream function.¹³⁵ Addressing the Corps' reliance on RGL 02-02 to defend its mitigation proposal, Judge Michael noted that "RGLs are 'issued without notice and comment and do not purport to change or interpret the regulations applicable to the section 404 program [and] are not binding, either upon permit applicants or Corps District Engineers.'"¹³⁶ Rather, the clear language of the regulation, section 230.11(e), should control where it is inconsistent with the Corps RGL and the Memorandum of

130. In section V of the majority opinion, the court held that the Corps has statutory authority under section 404 to permit discharges of fill sediment into stream segments connecting to downstream sediment ponds. *Id.* at 216. Such stream segments are a common feature of mountaintop removal mining operations, and allow for the movement of mining runoff from the valley fills into the sediment ponds, where the runoff is ultimately collected. *Id.* Judge Michael concurred with the majority's holding on this issue. *Id.* at 218 (Michael, J., concurring in part and dissenting in part). It is also interesting to note here that, but for the existence of the valley fills, OVEC's contention that the stream segments at issue were "waters of the United States," and thus subject to regulation by the EPA under section 402 of the CWA, would have been unquestionably valid. *See id.* at 212 (majority opinion).

131. *Id.* at 217-18 (Michael, J., concurring in part and dissenting in part).

132. *Id.* at 218. "General principles of statutory construction require a court to construe all parts to have meaning and to reject constructions that render a term redundant." *Id.* (quoting *PSINet, Inc. v. Chapman*, 362 F.3d 227, 232 (4th Cir. 2004)).

133. *Id.* at 219.

134. *Id.* at 222.

135. *Id.*

136. *Id.* at 223 (alteration in original) (quoting *Nw. Bypass Grp. v. U.S. Army Corps of Eng'rs*, 470 F. Supp. 2d 30, 51 (D.N.H. 2007)).

Agreement between the Corps and EPA.¹³⁷ As the dissent observed, it is “paradoxical” to find that the Corps’ assessments “adequately measured stream function and to simultaneously conclude that these same assessments provided insufficient data on stream function to require mitigation to replace lost function.”¹³⁸

In addition, Judge Michael treated the proposed “stream creation” type of mitigation skeptically, observing that the Draft EIS for Mountaintop Removal Mining and Valley Fills,¹³⁹ coauthored by the Corps, stated that past attempts at such mitigation were distinctly unsuccessful in practice.¹⁴⁰ Consequently, the dissent concluded that the Corps had not met the standard required by the CWA and NEPA for issuing a mitigated FONSI—it had not proven that the permitted valley fills would have no significant adverse impacts and would not significantly degrade waters of the United States.¹⁴¹ In Judge Michael’s words:

By failing to require the Corps to undertake a meaningful assessment of the functions of the aquatic resources being destroyed and by allowing the Corps to proceed instead with a one-to-one mitigation that takes no account of lost stream function, this court risks significant harm to the affected watersheds and water resources. We should rescind the four permits at issue in this case until the Corps complies with the clear mandates of the regulations.¹⁴²

137. *Id.* at 223-24.

138. *Id.* at 224.

139. Judge Michael is likely referring to the Draft Programmatic Environmental Impact Statement, originally drafted in 2003, as a condition to an earlier settlement agreement in the *Bragg I* litigation. See *Bragg v. Robertson*, 54 F. Supp. 2d 635, 638-39 (S.D. W. Va. 1999). In order to settle claims against the Corps and other federal defendants alleging a “pattern and practice” of failure to carry out statutory duties under NEPA and the CWA in the mountaintop removal mining permitting process, the Corps agreed to prepare an EIS (in conjunction with other state and federal agencies)

to consider developing agency policies, guidance, and coordinated agency decision-making processes to minimize, to the maximum extent practicable, the adverse environmental effects to waters of the United States and to fish and wildlife resources affected by mountaintop mining operations, and to environmental resources that could be affected by the size and location of excess spoil disposal sites in valley fills.

Id.

140. *OVEC II*, 556 F.3d at 225. The Draft EIS stated that “to date functioning headwater streams have not been re-created on mined or filled areas as part of mine restoration or planned stream mitigation efforts. Most on-site mitigation construction projects have resulted in the creation of palustrine wetlands that resembled ponds.” *Id.*

141. *Id.* at 225-26.

142. *Id.* at 226.

B. History Interpreted: Judicial Sanctioning of Lenient Permitting Practices

The preceding discussion of mountaintop removal mining case law illustrates the difficulty courts have faced in reconciling competing interests in the course of statutory interpretation.¹⁴³ While the District Court for the Southern District of West Virginia has demonstrated a willingness to uphold challenges to mining permits based on CWA and NEPA claims, a majority of the Fourth Circuit has frequently shown an equal unwillingness to uphold these same challenges. As a general proposition, the higher court has resolved the diverging government interests in energy extraction versus environmental protection in favor of Corps decisions that promote energy extraction. Even in instances where the Corps has granted permits in a manner that directly contradicts the statutory and regulatory commands of NEPA and the CWA,¹⁴⁴ the Fourth Circuit has deferred to the Corps' decision. In doing so, the Fourth Circuit has couched its approval of extractive activities as judicial deference to Corps expertise.

A scrupulous review of the statutory and regulatory language presented in these cases suggests that the district court's approach—as shared by the Fourth Circuit dissenters—is more in accordance with a proper interpretation of the CWA, SMCRA, and NEPA. In the *KFTC* cases, for example, it is abundantly clear that the Corps had been issuing mountaintop removal mining permits under NWP-21¹⁴⁵ for the express

143. See, e.g., 30 U.S.C. § 1202(f) (2006) (providing that the purpose of SMCRA is to “assure that the coal supply essential to the Nation’s energy requirements, and to its economic and social well-being is provided and *strike a balance between protection of the environment and agricultural productivity and the Nation’s need for coal as an essential source of energy.*” (emphasis added)).

144. See, e.g., *KFTC I*, 204 F. Supp. 2d 927, 931 (S.D. W. Va. 2002), *vacated*, 317 F.3d 425 (4th Cir. 2003); *Bragg I*, 72 F. Supp. 2d 642, 662-63 (S.D. W. Va. 1999), *vacated sub nom. Bragg II*, 248 F.3d 275 (4th Cir. 2001); *OVEC I*, 479 F. Supp. 2d 607, 662-63 (S.D. W. Va. 2007), *rev’d and vacated sub nom. OVEC II*, 556 F.3d 177 (4th Cir. 2009).

145. On June 17, 2010, the Corps officially suspended the use of NWP-21 in the Appalachian region. Announcing the suspension, the Corps stated that it had determined

after a thorough review and consideration of comments that continuing use of NWP 21 in this region may result in more than minimal impacts to aquatic resources. Activities that result in more than minimal impacts to the aquatic environment must be evaluated in accordance with individual permit procedures. Therefore, NWP 21 has been suspended in this region and coal mining activities impacting waters of the U.S. in this region will be evaluated in accordance with individual permit procedures.

See *Army Corps of Engineers To Suspend Nationwide Permit 21 in Appalachian Region*, U.S. ARMY CORPS ENGINEERS (June 17, 2010), <http://www.army.mil/article/40990>.

purpose of mining waste disposal via valley fills.¹⁴⁶ This practice contravened the Corps' own section 404 permitting regulations, which explicitly excluded from their definition of "fill material" pollutants discharged for the purpose of waste disposal.¹⁴⁷ That the Corps had a long-standing practice of issuing such permits should not serve as justification for frustrating the purpose of the CWA.

The district court's *KFTC I* decision was doomed by its procedural error, as opposed to its interpretation of the law and regulations. Because the *KFTC I* plaintiffs had only challenged the issuance of one specific mining permit, the district court's remedy enjoining *all* NWP-21 permits prospectively was genuinely overbroad. Notwithstanding this defect, under a scenario where the plaintiffs had instead challenged the entire Corps NWP-21 program as "arbitrary and capricious" in practice, the district court's legal reasoning would have been sound. Since nationwide permits such as NWP-21 are properly issued where they "will cause only minimal adverse environmental effects when performed separately, and will have only minimal cumulative adverse effects on the environment,"¹⁴⁸ it is difficult to square the Corps' program with the actual environmental impacts observed. As the district court later noted in *Ohio Valley Environmental Coalition v. U.S. Army Corps of Engineers (OVEC I)*, the volume of Appalachian surface mining activities has disturbed sizable areas of watershed and caused wide-scale stream degradation.¹⁴⁹

146. See, e.g., *KFTC II*, 317 F.3d 425, 431 (4th Cir. 2003). The Corps' authorization of MCCC's permit states:

With regard to [the] proposed discharges of coal mining overburden, we believe that the placement of such material into waters of the U.S. has the effect of fill and therefore, should be regulated under CWA section 404. . . . In Appalachia in particular, such discharges typically result in the placement of rock and other material in the heads of valleys, with a sedimentation pond located downstream of this "valley fill."

Proposed Revisions to the Clean Water Act Regulatory Definitions of "Fill Material" and "Discharge of Fill Material," 65 Fed. Reg. 21,292, 21,295 (Apr. 20, 2000) (to be codified at 40 C.F.R. pt. 232).

147. While the *KFTC* litigation was pending, the EPA and the Corps jointly published a revised rule adopting the "effects based" interpretation the Corps had been utilizing. See Evans, *supra* note 22, at 542 (citing Final Revisions to the Clean Water Act Regulatory Definitions of "Fill Material" and "Discharge of Fill Material," 67 Fed. Reg. 31,129, 31,142 (May 9, 2002) (to be codified at 40 C.F.R. pt. 232); *KFTC II*, 317 F.3d at 438). Under the prior regulatory language, effective for the purposes of the *KFTC* litigation, the Corps was subject to the "purpose based" definition of fill discussed above. Under the revised rule—which is still in effect—mining waste and overburden is explicitly included in the regulatory definition of "fill." 33 C.F.R. § 323.2(e) (2011). Some commentators have suggested that the revised rule is beyond the agencies' statutory authority under the *Chevron* doctrine because it is inconsistent with the "unambiguous meaning" of the CWA. See Evans, *supra* note 22, at 543-50.

148. 33 U.S.C. § 1344(e)(1) (2006).

149. *OVEC I*, 479 F. Supp. 2d at 659-60.

Considering these effects, together with the Corps' misinterpretation of the regulatory definition of "fill material," the district court properly vindicated the environmentally protective aspect of the law by reversing the Corps' decision.

Likewise, the district court's decision in *Bragg I*, while more legally supportable than the Fourth Circuit's reversal, failed on procedural grounds. As discussed above, the Fourth Circuit overturned the district court decision in *Bragg I* for lack of jurisdiction—namely that the state official being sued in that case had immunity from lawsuits brought in federal court pursuant to state laws under the Eleventh Amendment to the United States Constitution. Since SMCRA delegates sole regulatory authority to states upon federal approval of state implementation statutes, there was no cognizable violation of the federal SMCRA program. Assuming *arguendo* that the plaintiff in *Bragg I* had brought her claim in West Virginia state court, under West Virginia's parallel version of SMCRA, the district court's substantive legal interpretation of SMCRA and CWA statutory requirements would have been proper.

The provision of SMCRA at issue in *Bragg I* was the "buffer zone rule." This rule prohibits mining operations within 100 feet of an intermittent or perennial stream unless the WVDEP Director issues findings that "surface mining activities will not adversely affect the normal flow or gradient of the stream, adversely affect fish migration or related environmental values, materially damage the water quantity or quality of the stream and will not cause or contribute to violations of applicable State or Federal water quality standards."¹⁵⁰ At trial in *Bragg I*, the WVDEP Director conceded that, as a routine practice, he did not make these required findings.¹⁵¹ In fact, the Director completely abdicated his statutory role, deferring to the coal industry applicants: "If the company has shown that the fill is necessary¹⁵² during the review of the application with the spoil balance and stuff and they show that the fill will be stable, then . . . in the area of the fill, we do not require them to make those [buffer zone variance] findings."¹⁵³

150. *Bragg I*, 72 F. Supp. 2d 642, 646 (S.D. W. Va. 1999), *vacated sub nom. Bragg II*, 248 F.3d 275 (4th Cir. 2001).

151. *Id.* at 647.

152. Under SMCRA, coal mining operations must "restore the approximate original contour of the land" upon the cessation of mining activities at a site. 30 U.S.C. § 1265(b)(3) (2006). Due to the "swell factor" associated with earth removal, the Director likely intended this remark to mean that a valley fill is deemed "necessary" when the mining overburden includes excess spoil not needed for restoration to AOC. *See Bragg I*, 72 F. Supp. 2d at 646.

153. *Bragg I*, 72 F. Supp. 2d at 647 (alterations in original). The court also adduced that mining permits granted by WVDEP had explicitly violated the buffer zone rule, quoting from a permit application that stated: "The normal flow and gradient of the stream will be adversely

Furthermore, because valley fills of overburden have the effect of completely burying stream segments, there is no possible way WVDEP could make the required findings about “stream flow, environmental values and water quantity and quality.”¹⁵⁴ Only where surface coal mining can be conducted in an “environmentally acceptable manner” may it be permitted within 100 feet of a perennial or intermittent stream¹⁵⁵—meaning that the routine practice of authorizing valley fills contradicts the law. As the district court noted in *Bragg I*:

“When valley fills are permitted in intermittent and perennial streams, they destroy those stream segments. The normal flow and gradient of the stream is now buried under millions of cubic yards of excess spoil waste material, an extremely adverse effect. . . . If there is any life form that cannot acclimate to life deep in a rubble pile, it is eliminated. No effect on related environmental values is more adverse than obliteration.”¹⁵⁶

While SMCRA recognizes the necessity of coal extraction, it also demands compliance with environmental standards—both through its own provisions like the “buffer zone rule” and through the CWA savings clause.¹⁵⁷ State and federal agencies—with the support of the Fourth Circuit—have consistently allowed SMCRA’s extractive aspect to overwhelm its environmentally protective aspect when issuing and evaluating mountaintop removal mining permits. The Fourth Circuit’s *Bragg II* opinion also avers that the Secretary of the Interior may challenge a state SMCRA program that fails to meet the minimum federal standards in its application of the law.¹⁵⁸ However, this fleck is of small comfort when the Secretary fails to issue such a challenge.

Equally as problematic, the Fourth Circuit improperly deferred to Corps expertise in *OVEC II*. The portion of the section 404(b)(1) CWA Guidelines litigated in that case required the Corps to assess both the structure *and* the function of the aquatic ecosystem impacted by the proposed discharge.¹⁵⁹ By deferring to the Corps’ judgment that structure

affected in the areas of the proposed durable rock [valley] fills and the required sediment control for each. Surface mining activities as proposed in this application make disturbance in these areas necessary.” *Id.* (alteration in original).

154. *Id.*

155. *Id.* at 651 (citing Surface Coal Mining and Reclamation Operations, 44 Fed. Reg. 14,902, 15,176 (Mar. 13, 1979)).

156. *Id.* at 661-62.

157. *See, e.g.*, 30 U.S.C. § 1202(a), (d), (f) (2006); 30 C.F.R. § 816.57 (2011).

158. *Bragg II*, 248 F.3d 275, 297 (4th Cir. 2001).

159. *See* 40 C.F.R. § 230.11, 230.11(e) (2011) (providing that the “permitting authority shall determine in writing the potential short-term or long-term effects of a proposed discharge of dredged or fill material on the physical, chemical, and biological components of the aquatic environment in light of . . . the nature and degree of effect that the proposed discharge will have,

could serve as a surrogate of function, the Fourth Circuit failed to apply the proper APA standard—the Corps’ interpretation was clearly not in accordance with the text of the regulation.¹⁶⁰ In fact, the Corps not only failed to give meaning to a relevant portion of the regulation at issue—they also interpreted it in a manner inconsistent with the overall congressional intent of the CWA.¹⁶¹ The Corps compounded this error by approving mitigation techniques that largely improved structural attributes of the aquatic ecosystem, providing primarily cosmetic value.¹⁶² It is risible to think that placing boulders in streams, planting vegetation, and creating mere facsimiles of filled streams can truly “mitigate” the burial of a living, functional stream under a rubble pile of mining waste—let alone reduce the environmental impact of the action to insignificance, as is required for issuing a FONSI. Yet this was precisely the construction of NEPA and the CWA the Corps promoted in *OVEC II*, with Fourth Circuit approval.

Looking at the SMCRA and CWA permitting decisions litigated in the *KFTC*, *Bragg*, and *OVEC* cases in their totality, one sees a system predisposed to grant permits that cause environmental harm. As another commentator observed when assessing the interplay between state and federal actions related to mountaintop removal mining permits:

[T]he Corps sees its mission as *facilitating* the activities it permits, and it defers to a state’s determination that water quality laws are satisfied. The laws and rules enforced by the state agencies, similarly, have been developed to ease the permitting process rather than to limit it. . . . Without

both individually and cumulatively, on the *structure and function* of the aquatic ecosystem and organisms.” (emphasis added)).

160. See 5 U.S.C. § 706(2)(A) (2006) (providing that a reviewing court shall “hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law”). As the district court in *OVEC I* and the dissent in *OVEC II* noted, it is senseless to interpret the regulatory requirement that the Corps assess the “structure and function” of the aquatic ecosystem to mean that an assessment of “structure” alone suffices. See *OVEC II*, 556 F.3d 177, 218 (4th Cir. 2009) (Michael, J., concurring in part and dissenting in part); *OVEC I*, 479 F. Supp. 2d 607, 636 (S.D. W. Va. 2007), *rev’d and vacated sub nom. OVEC II*, 556 F.3d 177 (4th Cir. 2009).

161. Given the extensive cumulative environmental impacts of coal mining in the region observed by the District Court in *OVEC I*, it is difficult to square the Corps’ interpretation of the section 404(b)(1) Guidelines and permitting decision here with the stated purpose of the CWA to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.” See *OVEC I*, 479 F. Supp. 2d at 620 (quoting 33 U.S.C. § 1251(a)).

162. See *id.* at 644-45.

the Corps to look over their shoulders, the state permitting authorities have ignored egregious violations of law.¹⁶³

In essence, practice on the ground has evolved into a system of capitulation to extractive industry desire, at the expense of the natural environment. This is not the result envisioned by the applicable law.

III. BRAND NEW DAY: THE OBAMA EPA'S NEW APPROACH TO MOUNTAINTOP REMOVAL MINING REGULATION

A. *Enhanced Review Policies Under the Clean Water Act*

In response to persistent legal challenges against the mountaintop removal mining permitting process, the Obama Administration initiated an EPA-led review of the regulatory regime. Thus far, the EPA's new approach seemingly vindicates past critiques of mountaintop removal coal mining accepted by the District Court for the Southern District of West Virginia—at least in terms of salutary goals.

A memorandum from the EPA to the Corps, dated July 30, 2010, clarified the appropriate interpretation of the regulatory requirements at issue in the *OVEC* decisions.¹⁶⁴ Referring to section 230.11(e) of the section 404(b)(1) Guidelines, the memorandum unambiguously directed the Corps, in issuing section 404 permits, to assess the effect of the discharge on *both* the structure *and* the function of the aquatic ecosystem.¹⁶⁵ Leaving nothing to doubt, EPA went on to state, “The permitting authority . . . will not rely exclusively on an evaluation of structure in place of function.”¹⁶⁶ Further, in outlining a goal consistent with the section 404(b)(1) Guidelines to “avoid[] and minimize[] to the extent appropriate and practicable” the adverse impacts of section 404 permits for dredge and fill, the memorandum stipulated a science-based approach to analyzing functions and assessing the effectiveness of proposed mitigation measures.¹⁶⁷

Taken as a whole, the July 30th EPA memorandum endorsed the district court's reading of the statutory language litigated in the *OVEC* cases. In essence, the memorandum questioned the deference granted to

163. Evans, *supra* note 22, at 529-30 (citing 33 C.F.R. § 320.4(d) (2009); Zoe Gamble, *Injustice in the Fourth Circuit: Bragg v. West Virginia Coal Association Is Moving Mountains for Industry*, 30 VT. L. REV. 393, 398 (2006)).

164. Memorandum of Agreement Between Peter Silva, Assistant Administrator for Water, U.S. EPA, and Jo-Ellen Darcy, Assistant Secretary of the Army (Civil Works), at 3 (July 30, 2010), http://www.epa.gov/owow/wetlands/guidance/pdf/Stream_Guidance_final_073010.pdf.

165. *Id.* at 2-3.

166. *Id.* at 3.

167. *Id.* at 2-3.

the Corps by the Fourth Circuit and invalidated the Corps' prior interpretation of the section 404 Guidelines.¹⁶⁸ Such a result also calls into question the propriety of the deference granted to Corps interpretations of other section 404 provisions, as addressed by the *KFTC* cases.

In a similar vein, Congress has considered proposed legislation that would repeal past Corps practice by amending the CWA to clarify congressional intent regarding the definition of "fill material." H.R. 1310 would have excluded from the statutory definition of "fill material" "any pollutant discharged into the water primarily to dispose of waste."¹⁶⁹ Likewise, S. 696, the Senate companion to H.R. 1310, would have amended the CWA to state that "fill material" does not include "the disposal of excess spoil material [as described in SMCRA] in waters of the United States."¹⁷⁰

On June 11, 2009, the EPA and the Corps, along with the Department of the Interior, adopted a Memorandum of Understanding (MOU), implementing the Interagency Action Plan (IAP) on Appalachian surface coal mining. The stated purpose of the IAP is to "significantly reduce the harmful environmental consequences of Appalachian surface coal mining operations, while ensuring that future mining remains consistent with federal law."¹⁷¹ In the preamble, the signatory agencies acknowledge that "[s]treams once used for swimming, fishing, and drinking water have been adversely impacted, and groundwater resources used for drinking water have been contaminated" as a result of mountaintop removal mining practices.¹⁷²

The MOU also establishes minimum objectives for regulatory re-appraisal, to "better protect the environment and public health" from mountaintop removal mining.¹⁷³ These objectives include: revisions to SMCRA regulations, including the stream buffer zone and AOC requirements;¹⁷⁴ eliminating the use of NWP-21 in conjunction with

168. *See id.* at 3.

169. H.R. 1310, 111th Cong. § 2 (1st Sess. 2009).

170. S. 696, 111th Cong. § 2 (1st Sess. 2009).

171. Memorandum of Understanding Among the U.S. Department of the Army, U.S. Department of the Interior, and U.S. Environmental Protection Agency Implementing the Interagency Action Plan on Appalachian Surface Coal Mining, at 2 (June 11, 2009), http://water.epa.gov/lawsregs/guidance/wetlands/upload/2009_06_10_wetlands_pdf_Final_MTM_MOU_6-11-09.pdf [hereinafter MOU].

172. *Id.* at 1.

173. *Id.* at 4.

174. *See* Stream Protection Rule; Environmental Impact Statement, 75 Fed. Reg. 22,723 (proposed Apr. 30, 2010). The Office of Surface Mining (OSM) proposes to revise its rules "to improve protection of streams from the impacts of surface coal mining operations nationwide."

mountaintop removal mining; and revisions to how such mining activities are “evaluated, authorized, and regulated under the CWA.”¹⁷⁵ Notwithstanding the salutary goal to improve environmental compliance of mountaintop removal coal mining projects, the MOU also envisions the continued permitting of “environmentally responsible projects.”¹⁷⁶

As a companion to the June 2009 MOU, EPA Administrator Lisa Jackson issued a letter to Terrence Salt of the Corps, clarifying how the EPA intends to review permit applications pending before the Corps under the section 404(b)(1) Guidelines. Factors the EPA wants the Corps to consider include: the adequacy of practicable alternatives analysis; the number of valley fills; the number of impacted streams; cumulative effects of the proposed mine in consideration of previous and reasonably foreseeable future impacts; the extent of high-value streams to be impacted, including extent of impacts to critical headwater streams; the total length of streams to be impacted; and the adequacy of proposed mitigation to compensate fully for impacts.¹⁷⁷

Read in combination with the MOU, the June 2009 EPA letter raises the question whether the EPA’s new approach will require any substantive results. While the new standard certainly imposes a more rigorous review of environmental impacts than many past Corps permits have undergone, such an analysis may end up having a primarily procedural effect. In this respect, it may act more as an enhanced NEPA-type impacts analysis—slowing down potentially damaging projects rather than denying them permits altogether.

A later EPA “Detailed Guidance” memorandum, issued on April 1, 2010, further clarified EPA review of mountaintop removal coal mining operations under the CWA and NEPA. At the outset, the memorandum conceded that the balance of competing interests inherent in energy extraction will persist: “We make every effort to fulfill [the EPA’s statutory obligations under the CWA] without compromising the

Among the changes to be considered are “more extensive and more specific permit application requirements concerning baseline data on hydrology, geology, and aquatic biology[,] . . . [a]dding more extensive and more specific monitoring requirements for surface water, groundwater, and aquatic biota during mining and reclamation[, and r]equiring that the regulatory authority coordinate the SMCRA permitting process with Clean Water Act permitting activities to the extent practicable.” *Id.* at 22,723-24.

175. MOU, *supra* note 171, at 4.

176. *Id.* at 5.

177. Letter from Lisa Jackson, Adm’r, U.S. EPA, to Terrence Salt, Acting Assistant Sec’y (Civil Works), U.S. Dep’t of the Army 2 (June 11, 2009), http://water.epa.gov/lawsregs/guidance/wetlands/upload/2009_07_11_wetlands_pdf_Final_EPA_MTM_letter_to_Army_6-11-09.pdf.

economic and energy benefits that coal mining provides to both the Appalachian region and the entire nation.”¹⁷⁸

Despite the explicit balancing act the EPA proposes to undertake, the Detailed Guidance also all but admitted that past permitting practices allowing mountaintop removal mining violated environmental laws. Specifically, the EPA noted that its evaluation of pending Corps section 404 permits

found that many of these projects may not be consistent with EPA and Corps regulations, including the Section 404(b)(1) Guidelines. As many as 80% of these permits raised concerns with respect to compliance with state narrative water quality standards,¹⁷⁹ while more than half raised concern for their potential for significant degradation of aquatic ecosystems.¹⁸⁰

Along these same lines, the EPA also found that “nine out of every ten” streams evinced impairment of aquatic life downstream from surface mining operations.¹⁸¹

In addressing EPA oversight of state-issued NPDES permits under section 402 of the CWA, the Detailed Guidance anticipated situations in which the EPA may object to the issuance of a mining-related permit. “[W]here discussions with the state do not produce a proposed permit that, in [EPA’s] judgment, satisfies the requirements of the [CWA],” registering an objection would be an “appropriate” response.¹⁸² The memorandum also referred to antidegradation review, providing that for “high quality” waters, the EPA will emphasize whether the state has made the requisite finding that permitting lower water quality is “necessary to accommodate important social or economic development

178. Memorandum from Peter Silva, Assistant Adm’r for Water, U.S. EPA, to Shawn Garvin, Reg’l Adm’r, EPA Region 3, A. Stanley Meiburg, Acting Reg’l Adm’r, EPA Region 4, and Bharat Mathur, Acting Reg’l Adm’r, EPA Region 5, Detailed Guidance on Improving EPA Review of Appalachian Surface Coal Mining Operations Under the Clean Water Act 2 (Apr. 1, 2010) [hereinafter Detailed Guidance] (on file with author). The memo further expresses the hope that the EPA’s permit decisions “will be seen as a demonstration of our commitment to an Appalachian coal industry that provides economic security and protects the health of Appalachian communities, without violating environmental standards established under the law.” *Id.*

179. In setting “narrative” water quality standards under the CWA, states are required to provide a “designated use” for each water body, such as recreation or protection of aquatic life; then set standards specifying what level of pollution may be present in the water body without impairing the designated use. *See* 33 U.S.C. § 1313 (2006). The relevant West Virginia statute defines “[w]ater quality criteria” as “levels of parameters or stream conditions that are required to be maintained by these regulations. Criteria may be expressed as a constituent concentration, levels, or narrative statement, representing a quality of water that supports a designated use or uses.” W.VA. CODE R. § 47-2-2.20 (2011) (emphasis added).

180. Detailed Guidance, *supra* note 178, at 6.

181. *Id.* at 3.

182. *Id.* at 8.

in the area in which the waters are located.”¹⁸³ This provision suggests a potential ingress for extractive industry to exploit, by setting energy production against environmental protection. Summarizing the role of the EPA regarding state-issued section 402 permits, the Detailed Guidance broadly encouraged vigilant EPA oversight to ensure state program compliance with the CWA and EPA’s implementing regulations.¹⁸⁴ Where state programs are noncompliant, the strongest EPA response is to “object” to the permit—and even then, this objection is discretionary.¹⁸⁵ However, in the event that the EPA’s objections are not satisfactorily addressed by the state, authority to issue the permit passes to the EPA.¹⁸⁶

The Detailed Guidance also discussed the EPA’s intention to strengthen its review of Corps-issued section 404 permits. Accordingly, the stated “fundamental premise” of the section 404(b)(1) Guidelines is not to permit discharges that significantly degrade the Nation’s waters or cause water quality standard violations—especially where “practicable” alternatives exist.¹⁸⁷ If a proposed permit would lead to such impacts, the EPA may invoke its legal right to veto the Corps’ issuance of the permit.¹⁸⁸ In addition, the EPA instructs its regional offices to consider “watershed-scale” cumulative impacts in reviewing permits—including consideration of impacts to water quality and the aquatic environment that affect human use of resources, such as drinking water or fisheries.¹⁸⁹

183. *Id.* at 13 (citing 40 C.F.R. § 131.12(a)(2)).

184. *See id.* at 15. The EPA’s suggestions for reviewing state programs include requesting “information from each state as to how that state is interpreting and incorporating applicable numeric and narrative water quality standards within its permitting decisions;” possibly objecting to “permits that do not assess reasonable potential [impacts] effectively or fail to implement numeric and narrative standards;” and evaluating “the consistency of a permit’s monitoring provisions with the statutory and regulatory requirements.” *Id.* at 14-15.

185. *Id.* at 15. The EPA further described the objection process:

Following such an objection, the state or other interested parties may request a hearing and provide additional information supporting their position. After such a hearing . . . EPA can reassert its objection, modify its objection, or withdraw its objection. If EPA continues to object . . . and if EPA’s objections are not satisfactorily resolved by the state permitting authority, authority to issue the permit will pass to EPA.

Id. at 15 n.25 (citing 40 C.F.R. § 123.44(h)).

186. *Id.* at 15 n.25 (citing 40 C.F.R. § 123.44(h)).

187. *Id.* at 17.

188. *Id.*

189. *Id.* at 23. Mountaintop removal mining operations have observable deleterious impacts on nearby drinking water. As one commentator noted, discussing the effects of “sludge” resulting from coal mining,

blasting from [mountaintop removal] can also cause fractures that allow sludge in ponds or injection wells to seep into the groundwater, and most residents in the coalfields . . . are dependent on wells for their water. The obvious effects on the

The EPA also sets goals for mitigation measures attendant to section 404 permits. Like the earlier memorandum from the EPA to the Corps, the Detailed Guidance stresses the need for the Corps to conduct a functional assessment of impacted resources, in order to assure that “compensatory mitigation adequately replaces lost stream functions.”¹⁹⁰ The inclusion of this provision seems to presuppose that the EPA will still allow the Corps to issue permits that will negatively impact stream functions. While discussing mitigation, the Detailed Guidance suggests that the EPA require the Corps and permit applicants to adhere to an “expected timeframe” for mitigation success, while providing for a concomitant monitoring period.¹⁹¹ As a consequence, the EPA would potentially condone the permanent loss of a stream by valley fill in exchange for a mitigation measure that may only succeed temporarily—after which point, monitoring would cease.¹⁹² The Detailed Guidance section on section 404 permitting concludes with a statement that the EPA “encourage[s] more interaction between industry and [the] EPA to resolve permit issues through dialogue and technical cooperation.”¹⁹³ While this cooperative approach is laudable in spirit, it remains to be seen how dialogue with industry can resolve the problems stemming from industry’s practice of burying streams.

Broadly considered, the ongoing EPA review of mountaintop removal mining in Appalachia hints that previous agency-permitting practices violated the law by not fully considering the deleterious environmental impacts involved.¹⁹⁴ Given the EPA’s suggestions, the new approach will engender a more virile procedural review process. It is clear that, going forward, there will be a much higher level of scrutiny

water—rotten egg smells and dark stains—are not merely inconveniences; they are health hazards. In Prenter [Hollow], over two billion gallons of slurry have been injected into abandoned underground mines, and some of it has migrated into residents’ wells.

Evans, *supra* note 22, at 527-28. “Sludge” is a byproduct of the coal-washing process—washing the impurities out of mined coal before its sale—and contains high levels of carcinogens and heavy metals. *Id.* at 526 (citing SLUDGE SAFETY PROJECT, UNDERGROUND INJECTION OF COAL SLURRY: WATER, HEALTH, AND ALTERNATIVES 3, 5-7 (2009); 10 EPA, THE CLASS V UNDERGROUND INJECTION CONTROL STUDY, MINING, SAND, OR OTHER BACKFILL WELLS 23 (1999)).

190. Detailed Guidance, *supra* note 178, at 23.

191. *Id.* at 23-24.

192. As the District Court in *OVEC I* noted in reviewing the Corps’ proposed mitigation measures, “buried streams are lost forever while the enhancements [from mitigation] may be effective for only a limited time.” *OVEC I*, 479 F. Supp. 2d 607, 647 (S.D. W. Va. 2007), *rev’d and vacated sub nom. OVEC II*, 556 F.3d 177 (4th Cir. 2009).

193. Detailed Guidance, *supra* note 178, at 28.

194. *See id.* at 6.

placed on the potential adverse environmental impacts of mountaintop removal mining permits before they are granted. This, in turn, will increase the likelihood that CWA goals are vindicated. However, it also seems apparent that after going through this additional scrutiny, mining permits will still be granted, and valley fills will still be allowed.¹⁹⁵ And so, practices that violate the law will be minimized, but not stopped. To the extent that the CWA requires substantive results—and it certainly does¹⁹⁶—the EPA will substitute a more vigorous, enhanced NEPA-like procedural process.

In contrast to this approach, it would be more consistent with the statutory purpose of the CWA—“to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”¹⁹⁷—to ban mining practices such as valley fills altogether. As the district court in *Bragg I* concluded, valley fills are fundamentally inconsistent with the purpose of the CWA and de facto violations of the stream buffer rule, as it currently reads.¹⁹⁸ To be sure, the statutory inclusion of a “permitting” process in the CWA envisions the discharge of pollutants into water in some circumstances, while the section 404 regime envisions the filling of waters in others. However, the notion that the CWA would sanction the wholesale burial of stream segments with the blasted-off tops of mountains is a bridge too far to cross.

The Obama Administration’s EPA is in a difficult place. Like a runaway train, interests favoring resource extraction have gathered steam at the expense of environmental values. Because of the long-standing Corps practice granting section 404 permits for valley fills, an illegal action has been legitimized. In balancing the environmentally protective provisions of SMCRA, the CWA, and NEPA against the interest in favor of energy extraction, past decisions have deferred too much to industry prerogatives. This history of neglecting adverse environmental impacts has led courts such as the Fourth Circuit, in the cases discussed above, to grant agency determinations, in favor of extractive interests, a wide berth. It is tough to slow this train down, but it must be done.

In order to ensure that the level of environmental protection envisioned by SMCRA, the CWA, and NEPA is actualized, mountaintop

195. *Id.* at 23.

196. *See, e.g.*, 40 C.F.R. § 230.10(c) (2011) (prohibiting discharges that will cause or contribute to significant degradation of the waters of the United States); 33 U.S.C. §§ 1311(a), 1362(7), (12) (2006) (prohibiting the discharge of pollutants into waters of the United States without a permit).

197. 33 U.S.C. § 1251(a).

198. *Bragg I*, 72 F. Supp. 2d 642, 661-62 (S.D. W. Va. 1999), *vacated sub nom. Bragg II*, 248 F.3d 275 (4th Cir. 2001).

removal mining should be limited in several respects. First, Congress should adopt the pending legislative amendments to the CWA. By doing so, mining practice will be more adequately harmonized with the clear requirements of the Corps' regulations, and mining waste will no longer be considered "fill material" under the meaning of section 404. Put another way, the historical understanding that section 404 permits only apply to discharges serving a "useful" purpose, beyond mere waste disposal, will be restored.¹⁹⁹ In the interim, the EPA should more aggressively exercise its legal right to veto section 404 permits that propose to allow valley fills. To the extent that states are improperly granting SMCRA permits that fail to fully consider the environmental impacts of mountaintop removal mining and condone actions such as valley fills, the Secretary of the Interior should utilize his authority to challenge the state programs under SMCRA.

The adverse environmental impacts associated with mountaintop removal mining are real and often severe.²⁰⁰ Assumptions granting deference to extractive industry to act in this manner need to be reevaluated. A stable, inexpensive energy supply is not without its hidden costs. Befouled mountain streams and Appalachian watersheds are such costs. Without a doubt, the effective result of the above limits favoring environmental protection will be substantial curtailment of surface coal mining operations. Despite long-standing practice, the application of the current governing law necessitates such a result.

B. EPA's New Approach Applied: The Case of the Spruce No. 1 Surface Mine

In a recent practical application of the EPA's new enhanced review procedure for mountaintop removal mining permits, the EPA's Assistant Administrator for Water, Peter Silva, issued a Final Determination withdrawing specification for a Corps-approved disposal site—the Spruce No. 1 Mine.²⁰¹ The EPA found that the proposed project would

199. See, e.g., *KFTC I*, 204 F. Supp. 2d 927, 935 (S.D. W. Va. 2002), *vacated*, 317 F.3d 425 (4th Cir. 2003) ("Section 404 was enacted to allow harbor dredging and dredged spoil disposal to continue expeditiously under the then-existing dredge and fill permit program administered by the Corps. Examination of that permit program, adopted by Congress as CWA § 404, shows fill permits were never issued nor authorized for waste disposal."); *id.* (stating that section 10 of the Rivers and Harbors Act, the predecessor to section 404 of the CWA "does not control waste or refuse disposal, permits for which were required and issued under a separate section of the [Rivers and Harbors Act], Section 13, commonly known as the 'Refuse Act'" (citing 33 U.S.C. §§ 403, 407)).

200. See Detailed Guidance, *supra* note 178, at 3; see also Evans, *supra* note 22, at 525-28.

201. EPA, FINAL DETERMINATION OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY PURSUANT TO SECTION 404(C) OF THE CLEAN WATER ACT CONCERNING THE SPRUCE NO. 1 MINE,

have unacceptable adverse impacts for high quality waters in a heavily affected region and invoked its section 404(c) veto authority.²⁰² In evaluating the project's compliance with the section 404(b)(1) Guidelines, the EPA determined that the proposed permit failed to evaluate less environmentally damaging alternatives adequately, would cause or contribute to significant degradation of U.S. waters, and lacked compensatory mitigation to offset these impacts below the level of significance.²⁰³ Silva grounded his Final Determination on the earlier findings of EPA Region III Administrator Shawn Garvin, who issued the required Proposed Determination and Recommended Determination²⁰⁴ to withdraw a Corps section 404 permit.²⁰⁵

As described in the EPA Region III Proposed Determination To Withdraw Specification of an Area as a Disposal Site, the Spruce No. 1 mine was "one of the largest mountaintop mining projects ever authorized in West Virginia" and was to contain six valley fills.²⁰⁶ According to the Spruce No. 1 EIS, the proposed mining activity would impact a total area of 2,278 acres, removing 400 to 450 vertical feet of mountain, and generating 501 million cubic yards of overburden.²⁰⁷ Of this total, 110 million cubic yards of "excess spoil" would then be placed in valley fills, "burying all or portions of . . . Seng Camp Creek, Pigeonroost Branch, and Oldhouse Branch and their tributaries."²⁰⁸ In addition, the Corps' permit authorized the construction of "numerous sedimentation ponds, mined-through areas and other fills in waters of the U.S."²⁰⁹ The Corps issued its section 404 permit in 2007—in the face of concerns raised by the EPA and the U.S. Fish and Wildlife Service regarding the project's potentially adverse environmental impacts.²¹⁰

LOGAN COUNTY, WEST VIRGINIA 99 (Jan. 13, 2011), <http://wvgazette.com/static/coal%20tattoo/sprucefinalveto.pdf> [hereinafter FINAL DETERMINATION].

202. *Id.* at 8; *see also* 33 U.S.C. § 1344(c).

203. FINAL DETERMINATION, *supra* note 201, at 13.

204. EPA, RECOMMENDED DETERMINATION OF THE U.S. ENVIRONMENTAL PROTECTION AGENCY REGION III PURSUANT TO SECTION 404(C) OF THE CLEAN WATER ACT CONCERNING THE SPRUCE NO. 1 MINE, LOGAN COUNTY, WEST VIRGINIA (Sept. 24, 2010), http://action.sierraclub.org/site/DocServer/Reg_3_recommendation_-_Spruce.pdf [hereinafter RECOMMENDED DETERMINATION].

205. *See id.* at 81-82.

206. EPA, EPA-R03-OW-2009-0985, PROPOSED DETERMINATION TO PROHIBIT, RESTRICT, OR DENY THE SPECIFICATION, OR THE USE FOR SPECIFICATION (INCLUDING WITHDRAWAL OF SPECIFICATION), OF AN AREA AS A DISPOSAL SITE; SPRUCE NO. 1 SURFACE MINE, LOGAN COUNTY, WEST VIRGINIA 7 (Mar. 26, 2010), <http://water.epa.gov/lawsregs/guidance/cwa/dredgdis/upload/sprucepropdeterm.pdf> [hereinafter PROPOSED DETERMINATION].

207. RECOMMENDED DETERMINATION, *supra* note 204, at 13.

208. *Id.*

209. *Id.*

210. PROPOSED DETERMINATION, *supra* note 206, at 9. Specifically, "[t]he FWS service claimed there was inadequate compensatory mitigation proposed for the project because the

The Proposed Determination acknowledged that “we now know that failure to control mining practices has resulted in persistent environmental degradation,” and that “regulatory controls currently in place have not prevented adverse water quality and aquatic habitat impacts from other surface mining operations.”²¹¹ EPA Region III thus based its Proposed Determination on the belief that, despite the regulatory processes involved, “construction of [the] Spruce No. 1 Mine . . . would destroy streams and habitat, cause significant degradation of on-site and downstream water quality, and could therefore result in unacceptable adverse impacts to wildlife and fishery resources.”²¹²

Assessing the streams that would be filled under the Corps’ Spruce No. 1 permit, the EPA pointed to the quality of the Oldhouse Branch and Pigeonroost Branch as a reason to withdraw the permit.²¹³ Scientific evaluation of both streams found them to be “high functioning streams supporting healthy aquatic communities.”²¹⁴ In addition, the Recommended Determination also emphasized the important ecological role played by headwater streams within the aquatic ecosystem.²¹⁵ Concomitantly, the EPA noted that burial of headwater streams would adversely impact downstream waters:

[The] construction of valley fills, sedimentation ponds and other discharges into Pigeonroost Branch and Oldhouse Branch authorized by the [Corps] Permit would likely have adverse impacts on downstream waters and wildlife living outside the footprint of the fill. These adverse impacts would be caused by the removal of functions performed by the buried resources and by transformation of the buried areas into sources that contribute contaminants to downstream waters.²¹⁶

assessment methodology used by the permittee to evaluate stream impacts considered only the physical characteristics of the impacted streams, without considering the equally important biological or chemical characteristics.” *Id.* at 8. EPA expressed concerns that the project had the potential to adversely affect water quality. *Id.*

211. *Id.* at 2.

212. *Id.* at 1.

213. *Id.* at 14.

214. *Id.* The EPA also noted that other streams in the Spruce Fork sub-watershed (to which both the Oldhouse and Pigeonroost Branches belong) impacted by mining operations similar to the Spruce No.1 Mine are comparatively not as healthy as the Oldhouse and Pigeonroost Branches. *Id.*

215. RECOMMENDED DETERMINATION, *supra* note 204, at 7 (“[Headwater streams] are the largest network of waterbodies within our ecosystem and provide the most basic and fundamental building blocks to the remainder of the aquatic and human environment. . . . Pigeonroost Branch and Oldhouse Branch represent some of the very few remaining streams within the Spruce Fork sub-watershed and the Coal River sub-basin that represent ‘least degraded’ conditions.”).

216. *Id.*

The EPA's approach was also informed by "a growing scientific consensus of the importance of headwater streams, a growing concern about the adverse effects of mountaintop removal mining, and concern that impacted streams cannot easily be replaced."²¹⁷ Affirming the protective intent of the CWA, the EPA viewed its role as upholding the biological integrity of aquatic resources through protecting the "indigenous, naturally occurring community."²¹⁸ Noting both its veto authority under section 404(c) and the section 404(b)(1) Guidelines, along with West Virginia's "aquatic life" designated use,²¹⁹ the EPA found the anticipated adverse impacts of the Spruce No. 1 Mine to be "unacceptable."²²⁰ Both the Proposed Determination and the Recommended Determination go into great detail regarding the anticipated impacts to various forms of wildlife, including aquatic macroinvertebrates, amphibians, fish, birds, and bats—with the overall conclusion that these life forms will all be harmed by the proposed Spruce No. 1 Mine.²²¹

As a corollary to the EPA's findings on the adverse impacts of the proposed project, the EPA also noted that the mitigation measures proposed were inadequate to offset these adverse impacts.²²² Evaluating the proposed Compensatory Mitigation Plan (CMP) submitted by the permittee, the Final Determination accepted EPA Region III's concern that the techniques proposed would be "unlikely to replace the high quality resources in Pigeonroost Branch and Oldhouse Branch [and] does not adequately account for the quality and function of the impacted resources."²²³ In response to the CMP's proposal to convert former sediment ditches into "re-established" streams, the EPA cited past agency experience suggesting that this type of "stream creation" mitigation is rarely effective in replacing critical headwater stream functions.²²⁴ Given

217. *Id.* at 17.

218. PROPOSED DETERMINATION, *supra* note 206, at 22.

219. Under this designation, West Virginia has "adopted or developed numeric and narrative water quality standards to protect resident aquatic life." *Id.*

220. *See id.* at 21-23; *see also* RECOMMENDED DETERMINATION, *supra* note 204, at 82.

221. The EPA Headquarters accepted these conclusions and expressed substantially similar concerns in the Final Determination. *See* FINAL DETERMINATION, *supra* note 201, at 47-50.

222. *See* RECOMMENDED DETERMINATION, *supra* note 204, at 65 ("[N]o discharge of dredged or fill material shall be permitted unless appropriate and practicable steps have been taken which will minimize potential adverse impacts of the discharge on the aquatic ecosystem." (citing 40 C.F.R. § 230.10(d) (2010)).

223. *Id.*; *see* Final Determination, *supra* note 201, at 83-84.

224. RECOMMENDED DETERMINATION, *supra* note 204, at 65-70.

Data show that water quality in these types of sediment ditches in the [mountaintop removal mining] region is typically highly degraded as a result of water in these ditches percolating through mine spoil. Even when the sediment ditches are enhanced for

the high baseline quality of the streams to be impacted by the Spruce No. 1 Mine, this failure of the CMP was of particular importance to the EPA.²²⁵

Ultimately, the EPA determined that in the geographical context of the Coal River sub-basin, there is a “need to ‘[l]ocate and protect the few remaining high quality streams in the . . . watershed.’”²²⁶ EPA Region III analysis of the Spruce No. 1 Mine found that the proposed valley fills affecting Pigeonroost Branch and Oldhouse Branch would degrade high quality streams that ought to be protected. The EPA also noted that there are at least eleven “additional mining operations either proposed or authorized but not constructed . . . in the Coal River sub-basin.”²²⁷ Summarizing its findings, the EPA’s Recommended Determination stated:

Spruce No. 1 Mine would eliminate the entire suite of important physical, chemical and biological functions provided by the streams of Pigeonroost Branch and Oldhouse Branch including maintenance of biologically diverse wildlife habitat. Region III maintains that impacts to these functions at the scale associated with this project will result in significant degradation (40 CFR 230.10(c)) of the Nation’s waters, particularly in light of the extensive historic stream losses in the Spruce Fork and Coal River watersheds. Region III does not believe the potential impacts of these stream resources can be adequately mitigated to reduce the impacts to an acceptable level by the compensatory mitigation described in the CMP.²²⁸

As a test case of its new “enhanced” procedural approach to mountaintop removal mining, the EPA’s Final Determination to withdraw the Spruce No. 1 Mine’s section 404 fill permit suggests a renewed focus on the CWA’s protective intent. In this one instance, at least, the EPA has demanded substantive results—that valley fills not cause demonstrable degradation of aquatic resources. Despite the many procedural steps undertaken by the project applicant, from the completion of impact statements to the formulation of mitigation proposals, the EPA

benthic substrata and riparian vegetation, such as through adding boulder clusters[,] . . . resulting water quality will likely be so degraded that the ditches will not meet or exceed pre-mining water chemistry baselines.

Id. at 69.

225. *Id.* at 66 (“Even if stream structure and hydrology can be replaced, it is not clear that replacing structure and hydrology will result in true replacement of functions, especially the native aquatic community and headwater functions.”).

226. *Id.* at 80 (first alteration in original) (quoting a 1997 WVDEP ecological assessment that indicated the sub-basin was “becoming increasingly impaired due to stressors such as mining”).

227. *Id.*

228. *Id.* at 70.

nonetheless vetoed the Corps' decision to grant a section 404 permit. Such a result seems to finally strike the proper balance between resource extraction and environmental protection. Following years of permitting mountaintop removal mining projects that led to harmful impacts on aquatic resources, the EPA now appears ready to deny outright permits that violate the section 404(b)(1) Guidelines—projects that seemingly would have been approved under the prior approach.

Of course, it remains to be seen whether the EPA's action in the Spruce No. 1 Mine case is an outlier or the signal of a new trend. At all stages of its section 404(c) review process, the EPA emphasized the size and scope of the Spruce No. 1 Mine, implying that this factor may have played a role in EPA's scrutiny of the project.²²⁹ In light of this possibility, perhaps industry will break down future projects into smaller segments, making them less prone to in-depth review from the EPA.²³⁰ Additionally, the high quality nature of the streams at issue in the Spruce No. 1 Mine permit may also have played a decisive role in the EPA's analysis. As such, there is an implicit suggestion that had these streams not been "high functioning" and supporting "healthy aquatic communities," the outcome may have been different.²³¹

In the aftermath of its withdrawal of the Spruce No. 1 Mine permit, the EPA has come under intense scrutiny from regulated industry and West Virginia's elected officials. Newly elected U.S. Senator Joe Manchin has already promised to introduce legislation that would prevent the EPA from vetoing already-issued permits in the future.²³² Meanwhile, U.S. Representative Nick Rahall expressed optimism that the EPA's decision would be judicially challenged and successfully

229. See, e.g., PROPOSED DETERMINATION, *supra* note 206, at 7.

230. The Final Determination implicitly approves the practice of "phasing" valley fills in mining projects as a means to reduce adverse impacts from mining activities. See FINAL DETERMINATION, *supra* note 201, at 24 ("The permittee also indicated that other approaches previously discussed, such as 'sequencing' or 'phasing' of valley fills, remained unacceptable to Arch Coal, Inc., due primarily to economic considerations."); *id.* at 75 ("EPA and mining companies have . . . coordinated to . . . phase mining construction to assess the effectiveness of best management practices designed to protect water quality.").

231. PROPOSED DETERMINATION, *supra* note 206, at 14.

232. Manchin went on to state that "[a]lthough the EPA claims no other permits are currently being considered for a retroactive veto, the potential negative effects of this decision are staggering. Now, every similarly valid Section 404 permit is faced with regulatory limbo and potentially the same after-the-fact reversal." Ken Ward Jr., *Manchin To Introduce Bill To Block EPA Permit Vetoes*, CHARLESTON GAZETTE, COAL TATTOO BLOG (Jan. 20, 2011), <http://blogs.wvgazette.com/coalattoo/2011/01/20/sen-manchin-to-introduce-bill-to-block-epa-permit-vetoes/#more-12110>.

reversed.²³³ According to other legal analysis of the Final Determination, the decision could signal the EPA's intent to use its section 404(c) authority expansively and this, at the very least, would likely cause regulatory uncertainty through the mere threat of future vetoes.²³⁴ Of direct importance, Mingo Logan Coal Company—the Spruce No. 1 Mine permittee—has a lawsuit pending against the EPA, which it brought after EPA Region III issued the Proposed Determination to withdraw specification.²³⁵

Contrary to these views, any legal challenge to the EPA's Final Determination withdrawing specification from the Spruce No. 1 Mine should fail on the merits. Under the explicit text of the CWA, section 404(c), the EPA is authorized to prohibit the Corps from granting a section 404 permit for a specific site if granting that permit would have “unacceptable adverse effect” on aquatic resources—including the “withdrawal of specification” for permits already granted.²³⁶ The EPA's regulations define “unacceptable adverse effect” as an “impact on an aquatic or wetland ecosystem which is likely to result in . . . significant loss of or damage to . . . wildlife habitat,” while evaluating “unacceptability” of impacts consistent with the section 404(b)(1) Guidelines.²³⁷ Because the Proposed, Recommended, and Final Determinations all go into great detail cataloging the anticipated adverse aquatic impacts of the Corps' permit issued for the Spruce No. 1 Mine,

233. Ken Ward Jr., *Breaking News: EPA Vetoes Spruce Mine Permit*, CHARLESTON GAZETTE, COAL TATTOO BLOG (Jan. 13, 2011), <http://blogs.wvgazette.com/coalattoo/2011/01/13/breaking-news-epa-vetoes-spruce-mine-permit/#more-11760>.

234. See, e.g., John Iani et al., *EPA Reverses Army Corps Section 404 Permit*, VAN NESS FELDMAN ALERTS (Jan. 20, 2011), <http://www.vnf.com/news-alerts-545.html> (“If . . . EPA's determination with respect to Spruce No. 1 Mine signals any intent by the agency to expand its use of its Section 404(c) authority in the future, mining companies and others holding section 404 permits for controversial projects or activities could find themselves in what a collation of industry groups has called ‘regulatory limbo’ with respect to their permit authorizations.”).

235. See *id.*

236. 33 U.S.C. § 1344(c) (2006) (“The Administrator is authorized to prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and he is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever he determines, after notice and opportunity for public hearings, that the discharge of such materials into such area will have an unacceptable adverse effect on municipal water supplies, shellfish beds and fishery areas (including spawning and breeding areas), wildlife, or recreational areas. . . . The Administrator shall set forth in writing and make public his findings and his reasons for making any determination under this subsection.”); see 40 C.F.R. § 231.2(a) (2011) (“Withdraw specification means to remove from designation any area already specified as a disposal site by the U.S. Army Corps of Engineers or by a state which has assumed the section 404 program, or any portion of such area.”).

237. 40 C.F.R. § 231.2(e).

the EPA has met the legal requirements set by section 404(c).²³⁸ In light of the EPA's detailed findings, the statutory text of section 404(c), and the overarching purpose of the CWA, the reviewing court should defer to the EPA's judgment as a valid exercise of agency expertise, consistent with the APA's principles of judicial review.²³⁹

Any legal challenge of the Final Determination should also fail on procedural grounds. Here, the EPA scrupulously followed the process prescribed by the section 404(c) regulations—including provision of notice and a public hearing, completion of Proposed and Recommended Determinations at the regional level, consideration of public comments, and initiation of consultations with the Corps and the permittee on possible alterations to the project to reduce adverse impacts to an “acceptable” level.²⁴⁰

In addition, the policy arguments advanced by industry warning of future regulatory uncertainty are inapposite. While it is highly unusual for the EPA to withdraw an already-granted permit, in the case of the Spruce No. 1 Mine it should hardly have been a surprise. As detailed in the Final Determination, the EPA and the U.S. Fish and Wildlife Service expressed concerns regarding the project's potential for adverse aquatic impacts at nearly every step of the environmental review process.²⁴¹ Considering the EPA's long-standing views on the project, in combination with the ongoing legal challenge to the permit brought by environmental groups, industry should have been aware that their permits were tenuously held.²⁴² The true source of confusion is previous Corps policy condoning valley fills under the CWA. That the EPA has now finally determined to correct this prior misinterpretation by vindicating its statutory role under section 404(c) should not be held against it because industry will no longer have easy access to improperly granted dredge and fill permits.

238. See, e.g., FINAL DETERMINATION, *supra* note 201, at 49-50 (“The direct impacts to these headwater stream systems, through burial of these diverse and healthy wildlife communities and their habitat, will result in unacceptable adverse effects on wildlife, particularly to macroinvertebrate, amphibian, fish, and water-dependent bird populations. Through the loss of stream macroinvertebrate and salamander communities, there will be, in turn, substantial effects to both aquatic and terrestrial vertebrate populations that rely on these communities as a food source. . . . The filling in and complete destruction of 6.6 miles of streams at issue here is a large impact and clearly adverse to the wildlife that will be buried under the thousands of tons of excess spoil.”).

239. See *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 842-43 (1984); see also 5 U.S.C. § 706 (2006).

240. See 40 C.F.R. §§ 231.3-231.6.

241. See FINAL DETERMINATION, *supra* note 201, at 18-21.

242. *Id.* at 19-20.

IV. COAL STRIKES BACK? A BRIEF SURVEY OF ONGOING LITIGATION CHALLENGING EPA'S NEW APPROACH

In the wake of ongoing controversy surrounding its new approach to mountaintop removal mining, the EPA is currently facing increased legal and political pressure to desist from future permit revocations and implementation of “enhanced” review procedures. As stated in the Spruce No. 1 Mine Recommended Determination, sixty-five percent of the participants at the May 2010 public hearing held in Charleston, West Virginia, to address comments on the Proposed Determination generally opposed the EPA’s Proposed Determination.²⁴³ Joe Manchin, recently elected U.S. senator and former West Virginia governor, has termed coal mining a “way of life” for West Virginia, criticized the EPA’s efforts to regulate mountaintop removal mining more strictly, and proposed legislation to prevent the EPA from retroactively vetoing already-granted section 404 permits.²⁴⁴ Further, one of Manchin’s final acts as Governor was directing the WVDEP to sue the EPA over its “crackdown” on mountaintop removal mining.²⁴⁵

In the suit, WVDEP argues that the EPA’s Enhanced Coordinating Procedures (ECP)²⁴⁶ and Detailed Guidance covering mountaintop removal mining permits are unlawful and represent violations of the APA, the CWA, NEPA, and SMCRA.²⁴⁷ Essentially, West Virginia asserts that it should retain the right to develop extractive industry in accordance with its own interpretation of the CWA.²⁴⁸ In particular, the

243. RECOMMENDED DETERMINATION, *supra* note 204, at 17.

244. Ken Ward Jr., *Manchin Announces Suit To Block EPA Mine Permit Reviews*, CHARLESTON GAZETTE (Oct. 5, 2010), <http://wvgazette.com/News/201010051078>; Ward, *supra* note 232.

245. Ward, *supra* note 232.

246. Given the date and the content of the ECP referenced in the WVDEP suit, the “ECP” discussed in this section is presumably the June 11, 2009 MOU between the EPA, the Corps, and DOI referenced above, which sets out procedures for “enhanced coordination” between these agencies. *See* MOU, *supra* note 171.

247. *See* Complaint at 4-5, *Huffman v. EPA* (S.D. W. Va. filed Oct. 6, 2010), <http://wvgazette.com/static/coal%20tattoo/manchinvepa.pdf> [hereinafter WVDEP Complaint] (stating that the ECP and Detailed Guidance are “extra-regulatory actions . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law because they have invaded and usurped the authority of . . . West Virginia, and that of WVDEP, to perform . . . functions related to the regulation of surface coal mining” and that the ECP and detailed Guidance have impeded the issuance of surface mining permits, threatening the “economic well-being” of West Virginia and harming the public interest in acquiring a coal supply to meet the nation’s energy needs).

248. *See id.* at 5 (“Plaintiffs ask this Court to declare that the State of West Virginia retains its right to establish water quality standards for the State’s waters and that WVDEP retains the authority to control the relevant permitting processes under its purview, including the right to

lawsuit challenges the Detailed Guidance's approach to Corps-issued FONSI's based on certain types of mitigation and asserts that the EPA's increased scrutiny of projects with multiple valley fills violates SMCRA.²⁴⁹ West Virginia goes on to claim that the ECP and Detailed Guidance constitute "final agency action" under the APA by creating decision-making standards for the EPA and the Corps in reviewing mining permits for CWA compliance.²⁵⁰ As a result, the lawsuit alleges that the EPA has violated the APA by failing to follow the prescribed notice and comment rulemaking required for agency actions that substantively alter prior federal regulations.²⁵¹

WVDEP's complaint also bemoans the EPA's "utter disregard for the economic impact" that will allegedly transpire under application of the ECP and Detailed Guidance.²⁵² More specifically, the lawsuit claims that the EPA's new approach to assessing mining permits "threaten[s] the economic well-being of the State of West Virginia . . . and imperil[s] the general public interest in preserving a supply of coal necessary to meet the nation's energy needs, in contravention of the expressed goals of SMCRA."²⁵³ In support of these economic arguments, West Virginia contends that in the time frame following the EPA's adoption of the ECP and Detailed Guidance, "markedly fewer surface mining permits have been approved than in previous years."²⁵⁴ Unsurprisingly, West Virginia seeks a return to the Corps' traditional, more lenient permitting practice.²⁵⁵

West Virginia's view of the ECP and Detailed Guidance is shared by other industry voices. In a separate lawsuit, the Kentucky Coal Association (KCA) alleges substantially similar claims against EPA.²⁵⁶

apply the narrative water quality standards and to issue Guidance Documents interpreting and implementing those standards.").

249. *Id.* at 35-38.

250. *Id.* at 3.

251. *Id.* at 38-39.

252. *Id.* at 2.

253. *Id.* at 5. Of course, the "expressed goals" of SMCRA also include provisions favoring environmental protection. Among the purposes of the Act are to "establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations . . . assure that surface coal mining operations are so conducted as to protect the environment . . . and strike a balance between protection of the environment and agricultural productivity and the Nation's need for coal as an essential source of energy." 30 U.S.C. § 1202(a), (d), (f) (2006); *see id.* § 1292(a)(3) (providing that SMCRA does not supersede, amend, modify, or repeal the CWA).

254. WVDEP Complaint, *supra* note 247, at 19; *see id.* at 24-25, 34.

255. *See id.* at 5.

256. *See* Complaint, *Ky. Coal Ass'n v. EPA* (E.D. Ky. filed Oct. 18, 2010), <http://www.kentuckycoal.com/documents/Complaint.pdf> [hereinafter KCA Complaint].

Focusing on a perceived change in the EPA's approach to issuance of CWA section 402 NPDES permits for mining-related activities, KCA argues that the Detailed Guidance fundamentally altered the legal landscape by attempting to limit or eliminate valley fills in surface mining projects and obstructing Kentucky's process for approving section 402 permits.²⁵⁷ As a consequence, KCA posits that EPA's application of the Detailed Guidance is arbitrary and capricious, usurping Kentucky's CWA authority to issue section 402 permits.²⁵⁸ Much like WVDEP, KCA also characterizes the Detailed Guidance as a "legislative rule" and asserts that EPA's failure to subject it to formal notice and comment rulemaking violates the APA.²⁵⁹ Finally, KCA advances its own version of WVDEP's "economic harm" argument, claiming that EPA's use of the Detailed Guidance has caused delays in the permitting process, causing "significant injury in terms of loss of coal production, revenue and employment to KCA's members."²⁶⁰

In response to these lawsuits and another ostensibly similar lawsuit brought by the National Mining Association (NMA), the EPA has sought to consolidate the claims into one suit, to be heard by the United States District Court for the District of Columbia.²⁶¹ Unsurprisingly, the EPA defended the ECP and Detailed Guidance from these legal challenges in its Memorandum in Opposition to the NMA suit.²⁶² The EPA stressed that the ECP did not create any new, legally binding requirements; rather, the EPA intended it merely as a statement of procedures to be used in applying the existing section 404(b)(1) Guidelines, which would still control the ultimate permitting decision.²⁶³ Likewise, the EPA described the Detailed Guidance as a "quintessential policy statement"—an interim document that merely guides EPA review of Corps and state permitting decisions, which are still ultimately determined according to existing law.²⁶⁴ Thus, the EPA contends that the ECP and Detailed Guidance are

257. *See id.* at 10-11.

258. *Id.* at 20-21.

259. *Id.* at 20, 22.

260. *Id.* at 21. KCA also claims that the "EPA's actions are designed to delay and impede the issuance of any new surface coal mine in Eastern Kentucky and are arbitrary, capricious and illegal." *Id.* at 25.

261. Ken Ward Jr., *EPA Seeks To Combine Mining Lawsuits*, CHARLESTON GAZETTE, Nov. 2, 2010, <http://sundaygazette.com/News/201011020983>.

262. *See* United States' Memorandum in Opposition to National Mining Association's Motion for Preliminary Injunction, *Nat'l Mining Ass'n v. Env'tl. Prot. Agency* (D.D.C. filed Oct. 20, 2010) (No. 1:10-CV-1220), <http://wvgazette.com/static/coal%20tattoo/eparesponsetonma.pdf> [hereinafter EPA Memorandum].

263. *Id.* at 16.

264. *Id.* at 18-19.

fully consistent with the section 404(b)(1) Guidelines, which envision a joint role for the EPA and the Corps in the permitting process.²⁶⁵ While the ultimate decision on whether to grant a permit rests with the Corps, the EPA is also empowered to review the Corps' permitting decisions to ensure that they comply with the section 404(b)(1) Guidelines.²⁶⁶

When considering industry and state government claims against the EPA in light of the CWA's statutory intent and the regulatory requirements of the section 404(b)(1) Guidelines, it is apparent that the ECP and Detailed Guidance should stand as policy statements that enforce existing legal standards. Contrary to the view that the EPA regulation of mountaintop removal mining under the ECP and Detailed Guidance represents a legislative rule requiring a formal rulemaking procedure, the documents themselves are wholly rooted in the EPA's existing legal authority under the CWA and its implementing regulations.²⁶⁷ Under the APA, formal notice and comment rulemaking is not required for "interpretative rules" and "general statements of policy."²⁶⁸ The ECP and Detailed Guidance represent a departure from prior permitting practices only because incorrect policy determinations allowed approval of those prior permits. They are not emblematic of a sweeping change in substantive law under the EPA's new approach to CWA regulation of surface coal mining.

The economic loss arguments advanced by the industry and state government plaintiffs are even more pernicious. In particular, KCA's complaint suggests a view that the section 402 permitting process exists primarily to expeditiously grant CWA permits to whomever requests one—that industry is entitled to them, upon fulfilling minimal procedural steps and issuing conclusory findings on anticipated environmental impacts.²⁶⁹

265. *Id.* at 22, 27-28. The EPA also argued that the Detailed Guidance is consistent with NEPA, stating that "NMA has not and cannot point to anything in the Detailed Guidance that is inconsistent with the procedural requirements of NEPA and Courts have upheld the discretion of federal agencies as to how to achieve those procedural requirements." *Id.* at 28.

266. *Id.* at 27-28.

267. *See, e.g.*, Detailed Guidance, *supra* note 178, at 20 ("The following discussion represents EPA's expectations for the analyses necessary to ensure full compliance with water quality standards, prevention of significant degradation, and full analysis of avoidance, minimization, and . . . mitigation, to achieve full compliance with the 404(b)(1) Guidelines." (emphasis added)); *see also* MOU, *supra* note 171, at 4 ("The goal of these procedures is to ensure more timely, consistent, transparent, and environmentally effective review of permit applications *under existing law and regulations.*" (emphasis added)).

268. 5 U.S.C. § 553(b)(3)(A) (2006).

269. *See* KCA Complaint, *supra* note 256, at 11, 25.

In actuality, the CWA creates substantive requirements that must be met before permits may be granted. Accordingly, a fundamental precept of the section 404(b)(1) Guidelines is “that dredged or fill material should not be discharged into the aquatic ecosystem, unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact.”²⁷⁰ In addition, the Guidelines also mandate that “[n]o discharge of dredged or fill material will be permitted if it [c]auses or contributes . . . to violations of any applicable State water quality standard.”²⁷¹ Further, the purpose of the CWA is to “restore and maintain the chemical, physical, and biological integrity of the Nation’s waters”—not to facilitate the timely issuance of mining permits containing valley fills.²⁷² EPA policies that promote stricter adherence to the actual purpose and substantive requirements of the CWA should therefore not fail because environmental review postpones granting section 404 permits to mine operators. Under the governing law, these permits may only be granted when they meet established environmental standards. Decades of experience suggest that permits granted in the past have not met these standards. This has necessitated a more searching EPA review of future permits.

The state government and industry plaintiffs also undersell the EPA’s statutory and regulatory role in ensuring that state section 402 NPDES and SMCRA permitting practices comply with the law. While it is true that both statutes provide for state primacy following initial federal approval of state permitting plans, this approval does not signal the end of potential federal involvement. On the contrary, both SMCRA and the CWA envision a federal role capable of overriding state programs that fail to meet those statutes’ goals.²⁷³ As the EPA notes in its Memorandum in Opposition to the NMA lawsuit, the EPA “may object to state-adopted water quality standards[,] . . . may require changes to the state-adopted water quality standards[,] . . . promulgate federal standards[, and] develop and publish criteria for water quality that accurately reflect ‘the

270. 40 C.F.R. § 230.1(c) (2011).

271. *Id.* § 230.10(b), (b)(1).

272. 33 U.S.C. § 1251(a) (2006).

273. *See, e.g., id.* § 1313 (providing states the right to establish, review, and revise water quality standards, *subject to EPA approval*); *id.* § 1342(c)(2) (providing that the EPA has continuing oversight authority to ensure state program compliance with federal law); *id.* § 1344(c) (providing the EPA the right to veto any § 404 permit issued by the Corps that will have an “unacceptable adverse effect” on certain aquatic values); 30 U.S.C. § 1271(b) (2006) (providing the Secretary of the Interior with an “enforcement” power to revoke permitting authority from a state whose SMCRA program violates the minimum federal standards).

latest scientific knowledge.”²⁷⁴ Likewise, SMCRA expressly stipulates that it does not alter existing CWA requirements, while also authorizing the Secretary of the Interior to revoke permitting authority from states whose SMCRA programs fail to comply with minimum federal standards.²⁷⁵

Despite the logical consistency between the EPA’s enhanced review of mountaintop removal mining permits and the EPA’s existing CWA authority, reviewing courts have already signaled a willingness to favorably treat legal challenges against the ECP and Detailed Guidance. In a January 2011 ruling, Judge Walton of the United States District Court for the District of Columbia issued an opinion in the *NMA v. Jackson* litigation denying both NMA’s request for an injunction and the EPA’s motion to dismiss.²⁷⁶ Judge Walton concluded that NMA was likely to prevail on its claim that the EPA violated the APA in failing to subject the ECP and Detailed Guidance to formal notice and comment rulemaking.²⁷⁷ Assessing the EPA’s actions, Judge Walton determined that they “grant[ed] rights, impose[d] obligations, or produce[d] other significant effects on private interests,” and were therefore “legislative rules.”²⁷⁸ While the standard for reviewing a motion to dismiss is lenient,²⁷⁹ generally accepting the plaintiff’s claims as pleaded, this holding ignored the EPA’s valid argument that any legal obligations imposed on industry by the ECP and Detailed Guidance were already required by the CWA and the section 404(b)(1) Guidelines. Viewed in this light, the EPA’s promulgation of the ECP and Detailed Guidance look more like policy statements intended to bring mining permit issuance into compliance with existing CWA standards.

In addition, Judge Walton held that the EPA had likely exceeded its statutory role in the section 404 permitting process by issuing the ECP and Detailed Guidance.²⁸⁰ As such, the court signaled a belief that NMA

274. EPA Memorandum, *supra* note 262, at 3 (citing 40 C.F.R. §§ 131.5, 131.21; 33 U.S.C. § 1313(c)(3)-(4)).

275. *See* 30 U.S.C. §§ 1292(a)(3), 1271(b).

276. *See* Nat’l Mining Ass’n v. Jackson, 768 F. Supp. 2d 34 (D.D.C. 2011).

277. *Id.* at 44. Judge Walton also held that the EPA’s actions met the “final agency action” requirement necessary for review under APA, stating: “[Here], the MCIR Assessment, the EC process, and the Guidance Memorandum all meet the criteria of final agency actions . . . it is possible for an agency to take final agency actions during a permit assessment process prior to actually determining whether to grant or deny an application for a permit.” *Id.*

278. *Id.* at 48-49 (quoting *Batterton v. Marshall*, 648 F.2d 694, 701-02 (D.C. Cir. 1993)).

279. *See id.* at 41.

280. *Id.* at 49. The court applied step one of the *Chevron* test, stating, “It seems clear, however, that Congress intended the EPA to have a limited role in the issuance of Section 404 permits, and that nothing in Section 404 of the Clean Water Act gives the EPA the authorization to develop a new evaluation or permitting process which expands its role.” *Id.* at 50.

would prevail in demonstrating that the EPA's use of the ECP and Detailed Guidance is "arbitrary and capricious," and therefore in violation of the APA.²⁸¹ In spite of his holding that NMA was likely to prevail on many of its claims, Judge Walton also rejected NMA's request for an injunction, ruling that the industry plaintiffs had not demonstrated that the EPA's actions would cause them "irreparable harm."²⁸² Importantly, Judge Walton reserved judgment on whether the ECP and Detailed Guidance were "necessary to protect the environment," noting the defendant intervenor's view that "substantive requirements of the Clean Water Act were essentially ignored by the prior Administration."²⁸³ At trial, the court will not be constrained to accept all of NMA's factual allegations as true. Hopefully, a more thorough review of the substantive CWA requirements will lead the court to conclude that the EPA's use of the ECP and Detailed Guidance merely reflects a desire to ensure that these substantive requirements are upheld.

In sum, the claims challenging the EPA's implementation of the ECP and Detailed Guidance should fail in their totality. The EPA has an explicit statutory role to play in ensuring that activities such as mountaintop removal mining comply with the CWA. Consequently, the ECP and Detailed Guidance should be seen as policy statements guiding the EPA's authority under this statutory role.

V. A PATTERN OF DEFERENCE? *PENNACO ENERGY INC. v. EPA*

Recent case law outside of the mountaintop removal mining context also illustrates the tension between energy extraction and environmental protection. In 2009, the United States District Court of Wyoming considered a challenge brought by a group of energy companies against the EPA.

Exercising its authority under the CWA, Montana promulgated revised water quality standards in 2003 and 2006, which were intended to protect water quality from the impacts of coal bed methane development in the Tongue River, Powder River, and Little Powder River Watersheds.²⁸⁴ Subsequently, Pennaco Energy and other industry

281. *Id.*

282. *Id.* at 51. "The issuance of a preliminary injunction to 'restore' the previously existing regulatory environment would not be in line with the purposes of injunctive relief, as the ultimate inquiry would still remain 'whether there is a real and immediate threat of repeated injury.'" *Id.* at 55 (quoting D.C. Common Cause v. District of Columbia, 858 F.2d 1, 8-9 (D.C. Cir. 1988)).

283. *Id.* at 56.

284. *Pennaco Energy, Inc. v. EPA*, 692 F. Supp. 2d 1297, 1299 (D. Wyo. 2009).

petitioners sought review of the EPA's approval of the revised standards, arguing that the EPA's actions violated the CWA and the APA.²⁸⁵

Coal bed methane development has been a growing industry in the Powder River Basin area since the 1990's.²⁸⁶ Large coal deposits in the area have methane gas trapped in the coal aquifers, which is released from the coal bed by lowering the water pressure trapping the gas in the coal bed.²⁸⁷ The methane is detached from the coal by drilling water wells into the coal seam and then pumping water out of the seam.²⁸⁸ This water is then commonly discharged into ponds or existing stream channels, causing water quality issues.²⁸⁹

Specifically, coal bed methane extraction has implications for two aspects of water quality: sodium absorption ratio (SAR) and electrical conductivity (EC).²⁹⁰ SAR adversely affects soil quality by reducing its hydraulic characteristics, while EC impacts the ability of plants to uptake water.²⁹¹ In response to the environmental impacts resulting from coal bed methane development in Wyoming and Montana, the Montana Board of Environmental Review adopted numeric criteria for EC and SAR, which would be applied together with the existing "narrative standards" in the nondegradation review process.²⁹²

The provision of the CWA at issue in *Pennaco* addresses the control of nonpoint discharges into navigable waters.²⁹³ Under this scheme, Congress required states to develop water quality standards that included three elements:

- (1) [F]irst, each water body must be given a "designated use," such as recreation or the protection of aquatic life;
- (2) second, the standards must specify for each body of water the amounts of various pollutants or pollutant parameters that may be present without impairing the designated use; and
- (3) third, each state must adopt an *antidegradation review policy*

285. *Id.*

286. *Id.* at 1303.

287. *Id.*

288. *Id.*

289. *Id.*

290. *Id.* at 1303-04.

291. *Id.*

292. *Id.* at 1303 ("The function of a numeric standard is to quantify for a given pollutant the level determined to be protective of designated uses, whereas the purpose of a nondegradation rule is to protect the increment of 'high quality' water that exists between ambient water quality and a numeric water quality standard. . . . Under the narrative standards, a change in water quality is nonsignificant if the quality of water for any parameter will not have a measurable effect on any existing or anticipated use or cause measurable changes in aquatic life or ecological integrity." (citing MONT. ADMIN. R. 17.30.715(J) (g)).

293. 33 U.S.C. § 1313 (2006).

which will allow the state to assess activities that may lower the water quality of the water body.²⁹⁴

The purpose of the antidegradation policy is to “maintain existing beneficial uses of navigable waters, preventing their further degradation.”²⁹⁵ After a state adopts a water quality standard, the EPA must determine whether the standard is consistent with the CWA.²⁹⁶

In approving Montana’s 2003 numeric standards, the EPA supported its decision by stating:

Water quality standards for EC and SAR are needed to address current and projected development of coal bed methane (CBM) within the Tongue River, Powder River and Little Powder River Watersheds. . . . Our review of the new water quality standards . . . focused on the protectiveness of those standards as applied to irrigated agricultural uses EPA believes the final EC and SAR standards provide a reasonable assurance that irrigated agriculture and other designated uses applicable to these basins will be protected.²⁹⁷

Subsequently, the 2006 amendments designated EC and SAR as “harmful” parameters. Practically speaking, this classification would require permit applicants to obtain an authorization to degrade if a discharge would cause the applicable numeric standards to be exceeded by a certain threshold.²⁹⁸ The EPA’s basis for approving the 2006 revised standards stated:

In the revision . . . at issue, the Board has determined that EC and SAR are “harmful” parameters for the purposes of making nonsignificance determinations for high quality waters. There is evidence in the record that EC and SAR may be harmful to plants and soils, and therefore harmful to irrigated agriculture, the most sensitive designated use for these two parameters in the Tongue River, Powder River and Little Powder River Basins.²⁹⁹

The industry petitioners, along with the State of Wyoming, challenged the EPA’s action on procedural grounds. They alleged that the EPA, in approving the 2003 standards, failed to consider the entire administrative record, failed to articulate a rational analysis, and failed to determine whether the standards were based on appropriate scientific and

294. *Pennaco*, 692 F. Supp. 2d at 1300 (citing *Am. Wildlands v. Browner*, 260 F.3d 1192, 1194 (10th Cir. 2001)).

295. *Id.* at 1301 (quoting *PUD No. 1 of Jefferson Cnty. v. Wash. Dep’t of Ecology*, 511 U.S. 700, 705 (1994)).

296. *Id.* at 1301 (citing *Am. Wildlands*, 260 F.3d at 1194).

297. *Id.* at 1305.

298. *Id.* at 1306.

299. *Id.*

technical data.³⁰⁰ Likewise, petitioners argued that EPA's approval of the 2006 nondegradation standard failed to explain a basis for approval.³⁰¹ The district court agreed and ruled in favor of the industry petitioners on all these counts.³⁰²

Noting the contentious nature of the record and differing conclusions as to the environmental effects of coal bed methane water, the court found that the EPA had not objectively reviewed all of the coal bed methane industry testimony provided.³⁰³ In particular, industry testimony had challenged the SAR and EC standards applied as scientifically unreasonable—noting naturally high salinity in the river.³⁰⁴ Although the EPA had reviewed Montana's summary of significant comments received, and an EPA staff member had participated in hearings held during the Montana administrative review process, the court held that the EPA had not met its statutory obligations to consider the administrative record.³⁰⁵

The court also held that the EPA's "conclusory" explanation failed to identify the scientific basis for approving the proposed numeric standards.³⁰⁶ The EPA's rationale stated:

Based on our review of the available science on this topic, including a technical evaluation of the standards by the U.S. Department of Agriculture's Salinity Laboratory, EPA believes the final EC and SAR standards provide reasonable assurance that irrigated agriculture and other designated uses applicable to those basins will be protected.³⁰⁷

The EPA further advised the court that it had relied on a technical document drafted by the Montana Department of Environmental Quality, in support of the standards.³⁰⁸ However, because the EPA did not include the Montana document in its own report approving the Montana

300. *Id.* at 1308, 1310-11.

301. *Id.* at 1313-14.

302. *See id.* at 1315-16. The Tenth Circuit standard of review under the APA applied by the district court is:

The scope of our review under the "arbitrary or capricious" standard is narrow and we are not to substitute our judgment for that of the agency. . . . Agency action will be set aside if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Id. at 1307.

303. *Id.* at 1309-10.

304. *Id.* at 1308.

305. *Id.* at 1310.

306. *Id.* at 1311.

307. *Id.*

308. *Id.*

standards, the court held that the EPA had not made its own, independent determination that the standards were scientifically supported.³⁰⁹

Analyzing the EPA's approval of the 2006 nondegradation standard, the court found that the EPA had failed to provide a "rational connection" between the evidence in the record and its conclusion.³¹⁰ In reaching this conclusion, the court was troubled that the EPA had justified its approval on the "basis that there [was] evidence in the record that EC and SAR *may* be harmful to plants and soils," and therefore possibly affect agricultural use of water resources.³¹¹ To the court, this demonstrated that the EPA failed to identify a rational basis for its conclusion. Apparently, the uncertainty of the qualifier "may" convinced the court that the EPA did not meet the mandates of the CWA.

When comparing the District Court of Wyoming's decision in *Pennaco* to the Fourth Circuit mountaintop removal mining decisions in *KFTC II*, *Bragg II*, and *OVEC II*, a pattern of deference to extractive industry interests emerges. Where the Fourth Circuit ruling in *OVEC II* deferred to the Corps' conclusory belief that the proposed mitigation measures would be successful,³¹² the district court ruling in *Pennaco* treated a similar assurance from EPA skeptically.³¹³ The crucial distinction here is that the plaintiffs in *OVEC II* had challenged an agency action favoring extractive industry, while *Pennaco* involved an industry challenge of an agency action seen to harm extractive interests. Thus, where the Fourth Circuit was highly respectful to the Corps' "best professional judgment," the Wyoming district court treated EPA's decision making with considerably more suspicion.

In *KFTC II*, the Fourth Circuit expressly criticized the earlier district court ruling in that case for not showing proper deference to the Corps' interpretation of its duties in granting section 404 permits. In the Fourth Circuit's words, "The court . . . did not give any deference to the agency's interpretation of this regulation nor did it explain why such

309. *Id.*

310. *Id.* at 1314.

311. *Id.*

312. *See OVEC II*, 556 F.3d 177, 205-06 (4th Cir. 2009) ("The Corps' support for its claim that the proposed stream creation measures have good potential for success is admittedly limited [nonetheless] [w]hen an agency is called upon to make complex predictions within its area of special expertise, a reviewing court must be at its most deferential. . . . '[W]hen specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive.'" (quoting *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989)) (citing *Balt. Gas & Elec. Co. v. Natural Res. Def. Council*, 462 U.S. 87, 103 (1983))).

313. *Pennaco*, 692 F. Supp. 2d at 1311 ("The Court finds that the EPA's conclusory explanation fails to disclose the grounds upon which EPA acted.").

deference would be inappropriate.”³¹⁴ Faced with an ambiguous record, “replete with varying opinions and conclusions as to the effect of coal bed methane water,” the district court in *Pennaco* granted no such deference to the EPA’s professional judgment that the numeric standards at issue met CWA requirements.³¹⁵

Perhaps more troubling, the *Pennaco* court essentially used CWA requirements to upend the purpose of the Act, invalidating stricter discharge limits that had the goal of improving water quality. In this respect, the district court effectively ignored the EPA’s argument, based on prior Tenth Circuit case law, that if “state standards are more stringent than necessary to comply with the Clean Water Act, the EPA may approve the standards without reviewing the scientific data.”³¹⁶ Given the intent of the CWA to “restore and maintain the chemical, physical and biological integrity of the Nation’s waters,”³¹⁷ the EPA’s argument here makes intuitive sense. On the other hand, invoking the “sound science” requirement of the CWA³¹⁸ to allow higher EC and SAR levels attendant to coal bed methane development demonstrates unwarranted deference to extractive industry, at the expense of the CWA’s statutory goals. Similarly, the Fourth Circuit decision in *KFTC II* cited a provision of SMCRA requiring that surface mine operators “minimize disturbances and adverse impacts of the operation on fish, wildlife, and related environmental values, and achieve enhancement of such resources where practicable,” as statutory support for the allowance of valley fills.³¹⁹ In each case, the court used language that in its plain meaning evinces an environmentally protective purpose to favor extractive industry practices that threatened environmental values.

Further illustrating the *Pennaco* court’s deference to industry, the district court displayed much concern that the numeric standards were unfair to industry because the limits on EC and SAR under the standards would, in some instances, be lower than naturally occurring EC and SAR

314. *KFTC II*, 317 F.3d 425, 444 (4th Cir. 2003).

315. *Pennaco*, 692 F. Supp. 2d at 1310.

316. *Id.* at 1312 n.7 (citing *City of Albuquerque v. Browner*, 97 F.3d 415, 426 (10th Cir. 1996)). The *Pennaco* court itself even recognized this standard, yet still invalidated EPA’s action. *Id.* at 1312.

317. 33 U.S.C. § 1251(a) (2006).

318. See 40 C.F.R. § 131.5(a), (a)(4) (2011) (“Under Section 303(c) of the Act, EPA is to review and to approve or disapprove State-adopted water quality standards. The review involves a determination of . . . [w]hether the State standards . . . are based upon appropriate technical and scientific data and analyses.”).

319. *KFTC II*, 317 F.3d at 443 (quoting SMCRA, 30 U.S.C. § 1265(b)(24)).

levels.³²⁰ Of course, this could potentially be interpreted to mean that in light of the elevated natural levels of EC and SAR present, it is even more imperative to limit additional discharges in those rivers that would raise EC and SAR levels even higher. Considering the purpose of the CWA, this alternative view—affording greater protection of water quality—warrants greater deference than industry’s claims that the numeric standards were “unreasonable.”

In *Pennaco*, the CWA’s purpose would have been better served had the district court shown more deference to the EPA’s determination, in approving Montana’s numeric standards, that EC and SAR *may* be harmful to soils and plants. Instead, the district court was swayed by industry’s argument that the EPA’s finding was “arbitrary and capricious,”³²¹ ignoring the stated ideals of the CWA. The EPA’s approval of limits to EC and SAR levels was a plausible exercise of agency expertise, under the standard of review used by the district court.³²²

VI. DENOUEMENT

*There is a part of America which was here long before we arrived, and will be here, if we preserve it, long after we depart: the forests and the flowers, the open prairies and the slope of the hills, the tall mountains, the granite, the limestone, the caliche, the unmarked trails, the winding little streams—well, this is the America that no amount of science or skill can ever recreate or actually ever duplicate.*³²³

—Lyndon B. Johnson

The interplay between energy resource extraction and the CWA has unfolded in the courts as a story of deference. To the detriment of our shared aquatic resources, the deference in this story has been in favor of extractive industry desires. As detailed above, the Fourth Circuit mountaintop removal mining decisions deferred to agency expertise where such expertise struck a permissive chord favoring Appalachian coal extraction. By way of contrast, the District Court of Wyoming in *Pennaco* overturned an agency decision making resource extraction

320. See, e.g., *Pennaco*, 692 F. Supp. 2d at 1308, 1311. “The testimony expressed concern that the Montana numeric standards are not scientifically sound and impose unreasonable SAR and EC levels in light of the naturally high salinity of the rivers;” and the “EPA failed to identify the scientific basis for approving a standard which oftentimes will be less than the naturally occurring condition.” *Id.* (emphasis omitted).

321. *Id.* at 1314.

322. See *id.* at 1307.

323. Lyndon B. Johnson, *Remarks at the Signing of the Highway Beautification Act of 1965*, in *AMERICAN EARTH: ENVIRONMENTAL WRITING SINCE THOREAU* 395, 396 (Bill McKibben ed., 2008).

tougher for industry. Taken together, a pattern of judicial deference benefiting extractive industry begins to form.

Looking to the APA, the Supreme Court's *Chevron* decision requires that where statutory ambiguity exists, courts defer to the agency's interpretation unless it is "arbitrary, capricious, or manifestly contrary to the statute."³²⁴ Where Congress has clearly spoken, congressional intent trumps any inconsistent agency interpretation.³²⁵ Thus, the appropriate standard of judicial review to be applied under *Chevron* is dependent on the intent of the underlying statute applied. Towards this end, courts analyzing the CWA in the context of energy resource extraction must read the APA in conjunction with the CWA's ultimate objective when determining how much deference to grant agency determinations. At base, the purpose of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters."³²⁶ In addition, it is crucial to bear in mind that "[p]art of the concept of protecting the 'biological integrity' of the Nation's waters is protection of the indigenous, naturally occurring community."³²⁷

When reading the APA in conjunction with the purpose of the CWA, there is an imperative disfavoring discharges into our nation's waters that degrade water quality. Consequently, deferring to long-standing Corps practices sanctioning such fills violates the CWA. Likewise, overturning an agency decision that strengthens water quality standards as a violation of the CWA subverts the protective principle animating the CWA.

As described by both the EPA in the Spruce No. 1 Mine Recommended Determination and the district court in *OVEC I*, extensive Appalachian mountaintop removal mining operations go hand-in-hand with seriously degraded water quality.³²⁸ The EPA's recent initiatives placing greater scrutiny on mountaintop removal mining—culminating in the Recommended Determination to rescind a section 404 permit previously granted by the Corps—should work to re-balance the relationship between extractive industry and the CWA. Such a

324. *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 844 (1984) (citing *United States v. Morton*, 467 U.S. 822, 834 (1984); *Schweller v. Gray Panthers*, 453 U.S. 34, 44 (1981); *Batterton v. Francis*, 432 U.S. 416, 424-26 (1977); *Am. Tel. & Tel. Co. v. United States*, 299 U.S. 232, 235-37 (1936)).

325. *Id.* at 842.

326. 33 U.S.C. § 1251(a) (2006).

327. PROPOSED DETERMINATION, *supra* note 206, at 22 (citing *Alameda Water & Sanitation Dist. v. EPA*, 930 F. Supp. 486 (D. Colo. 1996)).

328. See RECOMMENDED DETERMINATION, *supra* note 204, at 80; see also *OVEC I*, 479 F. Supp. 2d 607, 658-59 (S.D. W. Va. 2007), *rev'd and vacated sub nom. OVEC II*, 556 F.3d 177 (4th Cir. 2009).

rebalancing would do much to restore the CWA's protective intent in the face of degradation-causing activities.

Congress intended SMCRA to provide the "coal supply essential to the Nation's energy requirements"—but at the same time required limits on surface mining to protect the environment from the adverse effects of resource extraction.³²⁹ In essence, Congress made SMCRA subservient to the CWA through a savings clause, stating that SMCRA would not be "construed as superseding, amending, modifying, or repealing . . . [t]he [Clean Water] Act, the State laws enacted pursuant thereto, or other Federal laws relating to preservation of water quality."³³⁰ In addition, the "buffer zone rule" in SMCRA's implementation regulations prohibits mining disturbances within 100 feet of perennial or intermittent streams, unless mining activities will not "cause or contribute to the violation of applicable State or Federal water quality standards."³³¹

Going forward, striking the proper balance between the CWA, SMCRA, NEPA and the APA should lead to the denial of the various legal challenges to the EPA's Enhanced Coordinating Procedures and Detailed Guidance Memorandum. Insofar as the West Virginia lawsuit alleges that the EPA's new procedures have usurped West Virginia's prerogatives to permit mining under the CWA and SMCRA, it is important to recall that both statutory regimes allow for federal supremacy where a state fails to adequately protect environmental values.³³² As many as eighty percent of the Corps' section 404 permits pending in Appalachia raise concerns over compliance with state narrative water quality standards, with more than half raising concern for potential "significant degradation of aquatic ecosystems," while "nine out of every ten" streams evince impairment of aquatic life downstream from surface mining operations. Thus, it is apparent that the EPA's new enhanced scrutiny of mountaintop removal mining operations is a necessary exercise of federal authority where states have failed to meet their CWA obligations.³³³ This is not to say that the EPA's success will be certain or easy. As seen in the lawsuits challenging the EPA's enhanced

329. 30 U.S.C. § 1202(a), (d), (f) (2006).

330. *Id.* § 1292(a), (a)(3) (citation omitted).

331. 30 C.F.R. § 816.57 (2011).

332. See WVDEP Complaint, *supra* note 247, at 4; see also 33 U.S.C. § 1313 (2006) (providing states the right to establish, review and revise water quality standards, *subject to EPA approval*); *id.* § 1344(c) (providing EPA the right to veto any § 404 permit issued by the Corps that will have an "unacceptable adverse effect" on certain aquatic values); 30 U.S.C. § 1271(b) (providing the Secretary of the Interior with an "enforcement" power to revoke permitting authority from a state whose SMCRA program violates the minimum federal standards).

333. See, e.g., Detailed Guidance, *supra* note 178, at 2-3, 6.

approach, industry has grown accustomed to the traditional, deferential permitting process and seems determined to cling to past practices—with the aid of state permitting authorities. The looming question is whether reviewing courts will grant the EPA’s current interpretation of CWA requirements the same deference they have historically granted to agency practices that leniently issued mountaintop removal mining permits.

With NEPA, Congress articulated an ethos fundamentally linking humanity and the natural environment—declaring a national policy to “encourage . . . harmony between man and his environment; [and] to promote efforts which will prevent or eliminate damage to the environment and biosphere.”³³⁴ In a similar fashion, the CWA was implicitly based on an ideal holding that nature has its own inherent value.³³⁵ Taken together, we have a fundamental ethical framework declaring that the natural environment, in its purest form, has value in its own right. Unlike coal, which as a commodity has a readily discernible market value, a pristine mountain stream is of incalculable monetary value. It might even be said that to quantify nature in such a way degrades its existential value.

As a consequence, the EPA must make sure that its discretion to allow degradation of aquatic resources where a state makes a finding that such degradation is “necessary to accommodate important social or economic development in the area in which the waters are located” does not become a loophole for future frustration of CWA principles.³³⁶ The pull to find and develop inexpensive, stable domestic sources of carbon-based energy remains strong. However, these “inexpensive” energy sources do not come without hidden costs, and the degradation of aquatic resources is one such cost.³³⁷ Though not industry’s first choice, a ready

334. 42 U.S.C. § 4321 (2006).

335. See 33 U.S.C. § 1251(a)(1)-(2) (2006) (“[I]t is the national goal that the discharge of pollutants into the navigable waters be eliminated by 1985 [and] that wherever attainable, an interim goal of water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water be achieved by July 1, 1983.”); see also 33 U.S.C. § 1252(a) (“The [EPA] shall . . . prepare or develop comprehensive programs for preventing, reducing, or eliminating the pollution of the navigable waters and ground waters. . . . In the development of such comprehensive programs due regard shall be given to the improvements which are necessary to conserve such waters for the protection . . . of fish and aquatic life and wildlife, [and] recreational purposes.”).

336. Detailed Guidance, *supra* note 178, at 13 (citing 40 C.F.R. § 131.12(a)(2)).

337. See, e.g., MOU, *supra* note 171, at 1 (“Although [the] scale and efficiency [of mountaintop removal] has enabled the mining of once-inaccessible coal seams, this mining practice often stresses the natural environment and impacts the health and welfare of surrounding human communities. Streams once used for swimming, fishing and drinking water have been adversely impacted, and groundwater resources used for drinking water have been contaminated.”).

alternative to mountaintop removal mining with valley fills already exists: underground mining.³³⁸ To be sure, tighter agency scrutiny of resource extraction may drive up energy costs. We must not become dissuaded by higher costs, and therefore motivated to retain a permissive view of the CWA regarding energy extraction. It is nothing less than the overarching intent of the Act itself to protect this inherent value from unabated energy resource development.

338. See Evans, *supra* note 22, at 571-72 (citing Ken Ward Jr., *Exclusive: Patriot Coal Says—We Can Mine It Underground*, CHARLESTON GAZETTE (Aug. 14, 2009), <http://blogs.wvgazette.com/coalattoo/2009/08/14/exclusive-patriot-coal-says-we-can-mine-it-underground/#more-1081>). By at least one estimate, the overall coal reserves available for extraction by underground mining exceed the reserves available for extraction by mountaintop removal; while industry has also acknowledged that a shift to deep mining could be made “relatively painlessly.” *Id.*