

**Chapter 26**  
**THE CANARY IN THE COAL MINE:  
FEDERAL ENVIRONMENTAL REGULATORY ACTION  
AGAINST EASTERN U.S. MINING AS A HARBINGER  
FOR NATURAL RESOURCES DEVELOPMENT IN THE WEST**

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#### § 26.01 **Introduction\***

Even the casual regulatory observer cannot miss the recent barrage of environmental regulatory activity targeted at the mining industry in the

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eastern United States. While much of it is driven by Executive Branch and/or citizen activist group policy aimed at curtailing certain forms of coal mining, and surface coal mining in Appalachia in particular, there are aspects of this heightened regulatory focus that have the strong potential to be applied to other forms of natural resource development in other regions of the United States. Indeed, some cross-country tracks have already been laid. It is impossible within the confines of this chapter to write on all aspects of these regulatory trends, and so the focus will be on four areas of the federal environmental regulatory landscape, most grounded in the Clean Water Act (CWA),<sup>1</sup> that have relevance to natural resource practitioners nationwide: (1) federal agency use of “guidance” to implement changes in policy and regulatory interpretation; (2) the growing use of conductivity as a means to implement narrative water quality standards; (3) the reach of the “veto” authority in section 404(c) of the CWA; and (4) the emergence of selenium as a challenging and costly water quality constituent.

### § 26.02 Use of Guidance Documents

We begin with a discussion of a regulatory vehicle that federal agencies consider routine and the regulated community sometimes considers rife with uncertainty and risk—the issuance of “guidance” to signal changes in policy and/or regulatory interpretation. With each new administration comes some form of regulatory change, and the Obama Administration’s Executive Branch transition was no different. What was new, however, was that after years of relative détente between government and the regulated community on the use of guidance, the U.S. Environmental Protection Agency (EPA) increased its reliance on guidance and other informal agency actions to—as many industry members and states would maintain—effectuate substantive regulatory changes, thus sparking new tensions and legal battles. While at first focused on guidance for eastern U.S. mining, EPA appears to be expanding its sights with the upcoming guidance on the meaning of “waters of the United States,” applicable nationwide.<sup>2</sup> The discussion below outlines the legal framework for considering the legality of federal agency guidance, and illustrates with a description of the guidance battles still ongoing between EPA, state governments, and the regulated mining community.

#### [1] Guidance Versus Legislative Rulemaking

Federal agencies have long relied on guidance documents to “explain[], interpret[], defin[e] and often expand[] the commands” in duly promul-

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<sup>1</sup>33 U.S.C. §§ 1251–1387.

<sup>2</sup>See 76 Fed. Reg. 24,479 (May 2, 2011).

gated regulations.<sup>3</sup> Agencies now routinely provide guidance by, for example, posting documents online on their websites, and gain a number of advantages in using guidance. Agencies can respond expeditiously to requests from the regulated community regarding regulatory requirements, instruct and assist their own employees on how to apply and interpret existing laws, and inform interested parties of how they intend to enforce those laws.<sup>4</sup> Importantly, when agencies issue guidance, instead of undergoing rulemaking under the Administrative Procedure Act (APA),<sup>5</sup> they need not give the public advance notice and an opportunity to comment. By avoiding the administrative burdens of notice-and-comment rulemaking (or other applicable statutorily mandated procedures), agencies can effectively make law “quickly and inexpensively” and often can “immuniz[e] [their] lawmaking from judicial review.”<sup>6</sup> And even if agencies do provide an opportunity to comment on guidance documents, they may nevertheless make such documents immediately effective.<sup>7</sup>

True guidance, in contrast with a legislative rule, does not effect binding changes in the law. Guidance frequently takes the form of: (1) interpretive rules that explain ambiguous language in, or remind regulated entities of duties under, existing law or regulations and do not “‘work substantive changes,’ . . . or ‘major substantive legal addition[s],’ . . . to prior regulations”;<sup>8</sup> and (2) policy statements that announce an agency’s tentative intentions for the future, but leave agency decisionmakers free to

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<sup>3</sup>*Appalachian Power Co. v. EPA*, 208 F.3d 1015, 1020 (D.C. Cir. 2000).

<sup>4</sup>See Sean Croston, “The Petition is Mightier Than the Sword: Rediscovering an Old Weapon in the Battles Over ‘Regulation Through Guidance,’” 63 *Admin L. Rev.* 381, 382–84 (2011).

<sup>5</sup>See 5 U.S.C. § 553.

<sup>6</sup>*Appalachian Power*, 208 F.3d at 1020 (quoting Richard J. Pierce, Jr., “Seven Ways to Deossify Agency Rulemaking,” 47 *Admin L. Rev.* 59, 85 (1995)).

<sup>7</sup>See, e.g., EPA, “Improving EPA Review of Appalachian Surface Coal Mining Operations under the Clean Water Act, National Environmental Policy Act, and the Environmental Justice Executive Order,” at 2 (Apr. 1, 2010) (Interim Guidance) (“We expect [EPA regional employees] to begin using this interim final guidance immediately in [their] review of Appalachian surface coal mining activities.”), [http://www.epa.gov/owow/wetlands/guidance/pdf/appalachian\\_mtntop\\_mining\\_detailed.pdf](http://www.epa.gov/owow/wetlands/guidance/pdf/appalachian_mtntop_mining_detailed.pdf); 75 Fed. Reg. 18,500 (Apr. 12, 2010) (inviting public comment but declaring that the guidance was “effective immediately”).

<sup>8</sup>*U.S. Telecom Ass’n v. FCC*, 400 F.3d 29, 34–35 (D.C. Cir. 2005) (emphasis omitted) (alteration in original) (quoting *Sprint Corp. v. FCC*, 315 F.3d 369, 374 (D.C. Cir. 2003); *Appalachian Power*, 208 F.3d at 1024).

exercise their discretion in implementing that policy in individual cases.<sup>9</sup> The APA expressly exempts these types of agency pronouncements, and others, from the statute's notice and comment requirements;<sup>10</sup> however, courts have cautioned that the exemptions are to be "narrowly construed" and "only reluctantly countenanced."<sup>11</sup>

Not surprisingly, the more agencies rely on guidance instead of rulemakings, the more courts are asked to hear claims that guidance documents are, in fact, binding legislative rules promulgated without notice and comment in violation of the APA and are contrary to the governing statutes. A regulated entity (or other stakeholder) that seeks to challenge ostensibly nonbinding guidance often must clear a number of jurisdictional and procedural hurdles to reach the merits of its lawsuit. For example, agencies often argue that courts should dismiss such challenges for lack of standing, failure to challenge a final agency action, and/or because such challenges are not yet ripe for judicial review.<sup>12</sup> In determining whether to assert jurisdiction over challenges to guidance documents and whether such documents are binding legislative rules, courts often focus on the language within the four corners of the document.<sup>13</sup> Nonetheless, the language may not be outcome determinative. Indeed, courts have looked beyond boilerplate statements by an agency disclaiming any binding effect of a guidance document and considered how that guidance was being applied in the field.<sup>14</sup> Determinations of whether guidance documents are binding rules are very fact intensive and, thus, interested parties have challenged guidance documents in federal courts with varying success.

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<sup>9</sup>See, e.g., *Cohen v. United States*, 578 F.3d 1, 7 (D.C. Cir. 2009), *rev'd on other grounds*, 650 F.3d 717 (D.C. Cir. 2011); *Chamber of Commerce v. U.S. Dep't of Labor*, 174 F.3d 206, 211 (D.C. Cir. 1999).

<sup>10</sup>See 5 U.S.C. § 553(b)(3)(A).

<sup>11</sup>See, e.g., *Asiana Airlines v. FAA*, 134 F.3d 393, 396 (D.C. Cir. 1998); *Indep. Guard Ass'n of Nev., Local No. 1 v. O'Leary*, 57 F.3d 767, 769 (9th Cir. 1995).

<sup>12</sup>See, e.g., *Natural Res. Def. Council v. EPA*, 643 F.3d 311, 313 (D.C. Cir. 2011); *Nat'l Mining Ass'n v. Jackson*, 768 F. Supp. 2d 34, 41 (D.D.C. 2011) (*NMA v. Jackson I*).

<sup>13</sup>See, e.g., *Catawba Cnty., N.C. v. EPA*, 571 F.3d 20, 33–34 (D.C. Cir. 2009); *Ctr. for Auto Safety v. Nat'l Highway Safety Admin.*, 452 F.3d 798, 809 (D.C. Cir. 2006); *Croplife Am. v. EPA*, 329 F.3d 876, 881 (D.C. Cir. 2003).

<sup>14</sup>See, e.g., *Gen. Elec. Co. v. EPA*, 290 F.3d 377, 383 (D.C. Cir. 2002); *Appalachian Power*, 208 F.3d at 1022–23; *NMA v. Jackson I*, 768 F. Supp. 2d at 45.

## [2] Litigation Over EPA's Use of Guidance to Expand Its Oversight Over Clean Water Act Permitting for Coal Mines

In recent years, EPA has ramped up its efforts to regulate surface coal mining in the eastern United States through guidance and policy statements. Several such guidance documents have been the subject of an action recently decided in the U.S. District Court for the District of Columbia, *National Mining Ass'n v. Jackson*,<sup>15</sup> brought by various industry plaintiffs, the State of West Virginia, and the Commonwealth of Kentucky.<sup>16</sup> The following sections describe the impact of these documents and the action in more detail.

### [a] Enhanced Coordination Procedures for Clean Water Act § 404 Permitting

On June 11, 2009, EPA and the U.S. Army Corps of Engineers (Corps) announced the creation of the Enhanced Coordination Process (EC Process), which would govern the review of CWA § 404<sup>17</sup> permit applications for Appalachian surface coal mining activities in six states (Kentucky, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia) that were pending as of March 31, 2009. At the time the EC Process was created, there was a significant backlog of section 404 permit applications, due, in large part, to protracted litigation brought by environmental groups over proposed permits that was ultimately resolved in the government's favor.<sup>18</sup>

The details of the EC Process were set forth in two memoranda that were immediately effective without any notice and comment.<sup>19</sup> First, EPA would screen the pending permit applications using a Multi-Criteria Integrated Resource Assessment to determine whether those applications should be reviewed under codified permitting procedures or under the new EC

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<sup>15</sup>Nos. 10-1220 (RBW), 11-0295 (RBW), 11-0446 (RBW), 11-0447 (RBW), 2012 WL 3090245 (D.D.C. July 31, 2012), *appeal docketed*, No. 12-5311 (D.C. Cir. Oct. 10, 2012). See also Nat'l Mining Ass'n v. Jackson, 816 F. Supp. 2d 37 (D.D.C. 2011) (*NMA v. Jackson II*); *NMA v. Jackson I*, 768 F. Supp. 2d 34. Note: Authors Kirsten L. Nathanson and David Y. Chung served as plaintiffs' counsel in the *NMA v. Jackson* litigation.

<sup>16</sup>The National Mining Association filed the first such challenge on July 20, 2010. Four subsequent actions were filed in federal district courts in West Virginia and Kentucky, but all cases were consolidated in the District of Columbia in early 2011. See *NMA v. Jackson*, 2012 WL 3090245, at \*1 n.1.

<sup>17</sup>33 U.S.C. § 1344.

<sup>18</sup>See *Ohio Valley Envtl. Coal. v. Aracoma Coal Co.*, 556 F.3d 177 (4th Cir. 2009).

<sup>19</sup>See *NMA v. Jackson II*, 816 F. Supp. 2d at 41.

Process.<sup>20</sup> For those applications selected to undergo “enhanced coordination,” applicants would first be subject to a pre-coordination period (of unspecified duration), during which information would be gathered, before proceeding to a 60-day enhanced coordination period.<sup>21</sup>

In October 2011, the *NMA v. Jackson* court invalidated the EC Process and associated screening procedure, finding that both were: (1) contrary to section 404 of the CWA; and (2) legislative rules unlawfully issued without notice and comment.<sup>22</sup> In so holding, the court emphasized that the Corps is “the principal player in the [section 404] permitting process” and that EPA cannot lawfully expand its role in that process beyond the authority that Congress gave it.<sup>23</sup> The court further held that the government had violated the APA by failing to provide notice and an opportunity for comment before imposing new legal requirements on regulated entities.<sup>24</sup> The court rejected the agencies’ claims that the EC Process and screening procedure fell within any of the APA’s exemptions from notice-and-comment requirements.<sup>25</sup>

Despite the court’s vacatur of the EC Process, many stakeholders had already felt the impact of significant delays and regulatory uncertainty for over two years. Because of the EC Process, a large number of permit applications were withdrawn, and many others remain pending to this date.

### **[b] Detailed Guidance on Surface Coal Mining in Appalachian States**

EPA announced the issuance of its Interim Guidance on April 1, 2010.<sup>26</sup> The 30-page, single-spaced document set forth “clear benchmarks for preventing significant and irreversible damage to Appalachian watersheds at risk from mining activity.”<sup>27</sup> Perhaps most notably, it introduced what appeared to be a numeric water quality criterion for specific conductance

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<sup>20</sup>*Id.*

<sup>21</sup>*Id.*

<sup>22</sup>*See id.* at 49. A group of industry plaintiffs and the State of West Virginia challenged the EC Process and screening procedure. The Commonwealth of Kentucky and the Kentucky Coal Association did not challenge those agency actions.

<sup>23</sup>*Id.* at 44.

<sup>24</sup>*Id.* at 48–49.

<sup>25</sup>*Id.*

<sup>26</sup>*See* Interim Guidance, *supra* note 7.

<sup>27</sup>*See* Press Release, EPA, “EPA Issues Comprehensive Guidance to Protect Appalachian Communities From Harmful Environmental Impacts of Mountain Mining” (Apr. 1, 2010), <http://www.epa.gov> (search title).

or electrical conductivity (explained in more detail in § 26.03, below). EPA's news release on the Interim Guidance stated "[t]o protect water quality, EPA has identified a range of conductivity . . . of 300 to 500 microSiemens per centimeter [ $\mu\text{S}/\text{cm}$ ]." <sup>28</sup> Moreover, Administrator Jackson was quoted as saying that there are "no, or very few, valley fills that are going to meet this standard." <sup>29</sup>

The Interim Guidance was challenged in the same lawsuit (*NMA v. Jackson*) as the EC Process. Although EPA moved for dismissal on the grounds that the Interim Guidance was neither final nor ripe for review, the court concluded that EPA was applying the guidance as a binding rule, notwithstanding the disclaimers in the document. <sup>30</sup> Before the completion of briefing on the merits of the plaintiffs' challenges to the Interim Guidance, EPA issued the Final Guidance on July 21, 2011, which superseded the Interim Guidance. <sup>31</sup> The plaintiffs amended their complaints to allege claims challenging the Final Guidance.

The Final Guidance contained more robust disclaimers than those in the Interim Guidance describing the nonbinding nature of the document. <sup>32</sup> The document proclaimed that it merely clarified existing legal requirements and that agency decision makers retain discretion on how to apply that guidance to a given mining project. <sup>33</sup> The *NMA v. Jackson* plaintiffs argued that those proclamations are belied by EPA's implementation of the guidance. <sup>34</sup> Substantively, the Final Guidance addressed the same subjects as the Interim Guidance, which the plaintiffs maintained exceeded EPA's CWA authority.

In particular, the Final Guidance still emphasized using a numeric conductivity benchmark of 300 to 500  $\mu\text{S}/\text{cm}$  to assess effects of surface coal mining on aquatic ecosystems and whether applicable narrative water quality standards are being met. <sup>35</sup> EPA insists this benchmark is flexible

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<sup>28</sup>*Id.*

<sup>29</sup>David A. Fahrenthold, "Environmental Regulations to Curtail Mountaintop Mining," *The Washington Post*, Apr. 2, 2010.

<sup>30</sup>See *NMA v. Jackson I*, 768 F. Supp. 2d at 45–46.

<sup>31</sup>See EPA, "Improving EPA Review of Appalachian Surface Coal Mining Operations Under the Clean Water Act, National Environmental Policy Act, and the Environmental Justice Executive Order" (July 21, 2011) (Final Guidance).

<sup>32</sup>See, e.g., *id.* at 1–3.

<sup>33</sup>*Id.*

<sup>34</sup>*NMA v. Jackson*, 2012 WL 3090245, at \*6.

<sup>35</sup>See Final Guidance, *supra* note 31, at 16.

and that there may be other ways to implement narrative water quality standards.<sup>36</sup> But, according to the *NMA v. Jackson* plaintiffs, EPA has applied this benchmark as a *de facto* water quality criterion without undergoing the requisite rulemaking process under CWA § 303(c).<sup>37</sup> The plaintiffs further argued that EPA has unlawfully overridden the states' ability to interpret and implement their own water quality standards.

Another point of contention in the Final Guidance was whether its pronouncements on best management practices (BMP) for mining<sup>38</sup> are a proper exercise of EPA's CWA authority or whether they exceed the limits Congress placed on that authority and invade state authority under the Surface Mining Control and Reclamation Act of 1977 (SMCRA).<sup>39</sup> The Final Guidance set forth a number of BMPs that EPA believes are appropriate for inclusion in CWA § 404 permits. The *NMA v. Jackson* plaintiffs argued that the BMPs relating to mine design and activities upland of any waters or fill disposal sites are matters within the exclusive province of SMCRA permitting authorities.

Last, the Final Guidance announced EPA's view on how CWA § 402 permitting authorities are to determine whether water-quality-based effluent limits are required in permits for point source discharges.<sup>40</sup> Under EPA's § 402 regulations, such limits are required for pollutants that the permitting authority determines "are or may be discharged at a level [that] will cause, have the reasonable potential to cause, or contribute to an excursion above any [applicable] water quality standard."<sup>41</sup> The Final Guidance added that permitting authorities "should not defer reasonable potential analyses until after permit issuance."<sup>42</sup> According to the plaintiffs in *NMA v. Jackson*, this statement on the propriety of post-permit reasonable potential analyses

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<sup>36</sup> See, e.g., *id.* at 18. In EPA's view, the relevant water quality standards in the Appalachian states subject to the Final Guidance are state-wide narrative standards. See *id.* at app. 3 (citing 25 Pa. Code § 93.6(a); 9 Va. Admin. Code §§ 25-260-10, -20; W. Va. Code R. §§ 47-02-3, -6; 401 Ky. Admin. Regs., ch. 10; Tenn. Comp. R. & Regs. 1200-4-3-.02, -.03; Ohio Admin. Code 3745-1-04).

<sup>37</sup> 33 U.S.C. § 1313(c).

<sup>38</sup> See Final Guidance, *supra* note 31, at app. 4.

<sup>39</sup> 30 U.S.C. §§ 1201-1328. The SMCRA statutory framework leaves substantial regulatory authority to the states; however, state regulatory regimes are still subject to federal approval. Of the six Appalachian states where the Final Guidance applies, only Tennessee does not have an approved SMCRA regulatory program.

<sup>40</sup> See Final Guidance, *supra* note 31, at 14-15.

<sup>41</sup> 40 C.F.R. § 122.44(d)(1)(i).

<sup>42</sup> Final Guidance, *supra* note 31, at 14.

represents a radical departure from prior permitting procedures for coal mines in Kentucky.<sup>43</sup>

The *NMA v. Jackson* court invalidated the Final Guidance in its entirety in an opinion dated July 31, 2012.<sup>44</sup> First, the court rejected EPA's "bevy of arguments targeting the Court's ability to review the Final Guidance," finding that: (1) the guidance was final agency action that was ripe for review; (2) the guidance was not among the agency actions that are subject to review only by courts of appeals under 33 U.S.C. § 1369(b); and (3) the plaintiffs had standing to challenge the guidance.<sup>45</sup> Upon disposing of EPA's various jurisdictional challenges, the court agreed with the plaintiffs that EPA exceeded its statutory authority by "impermissibly interject[ing] itself into the SMCRA permitting process"<sup>46</sup> and that the Final Guidance violated CWA §§ 303 and 402 by "impermissibly set[ting] a conductivity criterion for water quality"<sup>47</sup> and by unlawfully "remov[ing] the reasonable potential analysis from the realm of state regulators."<sup>48</sup>

The contentious *NMA v. Jackson* litigation illustrates how broadly a purportedly nonbinding guidance document can impact a regulated industry and the difficulties that courts must face in determining whether such documents are merely guidance or whether they effect unlawful, binding changes in the law. An appeal to the U.S. Court of Appeals for the D.C. Circuit was docketed on October 10, 2012.

### § 26.03 EPA's Emphasis on Numeric Conductivity Benchmarks

EPA's recent focus (in the Interim and Final Guidance) on conductivity as a means to implement narrative water quality standards in the permitting of mine-related discharges in Appalachia warrants particular attention. Four of the six states where the Final Guidance would have applied do not

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<sup>43</sup>Whether EPA's position on post-permit RPAs represents a radical departure from prior procedures appears to be an issue unique to Kentucky. According to Plaintiff Kentucky Coal Association and Plaintiff-Intervenors Commonwealth of Kentucky and City of Pikeville, Kentucky, EPA reviewed and approved Kentucky's procedures for determining reasonable potential (which provide for post-permit RPAs) in July 2000. See Amended Complaint in Intervention for Declaratory and Injunctive Relief of Plaintiff-Intervenor Commonwealth of Kentucky ¶ 49, *NMA v. Jackson*, 2012 WL 3090245 (No. 10-cv-1220), ECF No. 101; Amended Complaint for Declaratory and Injunctive Relief of Kentucky Coal Ass'n ¶ 19, *id.* (No. 10-cv-1220), ECF No. 102.

<sup>44</sup>See *NMA v. Jackson*, 2012 WL 3090245.

<sup>45</sup>See *id.* at \*3–11.

<sup>46</sup>*Id.* at \*13.

<sup>47</sup>*Id.* at \*14.

<sup>48</sup>*Id.* at \*17.

have water quality standards that mention conductivity,<sup>49</sup> yet EPA's view is that its conductivity benchmarks are appropriate means of implementing the standards in those states. Though EPA's emphasis on conductivity appears thus far limited to surface coal mining projects in Appalachia, it could potentially expand beyond that scope, depending on the appeal in *NMA v. Jackson*.

### [1] Background on Conductivity

EPA defines conductivity as “a measure of the ability of water to pass an electrical current.”<sup>50</sup> Conductivity is affected by the major charged ions dissolved in waters, such as chloride, nitrate, sulfate, and phosphate anions (negatively charged); or sodium, magnesium, calcium, iron, and aluminum cations (positively charged).<sup>51</sup> Conductivity varies depending on the geology of the area through which a waterbody flows. According to EPA, conductivity in U.S. rivers ranges generally from 50 to 1500  $\mu\text{S}/\text{cm}$ .<sup>52</sup> Discharges into those waters can alter conductivity levels depending upon the content of the discharge.<sup>53</sup>

The conductivity benchmarks in EPA's Interim and Final Guidance are based largely on two studies: EPA's own *A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams* (finalized in 2011), and a 2008 study by Pond et al. entitled *Downstream Effects of Mountaintop Coal Mining: Comparing Biological Conditions Using Family- and Genus-Level Macroinvertebrate Bioassessment Tools*.<sup>54</sup> At the same time EPA issued its Interim Guidance, it invited public comment on its draft field study.<sup>55</sup> In addition, EPA requested that its Science Advisory Board (SAB) review that study.<sup>56</sup> The SAB provided its final report in March 2011 after reviewing public comments, holding several public meetings, and undertaking its independent peer review.<sup>57</sup> Broadly speaking, the SAB

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<sup>49</sup>See, e.g., Final Guidance, *supra* note 31, at app. 3.

<sup>50</sup>See EPA, “Volunteer Stream Monitoring: A Methods Manual,” at ch. 5.9 (Nov. 1997), <http://water.epa.gov/type/rsl/monitoring/vms59.cfm>.

<sup>51</sup>See *id.*

<sup>52</sup>*Id.*

<sup>53</sup>See *id.*

<sup>54</sup>See Final Guidance, *supra* note 31, at app. 1, nn. 47, 54.

<sup>55</sup>See 75 Fed. Reg. 18,499 (Apr. 12, 2010).

<sup>56</sup>See 75 Fed. Reg. 29,339 (May 25, 2010).

<sup>57</sup>SAB, “Review of Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams” (Mar. 25, 2011) (SAB Report), <http://www.epa.gov> (search “EPA-SAB-11-006”).

applauded EPA's efforts to evaluate the linkages between conductivity and the presence or absence of aquatic insects in Appalachian streams.<sup>58</sup> The SAB, however, expressed concerns with, among other things, EPA's decision to base the benchmark "almost exclusively on data for aquatic insects, while the potential for impacts on other rare and/or sensitive taxa . . . was not evaluated."<sup>59</sup> It also cautioned EPA "not to apply the conductivity benchmark beyond the environmental conditions (e.g., geographic region, relative composition—or ionic signature—of the ions that make up total conductivity) for which it has been validated"—in other words, not to rely on the benchmark beyond ecoregions 68, 69, and 70 in West Virginia and Kentucky absent validation.<sup>60</sup> EPA's Final Guidance acknowledges and reiterates these and other SAB concerns.<sup>61</sup>

## [2] How Has EPA Implemented Its Conductivity Benchmark?

As discussed above, the *NMA v. Jackson* plaintiffs submitted evidence that EPA regions had treated the conductivity benchmarks in the Interim and Final Guidance documents as *de facto* water quality criteria, despite EPA's claims of flexibility in the documents themselves and in litigation briefs. The declarations and exhibits that the plaintiffs filed in the case discuss examples of how EPA began focusing on conductivity when commenting on proposed CWA permits for surface coal mines as early as January 2009. Notably, declarations from officials of three state agencies (in Kentucky, Virginia, and West Virginia) describe how EPA has insisted upon the inclusion of numeric conductivity effluent limits in CWA permits.<sup>62</sup> Declarations from several coal mine operators and many publicly available comment letters submitted by the plaintiffs tell a similar story.<sup>63</sup>

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<sup>58</sup> See *id.* at 2.

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> See Final Guidance, *supra* note 31, at 5–6.

<sup>62</sup> See, e.g., Aff. of R. Bruce Scott, *NMA v. Jackson*, 2012 WL 3090245 (No. 10-cv-1220), ECF No. 137-3 (describing Kentucky's experience); Decl. of Bradley C. Lambert, *id.* (No. 10-cv-1220), ECF No. 16-7 (describing Virginia's experience); Decl. of Thomas L. Clarke, *id.* (No. 10-cv-1220), ECF No. 137-1 (describing West Virginia's experience).

<sup>63</sup> See Decl. of Thomas Cook, *id.* (No. 10-cv-1220), ECF No. 137-2; Decl. of William Wells, Jr., *id.* (No. 10-cv-1220), ECF No. 10-24; Decl. of Thomas Cook, *id.* (No. 10-cv-1220), ECF No. 10-11; Decl. of Paul B. Horn, Jr., *id.* (No. 10-cv-1220), ECF No. 10-45; Letter from James D. Giattina, Director, Water Protection Division, EPA Region 4, to Col. Steven J. Roemhildt, U.S. Army Corps of Engineers Mobile Dist., at 2 (July 26, 2010), *id.* (No. 10-cv-1220), ECF No. 10-40.

EPA, for its part, pointed to several examples of CWA permits that were issued for surface coal mines in Appalachia with either higher conductivity limits than its proposed benchmarks or no numeric conductivity limits at all.<sup>64</sup> EPA highlighted statements in the Final Guidance proclaiming that the conductivity benchmarks therein may not apply to a given project depending on site-specific conditions.

Ultimately, the *NMA v. Jackson* court determined that the conductivity benchmark is a *de facto* water quality criterion.<sup>65</sup> Despite the outcome, however, it is evident that EPA has increasingly focused on conductivity when commenting on proposed CWA permits for Appalachian coal mining projects in recent years.

### [3] Implications for the Future

To date, EPA's use of conductivity as a measure of stream health has largely focused on discharges from surface coal mining operations involving valley fills in Appalachia. EPA has considered, however, whether to expand its focus to other regions. EPA asked its SAB to consider under what conditions its field-based method for developing a conductivity benchmark "would be transferable to developing a conductivity benchmark for other regions of the United States whose streams have a different ionic signature."<sup>66</sup> In response, the SAB advised that "the field method used to develop the conductivity benchmark was quite general and sufficiently flexible to allow the approach (though not the benchmark value) to be transferred to other regions with different ionic signatures, where minimum data requirements are met."<sup>67</sup> The SAB emphasized a number of conditions that EPA should satisfy—e.g., ensuring that background levels of conductivity are similar in reference sites in the region, ensuring that relative ionic composition is consistent across the region, and addressing confounding factors—should the agency attempt to develop conductivity benchmarks for other regions.<sup>68</sup>

Moreover, EPA's recent emphasis on conductivity within the context of Appalachian surface coal mining has triggered litigation (and threats to

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<sup>64</sup>See, e.g., Final Guidance, *supra* note 31, at app. 6.

<sup>65</sup>*NMA v. Jackson*, 2012 WL 3090245, at \*8–9.

<sup>66</sup>SAB Report, *supra* note 57, at 25.

<sup>67</sup>*Id.*

<sup>68</sup>See *id.* at 25–28.

sue) by environmental groups under the CWA's citizen suit provision<sup>69</sup> and under regulations governing the appeal of CWA § 402 permit approvals.<sup>70</sup> In their citizen suits, environmental groups have claimed that mine-related discharges have resulted in elevated conductivity levels that would cause a violation of applicable water quality standards.<sup>71</sup> Similarly, in their permit appeals, environmental groups have argued that the state permitting authorities unlawfully declined to impose effluent limits on conductivity, total dissolved solids, or sulfate in state-issued permits.<sup>72</sup>

Although EPA's actions reflect a policy decision by the current administration to increase regulatory efforts with regard to a particular method of surface coal mining in Appalachia—and litigation brought by environmental groups has been similarly limited in scope—nothing precludes policymakers and citizen plaintiffs in the future from expanding their focus on conductivity to other regions and/or to other earth-moving activities that purportedly result in elevated conductivity levels.

### § 26.04 The Reach of Section 404(c) Veto Authority

We next turn to EPA's evolving view of its authority and role under section 404(c) of the CWA.<sup>73</sup> EPA has shown increased interest in recent years in playing a more active role in CWA § 404 permitting—permits for the disposal of dredged or fill material issued by the Corps.<sup>74</sup> Such permits are necessary for surface coal mining operations in the East, and for many hard rock mining operations in the West. The reach of such authority is not well established in judicial precedent, and so it remains unclear, for example, if EPA can exercise its so-called “veto” authority before a section 404 permit application is even submitted (as EPA is being urged to do with

<sup>69</sup>See, e.g., Complaint for Declaratory and Injunctive Relief and for Civil Penalties, *Ohio Valley Env'tl. Coal. v. Boone E. Dev. Co.*, No. 12-cv-1173 (S.D. W. Va. Apr. 16, 2012); Complaint, *Sierra Club v. ICG Hazard LLC*, No. 11-cv-148 (E.D. Ky. May 24, 2011); Consent Decree, *Sierra Club v. Fola Coal Co.*, No. 10-cv-1199 (S.D. W. Va. entered Feb. 9, 2012).

<sup>70</sup>See, e.g., Letter from Mary Cromer, Appalachian Citizens' Law Center, to Office of Admin. Hearings, Ky. Energy & Env't Cabinet (Dec. 22, 2011) (request for administrative hearing on permit determination for KPDES permit No. KY0090123); Notice of Appeal, *Sierra Club v. Clarke*, No. 10-34-EQB (W. Va. Env'tl. Quality Bd. Sept. 3, 2010).

<sup>71</sup>See, e.g., Complaint for Declaratory and Injunctive Relief and for Civil Penalties ¶¶ 36–41, *Ohio Valley Env'tl. Coal.*, No. 12-cv-1173; Amended Complaint for Declaratory and Injunctive Relief and for Civil Penalties ¶¶ 55–63, *Sierra Club v. ICG Hazard*, No. 11-cv-148 (E.D. Ky. Oct. 3, 2011); Complaint for Declaratory and Injunctive Relief and for Civil Penalties ¶¶ 48–50, *Sierra Club v. Fola Coal*, No. 10-cv-1199 (S.D. W. Va. Oct. 11, 2010).

<sup>72</sup>See, e.g., Cromer Letter, *supra* note 70, at 4–5; Notice of Appeal ¶¶ 10–12, 23, *Sierra Club v. Clarke*, No. 10-34-EQB.

<sup>73</sup>33 U.S.C. § 1344(c).

<sup>74</sup>See *id.* § 1344.

regard to a mining project in the Bristol Bay region of Alaska). Until very recently, it was also unclear whether EPA could exercise a section 404 veto after a permit is issued. As explained below, one court has now spoken on that issue following an EPA veto of a section 404 permit issued to a surface coal mining operation in West Virginia, and has said no such authority exists, dealing a blow to the agency in its efforts to better delineate and perhaps expand its authority under CWA § 404.<sup>75</sup>

### [1] Background

EPA tested its veto authority on a section 404 permit that the Corps issued to the Spruce No. 1 Mine, a mountaintop coal mine in Logan County, West Virginia, owned and operated by Mingo Logan Coal Company (Mingo Logan).<sup>76</sup> Mingo Logan has spent over 10 years trying to obtain a section 404 permit for Spruce No. 1 Mine. Mingo Logan first applied for the section 404 permit under Nationwide Permit 21 (NWP 21) in January 1998.<sup>77</sup> But before the permit was issued, a federal district court preliminarily enjoined NWP 21.<sup>78</sup> Consequently, in June 1999, Mingo Logan applied for an individual section 404 permit.<sup>79</sup>

Both state and federal regulatory authorities reviewed Mingo Logan's individual permit application pursuant to procedures required by both the CWA and other environmental statutes.<sup>80</sup> As required by CWA § 401, West Virginia Department of Environmental Protection (WVDEP) reviewed the application and certified that the discharges proposed in Mingo Logan's section 404 permit application would not violate West Virginia's water quality standards or anti-degradation regulations.<sup>81</sup> Also, the Corps conducted a full environmental impact statement (EIS) for the Spruce No. 1 Mine's proposed discharges.<sup>82</sup> The EIS went through a public notice

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<sup>75</sup>Mingo Logan Coal Co. v. EPA, 850 F. Supp. 2d 133, 134 (D.D.C. 2012).

<sup>76</sup>At the beginning of the permitting process, the mine was owned by Mingo Logan's sibling corporation, but this chapter will refer collectively to the owners and operators of Spruce No. 1 Mine as "Mingo Logan."

<sup>77</sup>*Mingo Logan*, 850 F. Supp. 2d at 135; Statement of Facts Material to Mingo Logan's Motion for Summary Judgment as to which There Is No Genuine Issue ¶ 25, *Mingo Logan*, 850 F. Supp. 2d 133 (Mingo Logan SOF).

<sup>78</sup>*Mingo Logan*, 850 F. Supp. 2d at 135; Mingo Logan SOF ¶ 29.

<sup>79</sup>*Mingo Logan*, 850 F. Supp. 2d at 135; Mingo Logan SOF ¶ 30.

<sup>80</sup>*Mingo Logan*, 850 F. Supp. 2d at 135–36.

<sup>81</sup>*Id.* at 136.

<sup>82</sup>*Id.* at 135–36.

and comment process in which EPA participated.<sup>83</sup> EPA commented by letter on the Corps's revised Draft EIS in June 2006 and on the Final EIS in late 2006.<sup>84</sup> A subsequent email from EPA to the Corps in November 2006 stated that EPA had no intention of proceeding further regarding the Spruce Mine No. 1 section 404 permit.<sup>85</sup> The Corps issued Mingo Logan's Spruce No. 1 Mine section 404 permit in January 2007.<sup>86</sup>

In September 2009, EPA requested that the Corps suspend, modify, or revoke Mingo Logan's section 404 permit for the Spruce No. 1 Mine because the permit did not adequately address downstream water quality impacts.<sup>87</sup> On September 30, 2009, after receiving comments from WVDEP objecting to the revocation of Mingo Logan's section 404 permit, the Corps denied EPA's request.<sup>88</sup> In April 2010, EPA published a Notice of Proposed Determination to withdraw certain disposal sites specified in Spruce No. 1 Mine's section 404 permit for the discharge of dredged or fill material connected to the mine operations.<sup>89</sup> In January 2011, after a public comment period, EPA issued a Final Determination withdrawing the disposal sites.<sup>90</sup> Because the withdrawn disposal sites constituted 88% of the disposal sites permitted under the section 404 permit,<sup>91</sup> EPA's Final Determination effectively terminated the formerly permitted mine operations at Spruce No. 1 Mine. Mingo Logan subsequently sued EPA in federal district court claiming that EPA had no authority to veto its section 404 permit through its Final Determination.

## [2] Legal Arguments in Federal District Court

The question in Mingo Logan's suit involved EPA's asserted authority under CWA § 404(c) to effectively nullify Spruce No. 1 Mine's section 404 permit. Section 404(c) says EPA may:

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<sup>83</sup>*Id.* at 136.

<sup>84</sup>*Id.*

<sup>85</sup>*Id.*

<sup>86</sup>*Id.*

<sup>87</sup>*Id.* at 137. At the time that EPA requested the permit revocation, litigation regarding Mingo Logan's section 404 permit had prevented the full operation of Spruce No. 1 Mine. See Mingo Logan SOF ¶ 54.

<sup>88</sup>*Mingo Logan*, 850 F. Supp. 2d at 137; Mingo Logan SOF ¶¶ 57–59.

<sup>89</sup>75 Fed. Reg. 16,788 (Apr. 2, 2010).

<sup>90</sup>76 Fed. Reg. 3126 (Jan. 19, 2011).

<sup>91</sup>*Mingo Logan*, 850 F. Supp. 2d at 137.

prohibit the specification (including the withdrawal of specification) of any defined area as a disposal site, and [EPA] is authorized to deny or restrict the use of any defined area for specification (including the withdrawal of specification) as a disposal site, whenever [it] 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.<sup>92</sup>

Whether the phrase “withdrawal of specification” authorized EPA’s post-permit withdrawal of disposal sites identified in a section 404 permit became the dispositive issue in the lawsuit. The parties’ arguments over EPA’s “withdrawal” authority addressed, among other things, (1) the proper interpretation of the statutory language, (2) the CWA’s balance of regulatory authority, and (3) the public policy in favor of certainty.<sup>93</sup>

### **[a] Statutory Language: What Does “Specification” Mean?**

The key statutory interpretation dispute concerned the meaning of the word “specification” in section 404(c).<sup>94</sup> Although both Mingo Logan and EPA agreed that specification should mean something different than “permit,” they disagreed about whether a specification occurs before or after the Corps issues a section 404 permit. Mingo Logan argued that (1) a specification exists only outside the section 404 permitting context or before the issuance of a section 404 permit; (2) outside the permitting context, specifications include disposal sites for discharge material designated by the Corps before the creation of the section 404 permitting regime, and other disposal sites specified outside of the section 404 permitting regime;<sup>95</sup> (3) within the permitting context, a specification is the pre-permit act of describing the disposal location for a proposed permit;<sup>96</sup> (4) this interpretation is confirmed by the Corps’s section 404(c) regulations, which contemplate EPA providing a notice of intent to “prohibit or withdraw the specification” before permit issuance;<sup>97</sup> (5) a specification should occur before the permit issues, so that regulatory agencies can properly evaluate

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<sup>92</sup>33 U.S.C. § 1344(c).

<sup>93</sup>See generally *Mingo Logan*, 850 F. Supp. 2d 133.

<sup>94</sup>*Id.* at 139–42.

<sup>95</sup>Statement of Points and Authorities in Support of Mingo Logan’s Motion for Summary Judgment at 23–24, n.18, *id.* (No. 10-0541 (ABJ)) (Mingo Logan SPA).

<sup>96</sup>Reply Statement of Points and Authorities in Support of Mingo Logan’s Motion for Summary Judgment and Response to EPA’s Motion for Summary Judgment at 2, *id.* (No. 10-0541 (ABJ)) (Mingo Logan Reply); see also *Mingo Logan*, 850 F. Supp. 2d at 147.

<sup>97</sup>*Mingo Logan Reply* at 5; see 33 C.F.R. § 323.6(b).

the impacts of the proposed discharge;<sup>98</sup> (6) both outside of and within the permitting context, specifications are thus not incorporated into a section 404 permit issued by the Corps;<sup>99</sup> and (7) once the Corps issues a permit authorizing a disposal site, the specification no longer exists and cannot be withdrawn.<sup>100</sup>

EPA argued, however, that: (1) specifications only come into existence when authorized through the section 404 permitting process or another authorization process;<sup>101</sup> (2) this interpretation makes sense because the plain meaning of the word “withdraw” is “take back,” which can only happen if the specification has been permitted or authorized in some way;<sup>102</sup> (3) if a specification could be “withdrawn” only before a permit is issued, then EPA’s authority to “withdraw” would be the same as its authority to “prohibit” or “deny” specifications, and the word “withdraw” would be superfluous;<sup>103</sup> and (4) furthermore, because Congress did not temporally limit EPA’s withdrawal authority, it intended for EPA to withdraw a specification *anytime* it determines that a discharge into the specified disposal area would have an unacceptable adverse effect and not just before a permit issues.<sup>104</sup>

### **[b] Regulatory Balance: EPA Intrusion Into Army Corps and State Regulatory Spheres**

Mingo Logan, EPA, and amici also disagreed about whether EPA’s post-permit withdrawal of specifications created imbalance in the CWA regulatory regime. Mingo Logan argued that EPA’s post permit veto interfered with the Corps’s exclusive authority to revoke or modify a section 404 permit, and also the states’ primacy as regulators of state water quality.<sup>105</sup>

The State of West Virginia, writing as *amicus curiae*, also argued that EPA’s veto infringed on West Virginia’s regulatory authority over water

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<sup>98</sup>Mingo Logan Reply at 4.

<sup>99</sup>Mingo Logan SPA at 24.

<sup>100</sup>Mingo Logan Reply at 7; *see also Mingo Logan*, 850 F. Supp. 2d at 153.

<sup>101</sup>EPA’s Memorandum in Support of Its Motion for Summary Judgment and in Opposition to Plaintiff’s Motion for Summary Judgment at 4, 17, 18, *Mingo Logan*, 850 F. Supp. 2d 133 (No. 10-0541 (ABJ)) (EPA Memo); *see also Mingo Logan*, 850 F. Supp. 2d at 141 n.8.

<sup>102</sup>EPA Memo at 12.

<sup>103</sup>*Id.* at 12–13.

<sup>104</sup>*Id.* at 13.

<sup>105</sup>Mingo Logan Reply at 8, 14–22.

quality in that state.<sup>106</sup> West Virginia explained that the CWA charges states with developing water quality standards and administering the CWA § 402 permit program.<sup>107</sup> Also, under section 401, states must certify that discharges proposed in a section 404 permit will not result in a violation of the state's water quality standards.<sup>108</sup> A section 404 permit cannot issue unless the state regulatory authority issues a section 401 certification.<sup>109</sup>

WVDEP had exercised this regulatory authority with respect to the water quality impacts of the Spruce No. 1 Mine, granting a section 401 certification and issuing a section 402 permit for the Spruce No. 1 Mine.<sup>110</sup> Moreover, West Virginia opposed EPA's request for the Corps to modify Mingo Logan's section 404 permit.<sup>111</sup> West Virginia argued that EPA's veto based on downstream water quality impacts circumvented these state regulatory decisions and impermissibly imposed EPA's own water quality standards, effectively usurping state regulatory authority.<sup>112</sup>

EPA responded that overlap in CWA regulatory authorities does not diminish EPA's express withdrawal authority. EPA argued that (1) its withdrawal authority does not encroach on the Corps's authority to revoke or modify a permit—those two regulatory powers are separate and distinct;<sup>113</sup> (2) EPA's withdrawal authority is not limited by a state's authority to issue a section 401 water quality certification; (3) since a section 401 certification is a prerequisite for the issuance of a section 404 permit, if the receipt of a section 401 certification and satisfaction of state water quality standards precluded EPA's ability to withdraw a specification, EPA could never withdraw a permitted specification, and EPA's section 404(c) withdrawal authority would be meaningless;<sup>114</sup> and (4) whether permitted discharges will comply with state water quality standards is distinct from whether

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<sup>106</sup>Brief of Amicus Curiae the State of West Virginia in Support of Plaintiff's Motion for Summary Judgment, *Mingo Logan*, 850 F. Supp. 2d 133 (No. 10-0541 (ABJ)) (State of West Virginia Amicus Brief). West Virginia also explained that it has primacy to administer SMCRA. *Id.* at 6. WVDEP issued a SMCRA permit for Spruce No. 1 Mine. *Id.* at 9.

<sup>107</sup>*Id.* at 3–6. See 33 U.S.C. § 1342(c).

<sup>108</sup>State of West Virginia Amicus Brief at 7–8. See 33 U.S.C. § 1341(a)(1).

<sup>109</sup>See 33 U.S.C. § 1341(a)(1) (requiring all section 404 applicants to provide certification of compliance with state water quality standards).

<sup>110</sup>State of West Virginia Amicus Brief at 8–10.

<sup>111</sup>*Id.* at 12.

<sup>112</sup>*Id.* at 14–21.

<sup>113</sup>EPA's Reply Memorandum in Support of its Motion for Summary Judgment at 7, *Mingo Logan*, 850 F. Supp. 2d 133 (No. 10-0541 (ABJ)) (EPA Reply).

<sup>114</sup>*Id.* at 19.

they will cause an unacceptable adverse effect requiring the withdrawal of a specification.<sup>115</sup>

Several conservation groups, writing as amici curiae, supported EPA, arguing that (1) section 404(c) requires EPA to make its own determination regarding the impacts of section 404 permitted discharges and EPA cannot defer to state agency determinations;<sup>116</sup> (2) EPA's obligation to identify unacceptable adverse effects compels it to consider downstream effects of permitted discharges;<sup>117</sup> and (3) EPA cannot defer to the section 401 certification if it otherwise finds permitted discharges will have unacceptable adverse effects.<sup>118</sup>

### [c] Would EPA Veto Authority Undermine Finality and Certainty?

Mingo Logan also argued that allowing EPA to withdraw specifications after the Corps issues a permit would undermine the certainty provided by the CWA permitting regime under section 404(p). Section 404(p) says a permittee that complies with its section 404 permit is deemed to be in compliance with the CWA.<sup>119</sup> The certainty provided by section 404(p) and the permit is lost if EPA can veto the permit after it is issued.<sup>120</sup>

A broad base of industry members (Industry Amici) agreed, explaining that a wide array of industry activities—from construction to transportation—require section 404 permits and that efforts to comply with section 404 require enormous advance investment.<sup>121</sup> Section 404(p) provides certainty for this advance investment because it ensures that once a permit is issued, the permit would be altered only through the Corps's permit

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<sup>115</sup>EPA Memo at 54.

<sup>116</sup>Brief of Amici Curiae for the West Virginia Highlands Conservancy, Coal River Mountain Watch, Ohio Valley Environmental Coalition, and Sierra Club in Support of Defendant EPA's Motion for Summary Judgment at 9, *Mingo Logan*, 850 F. Supp. 2d 133 (No. 10-0541 (ABJ)).

<sup>117</sup>*Id.* at 10.

<sup>118</sup>*Id.* at 12.

<sup>119</sup>See 33 U.S.C. § 1344(p).

<sup>120</sup>*Mingo Logan SPA* at 18–20.

<sup>121</sup>Brief of Amici Curiae Chamber of Commerce of the United States in Support of Plaintiff at 8, *Mingo Logan*, 850 F. Supp. 2d 133 (No. 10-0541 (ABJ)) (Chamber Amici); Brief of Amici Curiae National Mining Ass'n in Support of Plaintiff, *id.* (No. 10-0541 (ABJ)); Brief of Amicus Curiae the United Co. in Support of Plaintiff, *id.* (No. 10-0541 (ABJ)). The group of amici supporting Mingo Logan will be referred to as "Industry Amici."

modification procedures.<sup>122</sup> But EPA's post-permit "veto" authority would eliminate this certainty because EPA could withdraw a permit anytime it finds a permitted discharge that causes an unacceptable adverse effect. Because there is no workable standard for what is an unacceptable effect, permittees cannot predict the circumstances in which their permits will be revoked.<sup>123</sup> Such uncertainty would lead to slower economic growth and fewer jobs in industries requiring section 404 permits,<sup>124</sup> and have a domino effect on businesses that support those industries.<sup>125</sup>

EPA responded that the court should not consider the economic arguments raised by Mingo Logan and Industry Amici.<sup>126</sup> First, EPA argued that its post-permit withdrawal authority is not inconsistent with section 404(p) because section 404(p) only protects permittees from enforcement actions and the withdrawal of a specification is not an enforcement action. Nothing in section 404(p) prevents EPA from withdrawing disposal sites receiving discharges that have an adverse impact on the environment.<sup>127</sup> EPA also asserted that it has had post-permit withdrawal authority since the enactment of the CWA, and has previously exercised that authority, but none of the economic impacts described by Mingo Logan and the Industry Amici have occurred.<sup>128</sup> EPA argued that its own policy of sparingly exercising its withdrawal authority will prevent the economic consequences predicted by the Industry Amici.<sup>129</sup> EPA acknowledged that prohibiting a specification prior to permit issuance is preferable, but refused to recognize any limitation on its post-permit withdrawal authority.

### **[3] District Court Holds EPA May Not Veto Spruce No. 1 Mine's Section 404 Permit**

On March 23, 2012, the court granted Mingo Logan's motion for summary judgment, holding that the CWA does not authorize EPA to withdraw specifications after the Corps issues a section 404 permit. The court

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<sup>122</sup>Chamber Amici at 8–9; *See also* Brief of Amicus Curiae the National Stone, Sand and Gravel Ass'n in Support of Plaintiff Mingo Logan Coal Co. at 5–7, *Mingo Logan*, 850 F. Supp. 2d 133 (No. 10-0541 (AB)) (Stone Ass'n Amici).

<sup>123</sup>Chamber Amici at 5–6.

<sup>124</sup>*Id.* at 2, 7–14.

<sup>125</sup>*See* Stone Ass'n Amici at 8–9.

<sup>126</sup>EPA Reply at 27.

<sup>127</sup>*Id.* at 23.

<sup>128</sup>*Id.* at 27.

<sup>129</sup>*Id.* at 28, 29.

vacated EPA's Final Determination, and ordered that Mingo Logan's section 404 permit remain in full force.

### [a] Section 404(c) Does Not Authorize EPA Veto Authority

In determining that EPA may not withdraw a specification after the Corps issues a section 404 permit, the court first addressed the statutory language of section 404. As a preliminary matter, the court recognized that section 404(c) vests the Corps with primary authority over section 404 permitting and gives EPA a more limited role regarding specifications.<sup>130</sup> The court repeatedly emphasized this distribution of authority in its statutory analysis. Specifically, the court expressed skepticism that EPA could effectively nullify a section 404 permit, even though section 404 exclusively authorized the Corps to issue permits.<sup>131</sup>

Addressing the disputed meaning of “specification,” the court rejected EPA's argument that a specification comes into existence at the time that permit issues.<sup>132</sup> That interpretation, the court explained, improperly conflates the words “specification” and “permit,” which are clearly distinct terms in section 404.<sup>133</sup> Also, EPA agreed that specifications can exist even outside the section 404 permitting context.<sup>134</sup> EPA's own regulations contemplate that EPA will act on specifications prior to the issuance of a permit.<sup>135</sup>

Confirming the distinction between the words permit and specification, the court identified the material question as whether EPA's authority regarding specifications allowed EPA to undermine an existing permit.<sup>136</sup> Although EPA protested that it acted only regarding specifications, EPA also admitted that the veto invalidated Mingo Logan's section 404 permit

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<sup>130</sup> *Mingo Logan*, 850 F. Supp. 2d at 139.

<sup>131</sup> *Id.* (“EPA's position is that section 404(c) grants its plenary authority to unilaterally modify or revoke a permit that has been duly issued by the Corps—the only permitting agency identified in the statute—and to do so at any time. This is a stunning power for an agency to arrogate to itself when there is absolutely no mention of it in the statute.”); *id.* at 144 (“The idea that a permit . . . will simply evaporate upon EPA's say-so is at odds with the exclusive permitting authority accorded the Corps in section 404(a.)”; *see also id.* at 152 (“[EPA's position] posits a scenario involving the automatic self-destruction of a written permit issued by an entirely separate federal agency after years of study and consideration.”).

<sup>132</sup> *Id.* at 141 n.8.

<sup>133</sup> *Id.*

<sup>134</sup> *Id.*

<sup>135</sup> *Id.* (citing 40 C.F.R. § 231.3).

<sup>136</sup> *Id.* at 141.

for the withdrawn disposal sites.<sup>137</sup> Because section 404 did not expressly authorize EPA to invalidate a section 404 permit, the court looked to the broader statutory context and legislative history.

The court found that EPA's post-permit specification withdrawal was contrary to Congress's intent that, under section 404(p), permittees could be certain that discharges made under a valid section 404 permit would be legal.<sup>138</sup> EPA asserted that a permittee could not discharge into disposal sites that had been withdrawn by EPA, but EPA could not explain whether the withdrawal would modify, revoke, or entirely eliminate the section 404 permit.<sup>139</sup> EPA's ability to affect the validity of a section 404 permit interfered with the Corps's exclusive section 404 permitting authority.<sup>140</sup> Further, because EPA's withdrawal created uncertainty about a permit's validity, the withdrawal would prevent permittees from relying on their section 404 permits as intended by Congress and guaranteed by section 404(p).<sup>141</sup>

The court also found support in the legislative history, which showed congressional intent that EPA exercise its section 404(c) withdrawal authority before the Corps issues the section 404 permit.<sup>142</sup> The court explained that section 404 was designed to continue the Corps's primacy over the disposal of dredged material while giving EPA limited responsibilities.<sup>143</sup> Those responsibilities expressly assigned in section 404 were to be exercised prior to the issuance of a permit.<sup>144</sup> Thus, the legislative history did not support EPA's post-permit withdrawal of specifications.

### **[b] EPA's Interpretation of Section 404(c) is Unreasonable**

Recognizing ambiguity in the language of section 404, the court continued its analysis to consider the persuasiveness of EPA's interpretation.<sup>145</sup>

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<sup>137</sup>*Id.* at 142.

<sup>138</sup>*Id.* at 142–44, 152.

<sup>139</sup>*Id.* at 142–44.

<sup>140</sup>*Id.* at 144.

<sup>141</sup>*Id.* Additionally, EPA's authority to withdraw specifications after the issuance of a permit deprives the permit of finality and undermines Congress's desire for expeditious permitting, as expressed in section 404(q). *See id.*; 33 U.S.C. § 1344(q).

<sup>142</sup>*Mingo Logan*, 850 F. Supp. 2d at 144–47.

<sup>143</sup>*Id.* at 146.

<sup>144</sup>*Id.* at 147.

<sup>145</sup>*Id.* at 150–51.

The court decided that EPA's position that section 404(c) allowed EPA's "post permit revocation without limitation" was unreasonable.<sup>146</sup> Despite insisting that the post-permit withdrawal of a specification would nullify a section 404 permit, EPA was not able to explain the practical consequences of the withdrawal, including what would actually happen to the permit issued by the Corps, an entirely separate federal agency.<sup>147</sup> The post-permit revocations would undermine the permit-based CWA regulatory scheme because permittees would not be able to rely on permits that had been issued.<sup>148</sup> Additionally EPA's approach would "sow a lack of certainty into a system that was expressly intended to provide finality."<sup>149</sup> The Industry Amici's projected economic effect of allowing EPA to revoke issued permits, and EPA's inability to provide any reassurance regarding these practical consequences further demonstrated EPA's unreasonableness.<sup>150</sup>

Second, EPA had identified no precedent or written authority for its position. The Memorandum of Opinion between EPA and the Department of the Army for implementing section 404, which was created under statutory directive to ensure cooperative implementation, does not address a post-permit veto, but expressly contemplates only pre-permit EPA action.<sup>151</sup> Also, EPA's regulations do not address post-permit withdrawals.<sup>152</sup> Given EPA's inability to provide any authority for its interpretation or to address the economic consequences of its actions, the court rejected EPA's interpretation of section 404(c) and held that EPA may not withdraw specifications from and effectively veto section 404 permits after the permits are issued.<sup>153</sup>

As of the writing of this chapter, EPA has appealed the district court decision and the appeal is pending before the U.S. Court of Appeals for the District of Columbia Circuit.<sup>154</sup>

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<sup>146</sup>*Id.* at 151, 153.

<sup>147</sup>*Id.* at 152–53.

<sup>148</sup>*Id.* at 152.

<sup>149</sup>*Id.*

<sup>150</sup>*Id.*

<sup>151</sup>*Id.* at 152–53.

<sup>152</sup>The court did not place any weight on an EPA preamble stating that EPA could exercise veto authority after the issuance of a permit because EPA characterized other parts of the preamble as mere policy guidelines. *Id.* at 153.

<sup>153</sup>*Id.*

<sup>154</sup>*Mingo Logan Coal Co. v. EPA*, No. 12-5150 (D.C. Cir. filed May 15, 2012).

As mentioned earlier, EPA is being urged to exercise its section 404(c) veto authority with respect to a proposed mining project in the Bristol Bay region of Alaska in a novel way that is at the other end of the spectrum from *Mingo Logan*—it is being urged to utilize section 404(c) *before a permit application is even filed*.<sup>155</sup> The D.C. Circuit’s analysis of the scope of EPA’s section 404(c) authority may have a bearing on how the agency proceeds with a potential preemptive veto, in addition to answering the question on the post-permit veto in *Mingo Logan*.

### § 26.05 Selenium—Increasing Focus on a Challenging and Costly Constituent

Finally, we examine the growing trend toward more active regulation of selenium in CWA § 402 permits for mining operations. Of the numerous legal actions initiated by environmental groups and federal and state governments against eastern U.S. mining, a specific subset of litigation involving CWA violations stemming from discharges of selenium into surface waters has exacted a particularly costly toll on surface coal mine operators. It is also emerging as an environmental compliance challenge for western U.S. mining operations. To assist those in the western United States who may be new to the issue of selenium, the following discussion provides an overview of regulation of selenium under the CWA and the litigation and enforcement trends that have emerged in the eastern United States.

Selenium is a naturally occurring element that is essential to all life in small concentrations. In higher concentrations it has proven to be toxic to aquatic and terrestrial wildlife.<sup>156</sup> Selenium is not directly toxic to fish, but because of its bioaccumulative properties it is passed to offspring to produce a range of deleterious effects.<sup>157</sup> Selenium water pollution has long been associated with agriculture, coal-fired power plants, petroleum refining, and hard and soft rock mining.<sup>158</sup> Surface coal mining—particularly the practices known as mountaintop mining and valley fills (MM/VF)—can introduce elevated levels of selenium into surface waters. By way of

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<sup>155</sup>See, e.g., <http://www.savebristolbay.org>.

<sup>156</sup>Notice of Draft Aquatic Life Criteria for Selenium and Request for Scientific Information, Data, and Views, 69 Fed. Reg. 75,541, 75,543 (Dec. 17, 2004).

<sup>157</sup>EPA Region 3, *Mountaintop Mining/Valley Fills in Appalachia: Final Programmatic Environmental Impact Statement* 40–41 (Oct. 2005) (Final PEIS).

<sup>158</sup>Tom Sandy & Cindy DiSante, CH2M Hill, “Review of Available Technologies for the Removal of Selenium from Water,” at 2-1 to 2-3 (June 2010) (CH2M Hill), <http://www.namc.org/docs/00062756.PDF>.

background, selenium generally is found in the earth's crust.<sup>159</sup> Surface mining brings selenium-bearing materials to the surface that would not otherwise be exposed to the elements. Selenium oxidizes over time and leaches when exposed to water.<sup>160</sup> In a MM/VF, a large volume of overburden—which can include selenium-bearing materials—is either placed in valley fills or used to resurface the mined area. This type of mining usually alters any surface water at the mine. By flowing through the newly constructed valley fills or ditches and coming into contact with selenium-bearing overburden material, runoff and surface water flow in MM/VF sites often contain elevated levels of selenium and other dissolved ions (as compared to background).<sup>161</sup>

Over approximately the last five years, environmental nongovernmental organizations (ENGO) have aggressively pursued CWA citizen suits<sup>162</sup> against operators in West Virginia. These lawsuits have sought to enforce newly-issued selenium effluent limits in National Pollutant Discharge Elimination System (NPDES) permits issued by the states pursuant to the CWA. The EPA has also pursued enforcement actions in Appalachia that have involved violations of selenium permit limits. These lawsuits—and the consent decrees that have come about as a result of the litigation—have posed a significant challenge for mine operators. In large part, the challenges stem from the numerous difficulties in both limiting and treating discharges of selenium from surface coal mining operations. Under the right set of circumstances, selenium water pollution could become equally menacing for western mine operators.

## [1] Regulatory Background

### [a] Clean Water Act Framework

Section 304 of the CWA requires EPA to issue water quality criteria that establish levels of pollutants at which aquatic life and human health are safe.<sup>163</sup> Water quality criteria issued under section 304 are not discharge limits or regulatory water quality standards. Rather, they are used to assist state regulators in carrying out their duty pursuant to section 303 of the

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<sup>159</sup>*Id.* at 2-1. Selenium sources include geologic sources such as black shale, coal, and phosphate rocks.

<sup>160</sup>*Id.* at 3-2.

<sup>161</sup>See EPA, *The Effects of Mountaintop Mines and Valley Fills on Aquatic Ecosystems of the Central Appalachian Coalfields* 52–54 (Mar. 2011) (2011 EPA Report), <http://www.epa.gov> (search “600/R-09/138F”).

<sup>162</sup>The CWA citizen suit provisions are found at 33 U.S.C. § 1365.

<sup>163</sup>See *id.* § 1314(a).

CWA to establish water quality standards.<sup>164</sup> Numeric water quality standards are the maximum level of pollutants or other substances that are protective of public health, welfare, and water quality, given the water bodies' various uses.<sup>165</sup> In turn, state regulators establish effluent limits in individual NPDES permits specific to various pollutants to ensure that discharges will not interfere with maintenance of water quality standards.<sup>166</sup>

### **[b] Water Quality Criteria for Selenium**

EPA's current water quality criteria for selenium were published in 1987.<sup>167</sup> The freshwater criteria issued in 1987 set both chronic and acute criteria. The chronic and acute criteria issued in 1987 are 5 ug/l and 20 ug/l, respectively.<sup>168</sup> In 2004, EPA issued revised water quality criteria for selenium in draft form.<sup>169</sup> The draft chronic acute and criteria represent a departure from the existing criteria to account for the fact that variable flows in surface waters can greatly influence selenium concentrations. The draft chronic criteria are expressed in terms of selenium per gram of fish tissue, and the acute criteria is expressed in terms of total recoverable selenium as a 24-hour average. The new draft acute criteria is 7.91 ug/g dry weight whole-body fish tissue, and the chronic criteria is 258 ug/L total recoverable selenium present in water.<sup>170</sup> Despite being issued nearly eight years ago, the draft criteria have yet to be finalized.<sup>171</sup>

### **[c] Selenium Pollution Linked to Appalachian Surface Mining**

A link between surface coal mining in Appalachia and selenium pollution was not established until EPA conducted its Programmatic EIS (PEIS) on mountaintop mining and valley fills in Appalachia.<sup>172</sup> The PEIS was prepared pursuant to a settlement agreement in a lawsuit brought against

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<sup>164</sup>See *id.* § 1313(c).

<sup>165</sup>See *id.*

<sup>166</sup>See generally *id.* §§ 1312, 1342(b).

<sup>167</sup>EPA, Office of Water, "Ambient Water Quality Criteria for Selenium" (1987), <http://www.epa.gov> (search title and year).

<sup>168</sup>*Id.* at 34.

<sup>169</sup>See 69 Fed. Reg. 75,541 (Dec. 17, 2004).

<sup>170</sup>*Id.* at 75,544.

<sup>171</sup>The agency maintains a website displaying all data and studies regarding the effects of selenium on aquatic life since issuing the draft criteria in 2004. See EPA, "Aquatic Life Criteria—Selenium," <http://water.epa.gov/scitech/swguidance/standards/criteria/aqlife/pollutants/selenium/index.cfm>.

<sup>172</sup>See Final PEIS, *supra* note 157, at 39.

the Corps stemming from their issuance of permits under CWA § 404.<sup>173</sup> As part of the PEIS, the U.S. Fish and Wildlife Service (FWS) conducted a survey of numerous water bodies in West Virginia that were in the vicinity of surface mining operations.<sup>174</sup> FWS concluded that numerous surface water bodies tested contained levels of selenium that exceeded the EPA water quality criteria, and could adversely affect fish reproduction and bird populations that feed on stream life: “The studies conducted . . . do show an impact from MTM/VF activities to water chemistry downstream of surface coal mining operations and valley fills and indicate that in some cases aquatic communities are impaired.”<sup>175</sup> EPA did note, however, that the sample size and monitoring periods “were not considered sufficient to establish firm cause-and-effect relationships between individual pollutants and the decline in particular macroinvertebrate populations,” nor could impairment “be correlated with the number of fills, their size, age, or construction method.”<sup>176</sup>

As part of a larger effort to catalog and understand the ecological impacts of MM/VF, EPA issued a report in Spring 2011.<sup>177</sup> EPA reviewed a number of peer-reviewed studies on the effects of selenium in waters receiving coal overburden leachates or runoff.<sup>178</sup> The report concluded that MM/VF directly led to elevated selenium concentrations that have been known to cause toxic effects in fish and birds.<sup>179</sup> However, the report also identified selenium impacts on stream life and stream food webs as an area that warranted further study and research.<sup>180</sup>

### [d] Selenium Limits Included in NPDES Permits

As a result of the studies FWS performed for the PEIS that highlighted high selenium levels in surface waters near MM/VF sites in West Virginia, the state took action to address the problem. Following publication of the draft PEIS the WVDEP began to address this through NPDES

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<sup>173</sup>Trial Brief ¶ 7, *Bragg v. Robertson*, 83 F. Supp. 2d 713 (S.D. W. Va. 2000) (No. 2:98CV00636), 1998 WL 35251185.

<sup>174</sup>See Letter from David Densmore, FWS, to W. Va. Dep’t of Env’tl. Prot. (Jan. 16, 2004), in Final PEIS, *supra* note 157, at Appendix-Errata Continuation.

<sup>175</sup>Final PEIS, *supra* note 157, at 40.

<sup>176</sup>*Id.* at 41.

<sup>177</sup>2011 EPA Report, *supra* note 161.

<sup>178</sup>*Id.* at 52–53.

<sup>179</sup>*Id.* at 1–2, 53–55.

<sup>180</sup>*Id.* at 101–03.

permit limits.<sup>181</sup> Beginning in 2003, WVDEP gradually started including monitor-and-report selenium requirements in surface coal mine NPDES permits.<sup>182</sup> Typically, WVDEP afforded operators a three-year lead time before effluent limits became effective for the permits.<sup>183</sup>

## [2] Enforcement Actions and Citizen Suits Against Operators for Selenium Violations

The majority of federal court litigation against Appalachian surface coal mining operators for selenium violations has been initiated by ENGOs. Federal enforcement actions from EPA have been far less prevalent. In the majority of these lawsuits, the litigants settled and enter into consent decrees that entail substantial obligations. Collectively, these consent decrees have applied to dozens of NPDES-regulated outlets at surface coal mines in West Virginia. Certainly, the regulatory and factual backdrop to these cases has presented the proverbial perfect storm for this type of environmental litigation: a changing regulatory environment with new permit limits and the water quality criteria in flux; emerging scientific data beginning with the PEIS; difficult decisions for operators to make regarding treatment technologies; and an active ENGO community that pursued this issue aggressively.

### [a] ENGO Citizen Suits

For the most part, the citizen suits brought by an ENGO against surface coal mine operators in West Virginia all share a similar procedural history, and thus the litigation, and the ensuing consent decrees bear many similarities. The NPDES permits at issue in these cases were typically modified through some administrative process by WVDEP to include selenium limits, whether through permit modification, renewal, or some other process.<sup>184</sup> However, other permits were issued anew with selenium limits.<sup>185</sup> Regardless, nearly all of the NPDES permits with new selenium limits gave the operators a phase-in period of approximately three years before the permit limits actually went into effect.<sup>186</sup>

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<sup>181</sup> See, e.g., *Ohio Valley Env'tl. Coal, Inc. v. Hobet Mining, LLC*, No. 3:08-cv-0088, 2008 WL 5377799, at \*5 (S.D. W. Va. Dec. 18, 2008) (*OVEC v. Hobet*).

<sup>182</sup> *Id.*

<sup>183</sup> *Id.* Once the lead time expires, the selenium effluent permit limits—generally 4.7 ug/l monthly average and 8.2 ug/l daily maximum—become effective. See, e.g., *id.* at \*3.

<sup>184</sup> See, e.g., *Ohio Valley Env'tl. Coal, Inc. v. Maple Coal Co.*, 808 F. Supp. 2d 868, 875 (S.D. W. Va. 2011) (*OVEC v. Maple Coal*); *OVEC v. Hobet*, 2008 WL 5377799, at \*3.

<sup>185</sup> *OVEC v. Hobet*, 2008 WL 5377799, at \*3.

<sup>186</sup> See, e.g., *id.*; *OVEC v. Maple Coal*, 808 F. Supp. 2d at 875.

Many of these cases and the corresponding permits also had complex procedural histories in state courts and administrative tribunals that included some combination of WVDEP enforcement actions, consent decrees or compliance orders with the state, and stays or extensions of selenium compliance deadlines. West Virginia's efforts to solve the selenium pollution problem on the one hand, and ENGOs bringing enforcement actions pursuant to a federal statute on the other hand, created a federalism tension that could reasonably be expected to play out in another state. For example, in a number of cases, ENGOs sued mine operators for selenium violations, despite the fact WVDEP was ostensibly taking enforcement action against the operators.<sup>187</sup>

In terms of the substance of the ENGO's complaints, these suits were typically brought to enforce violations selenium limits in the operator's NPDES permit. The ENGO plaintiffs categorically sought penalties to address previous violations, and injunctive relief to address future discharges.<sup>188</sup>

The majority of these cases were resolved through consent decrees between the defendants and the ENGOs.<sup>189</sup> All of the consent decrees include civil penalties. Based on a review of these consent decrees, it appears that \$750,000 is the largest penalty paid in a case involving selenium violations.<sup>190</sup> Another common component of the consent decrees has been the funding of supplemental environmental projects (SEP) by the defendants.<sup>191</sup> In general, the payments to fund SEPs are more substantial than the civil penalties paid pursuant to the consent decrees. For example, in two separate cases, the defendants paid \$6.75 million and \$4.05 million

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<sup>187</sup>See, e.g., *Ohio Valley Env'tl. Coal., Inc. v. Patriot Coal Corp.*, No. 3:11-0115, 2011 WL 6101921, at \*6-7 (S.D. W. Va. Dec. 7, 2011) (*OVEC v. Patriot I*); *OVEC v. Maple Coal*, 808 F. Supp. 2d at 883-87; *OVEC v. Hobet*, 2008 WL 5377799, at \*4-6.

<sup>188</sup>See, e.g., *Ohio Valley Env'tl. Coal., Inc. v. Independence Coal Co.*, No. 3:10-cv-0836, 2011 WL 1984523, at \*2-3 (S.D. W. Va. May 20, 2011) (*OVEC v. Independence*); *Ohio Valley Env'tl. Coal., Inc. v. Apogee Coal Co.*, 744 F. Supp. 2d 561, 563-64 (S.D. W. Va. 2010) (*OVEC v. Apogee II*); *Ohio Valley Env'tl. Coal., Inc. v. Coal-Mac, Inc.*, 775 F. Supp. 2d 900 (S.D. W. Va. 2011) (*OVEC v. Coal-Mac*).

<sup>189</sup>See, e.g., *OVEC v. Apogee II*, 744 F. Supp. 2d at 564; *OVEC v. Hobet*, 2008 WL 5377799, at \*3-4.

<sup>190</sup>See, e.g., *Ohio Valley Env'tl. Coal., Inc. v. Patriot Coal Corp.*, No. 3:11-cv-115, 2012 WL 895939, at \*3 (S.D. W. Va. Mar. 15, 2012) (*OVEC v. Patriot II*).

<sup>191</sup>SEPs allow violators to mitigate penalties by undertaking approved projects that benefit the environment and public health. See EPA Office of Enforcement and Compliance, "EPA Supplemental Environmental Projects Policy" (May 1, 1998), <http://www.epa.gov> (search title).

to fund SEPs for the West Virginia Land Trust.<sup>192</sup> The plaintiffs in these cases have also uniformly sought and received attorneys' fees.<sup>193</sup>

The most onerous components of the citizen-suit consent decrees are the injunctive relief requirements that obligate operators to install treatment systems and achieve compliance with selenium limits. The citizen-suit consent decrees typically have allowed the defendant-operators to select the initial treatment technology.<sup>194</sup> In their initial selections, the coal operators showed a clear preference for passive biological treatment.<sup>195</sup> However, all of the consent decrees have mandated the implementation of alternative treatment systems if the initial treatment system cannot achieve compliance with selenium limits. The alternative treatment systems available to defendants have typically been listed in the consent decrees, or must be approved by the ENGOs and a Special Master.<sup>196</sup> When the consent decrees have specified the alternative treatment systems, they are expensive systems that have a record of achieving regulatory limits such as RO, ABMet®, and FBRs.<sup>197</sup>

The consent decrees provide the defendants with a phase-in period following installation of a treatment system. Violations of the permit selenium limits during this period do not count against the defendant in terms of triggering implementation of an alternative treatment system.<sup>198</sup> However, once that period is up, the consent decrees typically mandate that an alternative system be installed if a certain number of violations of the daily

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<sup>192</sup>*OVEC v. Patriot II*, 2012 WL 895939, at \*3; *OVEC v. Independence*, Doc. No. 134, ¶ 17.

<sup>193</sup>See, e.g., *OVEC v. Patriot II*, 2012 WL 895939, at \*3.

<sup>194</sup>See, e.g., *OVEC v. Coal-Mac*, Doc. No. 136, at app. B; *OVEC v. Patriot II*, Doc. No. 51, ¶ 20.

<sup>195</sup>See, e.g., *OVEC v. Coal-Mac*, Doc. No. 136, at app. B; *OVEC v. Independence*, Doc. No. 134, ¶¶ 29, 38.

<sup>196</sup>See *OVEC v. Coal-Mac*, Doc. No. 136, ¶ 24; *OVEC v. Independence*, Doc. No. 134, ¶ 32; *OVEC v. Patriot II*, Doc. No. 51, ¶ 25.b.

<sup>197</sup>See, e.g., *OVEC v. Coal-Mac*, Doc. No. 136, ¶ 24; *OVEC v. Independence*, Doc. No. 134, ¶ 32. Reverse Osmosis (RO) is a physical treatment process in which wastewater is forced at high pressure through a membrane that is capable of filtering out any molecules greater than .0015 microns in size. CH2M Hill, *supra* note 157, at 4-13. ABMet® and Fluidized Bed Reactors (FBR) are active biological treatment systems that use chemical and mechanical means to create an environment that is optimal for microbial reduction of selenium. *Id.* at 4-54, 4-58, 4-66.

<sup>198</sup>*OVEC v. Patriot II*, Doc. No. 51, ¶ 26; *OVEC v. Coal-Mac*, Doc. No. 136, ¶ 25; *OVEC v. Independence*, Doc. No. 134, ¶ 28.

or monthly selenium limits occur.<sup>199</sup> To terminate the consent decree, the defendants must demonstrate compliance with the selenium limits for six straight months, three of which must be winter months.<sup>200</sup> If the operator fails to demonstrate compliance by the designated deadline, then it must implement an alternative treatment system.<sup>201</sup>

The consent decrees also include a variety of reporting requirements. Some have simply been increased monitoring reporting requirements,<sup>202</sup> while others have involved the requirement to submit progress reports documenting all the operator's activities to achieve compliance with the consent decree.<sup>203</sup> Additionally, the consent decrees typically have provided for some type of stipulated penalties for failure to meet deadlines and/or violations of selenium effluent limits.<sup>204</sup>

ENGOS have been diligent in policing compliance with the consent decrees. For example, Apogee Coal Company (Apogee) was first required by a federal district court in 2008 to install a selenium treatment system, and this mandate was later incorporated into a subsequent consent decree with the ENGO with extended deadlines.<sup>205</sup> Subsequently, Apogee failed to meet its compliance deadline and the ENGOS moved to hold the company in contempt. The court held Apogee in contempt, concluding that the company over-relied on zero valent iron (ZVI) technology to achieve compliance and did not heed its environmental consultant's advice.<sup>206</sup> As a result of the contempt finding, the court required Apogee to post a \$45 million irrevocable standby letter of credit; install an FBR and achieve

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<sup>199</sup>*OVEC v. Patriot II*, Doc. No. 51, ¶ 26; *OVEC v. Coal-Mac*, Doc. No. 136, ¶ 27; *OVEC v. Independence*, Doc. No. 134, ¶ 34.

<sup>200</sup>*OVEC v. Patriot II*, Doc. No. 51, ¶ 28; *OVEC v. Coal-Mac*, Doc. No. 136, ¶ 29; *OVEC v. Independence*, Doc. No. 134, ¶ 36.

<sup>201</sup>*OVEC v. Patriot II*, Doc. No. 51, ¶ 26; *OVEC v. Coal-Mac*, Doc. No. 136, ¶ 30; *OVEC v. Independence*, Doc. No. 134, ¶ 37.

<sup>202</sup>*OVEC v. Coal-Mac*, Doc. No. 136, ¶ 32.

<sup>203</sup>*OVEC v. Patriot II*, Doc. No. 51, ¶ 29; *OVEC v. Independence*, Doc. No. 134, ¶ 22.

<sup>204</sup>*OVEC v. Patriot II*, Doc. No. 51, ¶¶ 38–41; *OVEC v. Independence*, Doc. No. 134, ¶¶ 59–67; *OVEC v. Coal-Mac*, Doc. No. 136, ¶ 42.

<sup>205</sup>*See Ohio Valley Envtl. Coal., Inc. v. Apogee Coal Co.*, 555 F. Supp. 2d 640, 648–50 (S.D. W. Va. 2008); *OVEC v. Hobet*, Doc. No. 54.

<sup>206</sup>*See OVEC v. Apogee II*, 744 F. Supp. 2d at 573–74. ZVI involves introducing selenium-contaminated water to media that contains ZVI or elemental iron. When the oxidized and water-soluble forms of selenium come into contact with the ZVI or iron, they are reduced to the elemental form of selenium, which is water insoluble, or alternatively selenite is absorbed by the iron-containing solids formed during the reaction. *See* CH2M Hill, *supra* note 158, at 4-45.

compliance by March 2013; and submit monthly progress reports to the court, ENGOs, and a special master documenting Apogee's activities to achieve compliance with selenium limits.<sup>207</sup> Additionally, a number of outfalls operated by Hobet Mining LLC (Hobet) that were originally subject to a 2008 consent decree with WVDEP were included in a subsequent citizen suit and consent decree against Patriot Coal Corporation (Patriot), the parent company, when Hobet failed to achieve compliance by the deadline in the WVDEP consent decree.<sup>208</sup> Thus, the ability to achieve an acceptable settlement in these cases has not necessarily meant that the operators are out of the proverbial woods.

### [b] Federal Enforcement

Between the actions taken by WVDEP at the administrative and state judicial level, and the federal court actions by ENGOs, there has been comparatively little action by the federal government to enforce compliance with selenium limits at Appalachian surface coal mines, perhaps indicating a federal interest in allowing states to develop policies and approaches on the issue. Large enforcement actions against major operators and their subsidiaries have occurred in the last several years, but these actions did not focus specifically on selenium violations. In one such action, the United States and the State of West Virginia addressed violations at a number of mines in Appalachia owned by Patriot or its subsidiaries.<sup>209</sup> However, the consent decree entered into in that action in 2009 specifically excluded any injunctive relief regarding compliance with selenium limits in an effort to create a consistent state-led approach to the problem.<sup>210</sup> Although it did not impose selenium-specific injunctive relief and civil penalties for selenium violations, the agreement applied to four Hobet-operated NPDES-permitted outfalls with selenium violations that were subject to a consent decree with WVDEP mentioned above, as well as a later consent decree between Patriot and several ENGOs.<sup>211</sup>

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<sup>207</sup> See *Ohio Valley Env'tl. Coal., Inc. v. Apogee Coal Co.*, No. 3:07-cv-0413, 2010 WL 3951964, ¶¶ 1–3, 6 (S.D. W. Va. Oct. 8, 2010).

<sup>208</sup> See, generally *OVEC v. Patriot I*, 2011 WL 6101921, at \*2–3; *OVEC v. Patriot II*, 2012 WL 895939, at \*1.

<sup>209</sup> See *United States v. Patriot Coal Corp.*, No. 2:09-cv-099, 2009 WL 1210622 (S.D. W. Va. Apr. 30, 2009).

<sup>210</sup> See Consent Decree ¶ 100, *id.* (No. 2:09-cv-099), <http://www.epa.gov> (search “patriot coal consent decree”).

<sup>211</sup> *Id.* § I, ¶ E.

The United States entered into a similar agreement with Arch Coal LLC (Arch) and several of its subsidiaries in Appalachia in 2011.<sup>212</sup> This consent decree addressed selenium violations at one outlet, requiring installation of a selenium treatment system pursuant to a framework similar to those included in the citizen suit consent decrees.<sup>213</sup> At the time this consent decree was negotiated, a coalition of ENGOs had already initiated a citizen suit against two Arch subsidiaries for selenium violations at other outfalls.<sup>214</sup> The consent decree specifically reserved the right of the United States to obtain penalties or injunctive relief against the defendants for violations of selenium limits at any outfalls they operated.<sup>215</sup>

### [3] Conclusion

Compliance with selenium effluent limits has been a persistent problem for many surface coal mine operators in West Virginia. ENGOs have given every indication that their heightened level of attention to this issue will not abate anytime soon.<sup>216</sup> Because of the inherent difficulties in treating mine water discharges that contain selenium, complying with consent decree obligations has proved to be challenging for operators even after a case has settled. Given the experience of eastern coal mine operators, and the recent national attention regarding the Smoky Canyon mine in Idaho, mine operators in the West would do well to start tracking this issue and contemplating potential regulatory and operational strategies before compliance problems arise.

## § 26.06 Conclusion

As evidenced from the varied nature of CWA and federal regulatory topics discussed above, the regulatory challenges for eastern U.S. mining in recent years cannot be exaggerated. As science evolves on the water quality impacts of earth-moving activity, and federal agencies rush to respond to new data—sometimes preferring to do so outside the time-consuming

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<sup>212</sup>See *United States v. Arch Coal, Inc.*, 829 F. Supp. 2d 408 (S.D. W. Va. 2011) (*U.S. v. Arch Coal*).

<sup>213</sup>See Consent Decree ¶¶ 59–74, *id.* (No. 2:11-cv-0133) (Arch Coal–EPA Consent Decree), <http://www.epa.gov> (search “arch coal consent decree”).

<sup>214</sup>*U.S. v. Arch Coal*, 829 F. Supp. 2d at 410–12 (discussing *OVEC v. Coal-Mac*).

<sup>215</sup>Arch Coal–EPA Consent Decree ¶ 122.

<sup>216</sup>For example, a bench trial was scheduled to commence in May 2012 against one West Virginia operator, but a settlement was reached resulting in a consent order on June 26, 2012. See *Ohio Valley Env'tl. Coal., Inc. v. Maple Coal Co.*, No. 3:11-cv-09, 2012 WL 2425644 (W.D. Ark. June 26, 2012). New cases were filed in Tennessee and Kentucky in late 2011. See *Sierra Club v. Laurel Mountain Res.*, No. 7:11-cv-184 (E.D. Ky. filed Dec. 27, 2011); *Tenn. Clean Water Network v. Nat'l Coal, LLC*, No. 3:11-cv-515 (E.D. Tenn. filed Oct. 31, 2011).

burdens of formal rulemaking processes—many of the concepts and trends discussed in this chapter are likely to appear in other regions and be applied to other forms of natural resources development. Indeed, signals in Idaho on selenium and Alaska on section 404(c) may already indicate that what is past is prologue. It is the authors' hope that the detail provided in this chapter will assist practitioners in planning for and navigating the regulatory challenges that lie ahead and that are surely "moving West."