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Mountaintop Removal Mining: Background on Recent Controversies

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Summary

Mountaintop removal mining involves removing the top of a mountain in order to recover the coal seams contained there. This practice occurs in six Appalachian states (Kentucky, West Virginia, Virginia, Tennessee, Pennsylvania, and Ohio). It creates an immense quantity of excess spoil (dirt and rock that previously composed the mountaintop), which is typically placed in valley fills on the sides of the former mountains, burying streams that flow through the valleys. Mountaintop removal mining is regulated under several laws, including the Clean Water Act (CWA) and the Surface Mining Control and Reclamation Act (SMCRA).

Critics say that, as a result of valley fills from mountaintop removal mining, stream water quality and the aquatic and wildlife habitat that streams support are destroyed by tons of rocks and dirt. The mining industry argues that mountaintop removal mining is essential to conducting surface coal mining in Appalachia and that it would not be economically feasible there if operators were barred from using valleys for the disposal of mining overburden. Critics have used litigation to challenge the practice. Environmental groups have been successful at the federal district court level in challenging some permits for mountaintop removal mining projects, only to be later overturned on appeal. Nonetheless, the criticisms have prompted some regulatory changes.

In 2009, officials of the Environmental Protection Agency (EPA), the U.S. Army Corps of Engineers (Corps), and the Department of the Interior signed a Memorandum of Understanding outlining a series of administrative actions under these laws to reduce the harmful environmental impacts of surface coal mining in Appalachia. The plan included a series of actions that emphasize specific steps, improved coordination, and greater transparency of decisions to be implemented through regulatory proposals, guidance documents, and review of applications for permits to authorize surface coal mining operations in Appalachia. Viewed broadly, the Administration's combined actions displease both industry and environmental advocates. The additional scrutiny of permits and more stringent requirements have angered the coal industry and many of its supporters. Controversy also was generated by EPA's 2011 veto of a CWA permit that had been issued by the Corps for a surface coal mining project in West Virginia. At the same time, while environmental groups support EPA's steps to restrict the practice, many favor tougher requirements or even total rejection of mountaintop removal mining in Appalachia. The enhanced permit review procedures and EPA guidance on factors used in evaluating water quality impacts of Appalachian surface mining permits were challenged in court, but they were upheld by a federal appellate court. EPA's veto of the West Virginia mine permit was overturned by a federal court, but that ruling was reversed on appeal and the Supreme Court declined to review the case. Several bills to clarify and restrict EPA's veto authority were introduced in the 113th Congress. Legislation to restrict EPA's veto authority also was introduced in the 114th Congress (S. 55/S. 234, H.R. 896, and H.R. 1203).

This report provides background on regulatory requirements, controversies and legal challenges to mountaintop removal mining, and recent Administration actions, including a Stream Protection Rule proposed by the Office of Surface Mining in July 2015. Attention to EPA's veto of the West Virginia mining permit and other federal agency actions has increased in Congress. Congressional interest in these issues is discussed, including legislation seeking to restrict the practice of mountaintop removal mining and other legislation intended to block the Obama Administration's regulatory actions.

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What Is Mountaintop Removal Mining?

The environmental, economic, and societal impacts of the surface mining practice termed mountaintop removal mining have attracted considerable attention. This type of surface mining occurs in an area of approximately 12 million acres located in portions of Kentucky, West Virginia, Virginia, Tennessee, Pennsylvania, and Ohio.

As its name suggests, mountaintop removal mining involves removing the top of a mountain in order to recover the coal seams contained in the mountain. Explosives are used to break the mountain's rock, and massive earth-moving equipment, often including equipment called draglines, removes the spoil (i.e., the dirt and rock that composed the mountaintop over or between the coal seams). While federal law calls for excess spoil to be placed back in the mined areas—returning the lands to their approximate original contour (AOC)—that result ordinarily cannot be accomplished with mountaintop removal mining because broken rock takes up more volume than did the rock prior to mining and because there are stability concerns with the spoil pile. Mountaintop removal creates an immense quantity of excess spoil, which is typically placed in valley fills on the sides of the former mountains. One consequence is that streams flowing through the valleys are buried.

All types of surface and underground coal mining in Appalachia generate excess spoil fills due to the increased volume of broken rock, limitations on the steepness and height to which broken rock may be placed to achieve a stable slope, and the steep topography of the region. Large mines may be surrounded by several valley fills. Depending on the local topography and the profile of those valleys, a single fill may be over 1,000 feet wide and over a mile long.

While mountaintop removal mining has been practiced in some form since the 1960s, it became a prevalent coal mining technique in parts of central Appalachia during the 1990s for several reasons. First, as the demand for electricity increased, so has the demand for the relatively clean-burning, low-sulfur coal found in Appalachia. Second, coal supplies near the surface have been significantly depleted. Third is the development of large surface mining equipment (draglines) capable of moving over 100 cubic yards of earth in a single scoop.

Data from the U.S. Energy Information Administration (EIA) indicate that the amount of coal produced at mines with mountaintop removal mining permits in Central Appalachia has decreased by 62% since 2008, declining from about 53.2 million short tons in 2008 to approximately 20.2 million short tons in 2014. The number of mountaintop removal permits has decreased by 37%, from 51 active permits in 2008 to 32 in 2014.¹ Analysis of the EIA data shows different trends in different states. Mountaintop removal coal mining declined in West Virginia and Kentucky by 60% and 75%, respectively, during the 2008-2014 period, while production at mountaintop removal mines in Virginia increased by 24%.²

For many years, excess spoil from coal mining was generally placed in the extreme headwaters of streams, affecting primarily ephemeral streams that flow intermittently only in direct response to precipitation in the immediate watershed. Because smaller upstream disposal sites are exhausted and because of the increase in mountaintop removal mining activity, today the volume of a single stream fill can be as much as 250 million cubic yards. As a result, streams are eliminated, stream

¹ U.S. Energy Information Administration, "Coal Production Using Mountaintop Removal Mining Decreases by 62% since 2008," *Today in Energy*, July 7, 2015, <http://www.eia.gov/todayinenergy/detail.cfm?id=21952>.

² Rachel Leven, "Mountaintop Removal Coal Production Drops 62 Percent From 2008 to 2014, EIA Says," *Daily Environment Report*, July 8, 2015, pp. A-4.

chemistry is harmed by pollutants in the mining overburden, and downstream aquatic life is impaired. EPA estimated that from 1992 to 2010 almost 1,200 miles of Appalachian streams were buried by surface coal mining practices. The cumulative effects of such surface coal mining operations include deforestation, which has been linked to harm in aquatic communities; accelerated sediment and nutrient transport; and increased algal production, as well as possible human health impacts.³

Regulatory Setting

Regulation of valley fills associated with mountaintop removal mining is primarily under the authority of two federal statutes, the Surface Mining Control and Reclamation Act (SMCRA, 30 U.S.C. §1201) and the Clean Water Act (CWA, 33 U.S.C. §1252), and involves several federal and state agencies. The two laws provide for separate regulatory programs with different purposes and different permitting requirements and procedures. For example, the CWA focuses primarily on regulating discharges into waters of the United States, while SMCRA regulates a broad range of environmental and other impacts of surface coal mining and reclamation operations.

SMCRA addresses the necessary approvals for surface mining operations, as well as inspection and enforcement of mine sites until reclamation responsibilities are completed and all performance bonds are released. SMCRA permits may be issued by the Office of Surface Mining, Reclamation and Enforcement (OSM), U.S. Department of the Interior, or by qualified states, only if it has been shown that the proposed mining activities will satisfy general performance standards applicable to all surface coal mining operations.⁴ Among those standards, SMCRA addresses disturbances at the mine site and in associated offsite areas, as well as the quality and quantity of water in surface and ground water systems both during and after surface coal mining operations. While SMCRA generally requires that surface-mined areas be reclaimed so that they closely resemble the general surface configuration of the land prior to mining (i.e., AOC), the law and OSM regulations allow a variance from AOC for mountaintop removal mining operations under certain conditions.

The CWA prohibits the discharge of any pollutant from any point source into the waters of the United States, except in compliance with a permit issued under one of the two permit programs established by the statute. The two permit programs are the National Pollutant Discharge Elimination System (NPDES) program, administered by the Environmental Protection Agency (EPA) under CWA Section 402, and the dredge and fill permit program administered by the U.S. Army Corps of Engineers (Corps) under CWA Section 404.⁵ Mountaintop removal mining and other surface coal mining operations typically require both types of permits—a Section 404 permit for the discharge of mining overburden into waters of the United States, and a Section 402 permit for discharges from sediment ponds, on-site coal preparation facilities, and stormwater

³ Nancy Stoner, Acting Assistant Administrator for Water, and Cynthia Giles, Assistant Administrator for Enforcement and Compliance Assurance, *Improving EPA Review of Appalachian Surface Coal Mining Operations under the Clean Water Act, National Environmental Policy Act, and the Environmental Justice Executive Order*, U.S. Environmental Protection Agency, Memorandum, July 21, 2011, p. 5, http://water.epa.gov/lawsregs/guidance/wetlands/upload/Final_Appalachian_Mining_Guidance_072111.pdf.

⁴ In the Appalachian states where mountaintop removal mining occurs, the SMCRA regulatory program has been delegated by the federal government to state agencies, except in Tennessee.

⁵ The CWA authorizes delegation of both of these permit programs to qualified states. The NPDES program has been delegated to 46 states, including each of the Appalachian states. The Section 404 program has been delegated to two states, Michigan and New Jersey.

discharges from the mine site. The two permit programs employ different regulatory approaches and criteria.

The NPDES program focuses primarily (but not exclusively) on discharges from industrial operations and sewage treatment plants. Section 402 permits must include limitations on the quantities, rates, and concentrations of pollutants, called effluent limitations, that reflect treatment with available pollution control technology and any more stringent limitations necessary to meet state-established water quality standards for the receiving water. The standard for issuance of a Section 402 permit is compliance with pollutant limitation and control provisions in the CWA.

The Corps and EPA have complementary roles in implementing the Section 404 permit program. Under Section 404, the Corps issues permits for the discharge of dredged or fill material, using a set of environmental guidelines promulgated by EPA in conjunction with the Corps. These guidelines are intended to provide a comprehensive means of evaluating whether any discharge of fill is environmentally acceptable. The standard for issuance of a 404 permit is consideration of the full public interest by balancing the favorable impacts of a proposed activity against the detrimental impacts to reflect the national concerns for both the protection and utilization of important resources. This balancing test of probable impacts involves many factors, including conservation, economics, flood hazards, land use, navigation, energy and mineral needs, and, in general, the needs and welfare of the people.⁶ The Corps has considerable discretion, and the weight of each factor changes with each permit application, depending on the factor's importance and relevance to the particular proposal. However, a discharge is categorically prohibited if it would significantly degrade water quality. In addition, no discharge may be allowed if there is a less environmentally damaging practicable alternative. Where there is no other alternative, the discharge may be allowed if the applicant has taken all practicable steps to minimize the amount of material discharged and to compensate for unavoidable impacts through mitigation.

Section 404 permits consist of two basic types: Individual permits for a particular site and nationwide (general) permits for categories of discharges that are similar in nature and have no more than minimal adverse impacts, individually and cumulatively, on the waters of the United States. If the discharge may have more than minimal impacts, an individual permit is required. Nationwide permits cover approximately 74,000 activities annually (about 90% of total Corps permits) and involve less regulatory burden and time than authorization by individual permits. Disposal of excess overburden associated with mountaintop removal mining has generally been permitted under Nationwide Permit 21 (NWP 21), which authorizes discharges from surface coal mining activities that result in no more than minimal impacts (site-specifically and cumulatively) to the aquatic environment.⁷ The use of NWP 21 in conjunction with mountaintop removal mining in the Appalachian region has been controversial and has been challenged in litigation. The Obama Administration recently added new environmental restrictions on the use of NWP21 generally, while permanently prohibiting its use to authorize discharges to construct valleys fills, such as occurs in the Appalachian region (these developments are discussed below).

The U.S. Fish and Wildlife Service (FWS) also has responsibilities relevant to mountaintop removal mining. FWS implements and enforces the Endangered Species Act (35 U.S.C. §1531) and the Fish and Wildlife Coordination Act (16 U.S.C. §661), and under both laws, agencies proposing projects affecting U.S. waters are required to consult with FWS to ensure that fish and

⁶ 33 CFR §320.4(a)(1).

⁷ For additional information, see CRS Report 97-223, *The Army Corps of Engineers' Nationwide Permits Program: Issues and Regulatory Developments*, by (name redacted) and (name redacted)

wildlife conservation and impacts on threatened or endangered species are considered. Coordination with FWS is required for both SMCRA and CWA permits.

Criticism and Legal Challenges to Mountaintop Removal Mining

Because of the increase in valley fill disposal of mountaintop removal mining overburden in areas of Appalachia, the practice has drawn public attention and criticism. Critics say that, as a result of valley fills, streams and the aquatic and wildlife habitat that they support are destroyed by tons of rocks and dirt. Flow regimes are altered, increasing the likelihood and severity of floods, and the water quality downstream from fills also is significantly degraded. In addition, mountaintop removal can crack the walls and foundations of nearby homes; cause dust, noise, and vibration from blasting; collapse drinking water wells; and destroy nearby streams for fishing, hiking, swimming, or aesthetic pleasure. It also has forced the relocation of whole communities.⁸ Environmental groups argue that the practice of authorizing valley fills under Section 404 is unlawful because mining overburden is waste material which pollutes and destroys waterways, and impacts are far more than minimal, which is the standard for coverage by a nationwide permit.

The mining industry argues that mountaintop removal mining is essential to conducting surface coal mining in Appalachia. The poor stability of the soil surrounding coal deposits in this region makes it impossible to mine the coal using underground mining techniques. Waste disposal in valley fills is a necessary part of that activity because of the steep topography of the region, and they assert that mountaintop removal mining would not be economic or feasible if producers were restricted from using valleys for the disposal of mining overburden. Requiring Section 402 permits for these activities would effectively prohibit a broad range of mining which has been allowed by long-standing practice, they say.

Critics have been using litigation to challenge the practice. In a number of cases discussed here, environmental groups have been successful at the federal district court level in challenging issuance of permits for mountaintop removal mining projects, but each has been later overturned on appeal. Nonetheless, the criticisms also have prompted some regulatory changes, also discussed below.

In 1998, a West Virginia citizen group sued the state of West Virginia and the Corps for failure to prevent or enforce against environmental violations caused by mountaintop removal practices. The principal claim under SMCRA was that the state was failing to enforce OSM's 1983 buffer zone rule, which protects intermittent and perennial streams from disturbance by coal mining activities.⁹ In addition, the lawsuit asserted that the Corps had been granting permits that allowed disposal of waste in waters of the United States through permits under the nationwide permit program that have greater than minimal adverse effects, individually and cumulatively, which

⁸ Daniel L. Rosenberg, "Mountaintop Mining and Proposed Rule Change Will Waste Clean Water Act," *National Wetlands Newsletter*, vol. 22, no. 4, July-August 2000, p. 12.

⁹ In order to protect streams from sedimentation and channel disturbance, the 1983 buffer zone rule provided that no land within 100 feet of a perennial or intermittent stream shall be disturbed by surface mining activities, including the dumping of mining waste, unless the regulatory authority grants a variance that specifically authorizes surface mining activities closer to or through such a stream. The regulatory authority must find that the proposed mining activity will not cause or contribute to a violation of applicable state or federal water quality standards and will not adversely affect water quantity and quality or other environmental resources of the stream.

plaintiffs argued is contrary to the CWA. Some of the claims were settled when the federal agencies agreed to complete a Programmatic Environmental Impact Statement (PEIS) on the effects of mountaintop removal mining. The Corps also agreed that proposed valley fills in West Virginia in watersheds of at least 250 acres must be permitted by individual, not nationwide, permits.

The remaining claims were addressed in a 1999 ruling which held that disposal of mining spoil in valley streams violates federal and state mining rules and the CWA.¹⁰ Under the ruling, mining spoil was reclassified from “dredge and fill material,” requiring a CWA Section 404 permit, to “waste material” that is subject to CWA Section 402 permit requirements, thus raising the regulatory hurdles for disposing of mining waste.

Upon appeal, the district court ruling was overturned in a decision that dealt with jurisdiction and state sovereignty issues.¹¹ The court held that the stream buffer regulation at issue was, in fact, a matter of state law, not federal law and, thus, the case should not have been brought in federal court. The Clinton Administration had sided with the industry by appealing the district court’s finding that mountaintop removal mining must be regulated under CWA Section 402, but it concurred with the related finding, supported by environmental groups, that the activity violates stream buffer zone requirements under SMCRA. In 2002, the Supreme Court declined to hear a challenge to the Fourth Circuit decision.

In 2005, the Corps, EPA, and other federal agencies released a final PEIS on the impacts of mountaintop removal mining and valley fills,¹² as promised in the 1999 partial settlement of *Bragg*. It identified three alternatives for improving coordination of regulatory efforts to limit the negative impacts of mountaintop removal mining. Under the preferred alternative, OSM, the Corps, EPA, and state agencies would determine the size, number, and location of valley fills for a proposed operation, under a joint permit application integrating the CWA and SMCRA programs. The Corps would make case-by-case determinations whether a project would be covered under NWP 21 or under an individual Section 404 permit. More than 70,000 public comments were submitted on the draft PEIS. Industry groups favored continued use of general permit authorizations, while environmental groups said that the preferred alternative failed to place adequate limits on mountaintop removal mining and valley filling. A number of comments were critical that all of the alternatives were process alternatives, and none would minimize the environmental impacts from valley fills. The agencies responded that the alternatives were appropriate for a programmatic EIS and that they would provide increased environmental protection. The agencies also said that a number of changes to agency rules, policy, and guidelines would follow.

The “Fill Material” Rule

Controversies also arose following a proposal by EPA and the Corps in 2000 to revise a portion of the regulations that implement CWA Section 404. The agencies proposed to redefine the terms “fill material” and “discharge of fill material.” One result of the proposal would be regulatory definitions more consistent with the Administration’s position in the then-ongoing *Bragg* litigation, namely its view that regulating mountaintop removal mining under CWA Section 404 is not inconsistent with that act. This proposal was not finalized before the Clinton Administration

¹⁰ *Bragg v. Robertson*, 72 F.Supp.2d 642 (S.D.W.Va. 1999).

¹¹ *Bragg v. Robertson*, 248 F.3d 275 (4th Cir. 2001).

¹² <http://www.epa.gov/Region3/mtntop/eis2005.htm>. The final PEIS was preceded by a draft PEIS issued in 2003.

left office but was finalized in May 2002 by the Bush Administration, substantially as proposed in 2000.¹³

The revision was intended to clarify the regulatory definition of fill material—which determines whether the activity is subject to Section 404 permit requirements or more stringent Section 402 requirements—by replacing two separate and inconsistent definitions with a single, common definition to conform with long-standing Corps and EPA practice in regulating surface mining activities. According to the Clinton and Bush Administrations, the previous definitional differences had led to considerable confusion, as reflected in part in the *Bragg* and other lawsuits, but the changes were not driven solely by concerns over regulating mountaintop removal mining practices. Environmental groups continue to contend that the disposal practice is unlawful under the Clean Water Act, and that the revised EPA and Corps rules allow for inadequate regulation of disposal activities, including coal mining waste.

Following issuance of the revised rule, the Senate Environment and Public Works Committee held an oversight hearing in the 107th Congress to examine the rule, receiving testimony from Administration, mining industry, and public witnesses. Legislation intended to reverse the 2002 rule has been introduced in Congress since then (see “Congressional Actions” below).

OSM’s 2008 Stream Buffer Zone Rule

The 2003 draft PEIS called for OSM to make changes to its stream buffer zone rule to improve consistency with the Clean Water Act, and OSM proposed changes to that rule in 2004. However, OSM subsequently decided to prepare a new PEIS and to draft a revised rule, both of which were released in 2007.¹⁴

OSM issued a final revised buffer zone rule in December 2008. As described by OSM, the final rule required that surface coal mining operations be designed to minimize the amount of spoil placed outside the mined-out area, thus minimizing the amount of land disturbed. It also required that, to the extent possible, surface coal mining and reclamation operations be designed to avoid disturbance of perennial or intermittent streams and the surface of lands within 100 feet of those streams. If avoidance is not reasonably possible, the rule required that the permit applicant develop and analyze a range of reasonably possible alternatives and select the one that would have the least overall adverse impact on fish, wildlife, and related environmental values.¹⁵ According to OSM, the final rule did not mandate avoiding placement of coal mine waste in or within 100 feet of perennial or intermittent streams in all cases, because “there is sometimes no viable alternative to the construction of coal mine waste disposal facilities in perennial or intermittent streams and their buffer zones, in which case avoidance is not reasonably possible.”¹⁶

The 2008 revised rule eliminated the provision in the 1983 stream buffer zone rule that had required a finding that the proposed activity would not cause or contribute to a violation of state or federal water quality standards. In doing so, OSM said that the previous language more closely

¹³ Department of the Army, Corps of Engineers, and Environmental Protection Agency, “Final Revisions to the Clean Water Act Regulatory Definitions of ‘Fill Material’ and ‘Discharge of Fill Material,’” 67 *Federal Register*, No. 90, May 9, 2002, pp. 31129-31143. For additional background information on the 2002 rule, see CRS Report RL31411, *Controversies over Redefining “Fill Material” Under the Clean Water Act*, by (name redacted) .

¹⁴ 72 *Federal Register* 48890, August 24, 2007.

¹⁵ Department of the Interior, Office of Surface Mining Reclamation and Enforcement, “Excess Spoil, Coal Mine Waste, and Buffers for Perennial and Intermittent Streams; Final Rule,” 73 *Federal Register* 75814-75885, December 12, 2008, p. 75875.

¹⁶ *Ibid.*, p. 75833.

resembled the CWA than the underlying provisions of SMCRA. Because the SMCRA rule did not substitute for or supersede the CWA, mine operators still must comply with the requirements of that law.

Both industry and environmental groups said that the final rule did little to change the existing practice of disposing excess mountaintop removal mining spoil into valleys and streams. In fact, OSM stated that a key purpose of the rule was to reduce confusion about the 1983 rule and to conform the regulation to historic practice of federal and state authorities. Environmental groups said that the final rule would actually reduce environmental protection for streams by making it easier for coal mine operators to obtain exemptions from the stream buffer zone requirement, thus increasing destructive mining activities in and around streams; a coalition of these groups filed a lawsuit challenging the rule.

In 2009 the Obama Administration requested that the federal court hearing this case vacate the 2008 stream buffer zone rule and remand it to the department, in order to return immediately to the more stringent 1983 rule until a replacement rule can be adopted. The Administration argued that the 2008 rule did not adequately protect water quality and stream habitat. The court rejected the Administration's request, leaving the 2008 rule in place.¹⁷ However, litigation over the rule continued. In February 2014, the same federal court ruled that the 2008 rule had been issued without necessary consultation with federal wildlife agencies (under the Endangered Species Act).¹⁸ The court vacated the 2008 rule, which has been under review by OSM for modification since 2009, and in December 2014, OSM withdrew it.¹⁹ Withdrawal of the rule was expected to have little impact, because most states did not implement it due to the litigation, but controversies over OSM's revisions continued (see discussion below, "Revising the Stream Buffer Zone Rule").

Other Litigation

In other litigation challenging authorization of a specific mountaintop removal mining operation in Kentucky (rather than the general practice), a federal district court ruled in 2002 that the disposal of waste from mountaintop removal mining into U.S. waters is not allowed under Section 404, and the court permanently enjoined the Corps from issuing Section 404 permits for the disposal of mountaintop removal mining overburden where the purpose is solely to dispose of waste. In January 2003, a federal court of appeals ruled that the district court's action was too broad and lifted the injunction prohibiting the Corps from issuing Section 404 permits for disposal of mountaintop removal mining waste.²⁰

In 2007, individual permits for four mountaintop removal mining operations in West Virginia were overturned by a federal district court. The court found that the probable impacts of the valley fills would be significant and adverse, that the mitigation plans for each permit were not sufficient to compensate for those adverse impacts, and that the Corps inadequately evaluated the cumulative impacts of the projects. The Corps appealed the court's orders, and in February 2009, the court of appeals reversed and vacated the district court's actions.²¹ The court found that the Corps had not acted arbitrarily or capriciously in its evaluation of the projects' impacts, and it

¹⁷ Nat'l Parks Conservation Ass'n v. Salazar, 660 F. Supp. 2d 3 (D.D.C. 2009).

¹⁸ Nat'l Parks Conservation Ass'n v. Jewell, D.D.C., No. 1:09-cv-00115, February 20, 2014.

¹⁹ Office of Surface Mining Reclamation and Enforcement, "Excess Spoil, Coal Mine Waste, Diversions, and Buffer Zones for Perennial and Intermittent Streams," 79 *Federal Register* 76227-76233, December 22, 2014.

²⁰ Kentuckians for the Commonwealth v. Rivenburgh, 317 F.3d 425 (4th Cir. 2003).

²¹ Ohio Valley Environmental Coalition v. Aracoma Coal Company, 556 F.3d 177 (4th Cir. 2009).

found the Corps' proposed mitigation plans sufficient for purposes of complying with the National Environmental Policy Act (NEPA). One judge on the panel wrote in dissent that in his view the Corps had failed to establish that the projects will have no significant adverse environmental impact, and thus the agency had not satisfied the requirements of NEPA. While this case was pending, uncertainty over its outcome had effectively blocked the Corps from issuing Section 404 permits in Appalachia. Thus, the ruling by the court of appeals allowed for resumption of permitting activities in the region.

Environmental advocacy groups have continued to pursue legal challenges to permits for individual surface coal mining projects in Appalachia, especially for mines located in West Virginia and Kentucky.

Since 2003, citizen groups also have filed lawsuits seeking generally to halt the Corps' use of Nationwide Permit 21 for mountaintop removal mining operations. In one such case, a federal district court ruled that NWP 21 violates the Clean Water Act by authorizing activities that have more than minimal adverse environmental effects. The court enjoined the Corps from using NWP 21 to authorize new mountaintop removal mining in southern West Virginia and ordered the Corps to revoke previous authorization for 11 operations. On appeal, the judgment of the district court and the injunction against NWP 21 were vacated when the court of appeals found that the Corps had complied with the Clean Water Act when it promulgated NWP 21.²²

In another case, a U.S. district court ruled that, when the Corps issued NWP 21, its analysis of cumulative impacts was inadequate and its reliance on compensatory mitigation in determining the environmental impacts of valley fills was arbitrary and capricious.²³ The court again enjoined the Corps from using NWP 21 to authorize mountaintop removal mining activities in the Southern District of West Virginia. The decision requires that mining operations operating under NWP 21 be halted in West Virginia and Kentucky, but mining companies can seek individual permits from the Corps or appeal the decision. A Kentucky court disagreed with the district court's ruling in 2011 and allowed its continued use in that state. A federal appeals court overturned the Kentucky court's 2011 ruling and invalidated the use of NWP 21, finding that the Corps' environmental review procedures for NWP 21 were inadequate. Although this ruling dealt with the text of NWP 21 as issued in 2007 (which was re-issued with additional protections in 2012), environmental groups applauded the court's criticism of the Corps' actions.²⁴ As described next, in 2009, the Obama Administration announced a series of administrative actions regarding surface coal mining operations in Appalachia, including use of Nationwide Permit 21.

Administrative Actions

The Obama Administration joined the debate over mountaintop removal mining. Early in 2009, EPA began reviewing CWA Section 404 permit applications for surface coal mining operations in the Appalachian states, many of which had been on hold for months in light of the litigation on which the U.S. Court of Appeals for the Fourth Circuit ruled in February 2009, *Ohio Valley Environmental Coalition v. Aracoma Coal* (see above, "Other Litigation"). Following that ruling, EPA Administrator Lisa Jackson announced that, under its CWA authority to comment on 404 permit applications pending at the Corps and its authority to oversee issuance of Section 402

²² *Ohio Valley Environmental Coalition v. Bulen*, 429 F.3d 493 (4th Cir. 2005).

²³ *Ohio Valley Environmental Coalition v. Dana R. Hurst*, 604 F. Supp. 2d 860, (S.D. W.Va. 2009).

²⁴ *Kentucky Riverkeeper v. Robert A. Rowlette*, 714 F.3d 402 (6th Cir. 2013).

permits by states, EPA would review pending surface coal mining permit requests in Appalachia to ensure protection of the environment.

On June 11, 2009, officials of EPA, the Corps, and the Department of the Interior signed a Memorandum of Understanding (MOU) and Interagency Action Plan (IAP) outlining a series of administrative actions to reduce the harmful environmental impacts of surface coal mining in Appalachia. The plan includes a series of near-term and longer-term actions that emphasize specific steps, improved coordination, and greater transparency of decisions.²⁵ Many of the Administration's actions have been highly controversial, resulting in substantial congressional criticism. Some have been challenged successfully in court by industry companies and groups, and other legal challenges continue.

The Enhanced Coordination Process (ECP)

Also on June 11, 2009, EPA and the Corps signed a specific agreement detailing criteria to be used to coordinate and expedite review of pending permit applications for surface coal mining operations in Appalachia (including but not limited to mountaintop removal mining projects). Based on its authority to evaluate 404 permit applications, EPA identified 79 projects for additional environmental review. EPA and the Corps developed a joint Enhanced Coordination Procedure (ECP) for evaluation of the permits. Of the 79 projects, 49 were located in Kentucky, 23 in West Virginia, 6 in Ohio, and 1 in Tennessee. EPA stated that each of the 79 projects, as proposed, is likely to result in significant harm to water quality, either individually or cumulatively. Under the coordination process, the Corps was responsible for beginning discussions with EPA and the mining companies to reduce anticipated environmental effects, and generally the individual reviews were expected to be completed within 60 days of notification by the Corps. As of September 2011, 50 of the 79 permit applications had been withdrawn without prejudice by the applicants, and the Corps had issued permits for eight. EPA had sent recommendation letters for two others, and the 60-day review had begun for one more. The remaining 18 (all located in Kentucky and West Virginia) were pending, awaiting additional information from the applicant prior to Corps notification to begin the formal EPA review.

Coal industry groups and coal state officials contended that the ECP process resulted in costly delay in issuance of permits. They challenged the process in federal court, arguing that EPA and the Corps had violated the CWA by transferring regulatory authority from the Corps to EPA and effectively expanding the agency's veto power over permit decisions and also violated the Administrative Procedure Act by substantially changing permitting procedures without initiating a formal rulemaking. Further, they challenged the screening process used to determine whether pending permits should be subject to the ECP (called the Multi-Criteria Integrated Resource Assessment, or MCIR Assessment), as well as guidance used by EPA to evaluate the permit applications (discussed below, "EPA Guidance on Permitting"). EPA defended the ECP, saying that the additional coordination between the two agencies resulted in surface coal mining projects with reduced environmental, water quality, and human health effects, consistent with requirements of the CWA.

In October 2011, the federal district court struck down the ECP and the MCIR Assessment as an unlawful transfer of legal authority from the Corps to EPA.²⁶ Following the ruling, the Corps and

²⁵ For additional information on these Administration actions, see <http://water.epa.gov/lawsregs/guidance/wetlands/mining.cfm>.

²⁶ *National Mining Association v. Jackson*, 816 F.Supp.2d 37 (D.D.C. 2011). This ruling only addressed the ECP and the MCIR Assessment decision tool. A second part of the litigation, addressing the EPA guidance document, is (continued...)

EPA issued memoranda to clarify the roles of both agencies moving forward. While the specific ECP was set aside, the memoranda stated, the Corps would continue to process applications—including the 21 pending under the vacated ECP process—in accordance with permitting regulations, and EPA Regions should continue collaborating with the Corps to review proposed 404 permits.²⁷

Revising the Stream Buffer Zone Rule

OSM's 2008 stream buffer zone rule (discussed above) also was addressed in the June 2009 MOU and IAP. As described above, the Department of the Interior had asked a federal court to vacate the revised rule issued by the Bush Administration in 2008, saying that the rule did not adequately protect water quality and stream habitat. OSM officials had hoped to return to using the more stringent 1983 rule until, in the longer term, a replacement rule can be developed. The court rejected this request, thus leaving the 2008 rule in place. However, OSM officials also stated that because of litigation over the 2008 revisions, states were never directed to amend their programs to conform with the revisions—thus, most states are still operating under the 1983 rule.²⁸ In any event, as described previously, in February 2014 a federal court vacated the 2008 rule, because of OSM's failure to consult with federal wildlife agencies, so the question of applicability of that rule appears moot.

In November 2009, OSM identified a broad set of regulatory options that it was considering for revisions to the 2008 rule, ranging from formally reinstating the 1983 rule with small conforming changes, to requiring stricter buffer zone requirements for mountaintop removal mining operations on steep slopes.²⁹ OSM officials began work to develop a new rule and an accompanying draft environmental impact statement (EIS). The revised rule would apply nationwide, not just in Appalachia. OSM's efforts to revise the rule have been criticized, based on concerns about potential economic impacts of the rule and the quality of work on its EIS. However, OSM officials and environmental advocacy groups contended that a new rule is needed to protect waterways from surface mining operations.

OSM missed several self-imposed dates for releasing draft revised rules and an EIS, but finally announced both on July 16, 2015. As indicated since 2009, the proposal—now called the Stream Protection Rule—would apply to coal mining activities nationwide. It is broader in scope than the existing stream buffer zone rules, because it deals with the whole mine permit area and outside the permit area, not just the stream buffer zone.

The proposed rule retains the core of the current rules in many respects, including basic elements of the 1983 stream buffer zone rule. It is not the most environmentally stringent of all of the options evaluated by OSM before releasing the proposed rule. However, it includes provisions

(...continued)
discussed below.

²⁷ Nancy Stoner, Acting Assistant Administrator, U.S. EPA Office of Water, "Transmittal of Department of the Army Memo on 'Decision in National Mining Association et al. v. Jackson, et al,'" http://water.epa.gov/lawsregs/guidance/wetlands/upload/EPA_ECP_memo_DCCruling_11-16-11.pdf.

²⁸ According to OSM, the provisions of the 2008 rule—now withdrawn (see "OSM's 2008 Stream Buffer Zone Rule")—were only in effect where OSM is the primary regulatory authority, meaning Tennessee, Washington, the Indian lands for the Crow Tribe, Hopi Tribe, and Navajo Nation, and on federal lands in states without cooperative agreements.

²⁹ Department of the Interior, Office of Surface Mining Reclamation and Enforcement, "Stream Buffer Zone and Related Rules," 74 *Federal Register* 62664-62668, November 30, 2009.

that would be more stringent than current rules, such as new requirements for baseline data collection to determine the impacts of proposed mining operations, more specificity on reclamation plans, and more specificity on measures to protect fish and wildlife from adverse impacts of mining.³⁰

OSM's efforts to revise the 2008 rule have been controversial and have been criticized in Congress, which has considered legislation to require states to implement the 2008 rule and delay OSM's development of a revised rule (see "Congressional Actions"). Initial reactions to the 2015 proposed rule by stakeholder groups varied. Mining industry groups have been very critical, while environmental groups that have generally supported strengthening SMCRA regulations contend that the rule should be stronger to provide more protection to streams.

OSM issued a final environmental impact statement for the rule on November 16, 2016, meaning that a final rule could be issued soon. If a final rule is not issued by the Obama Administration before the new Administration takes office in January 2017, or if a final rule were overturned by legislative or presidential action in the 115th Congress, the current rules (i.e., the 1983 stream buffer zone rules) would remain in place, unless or until new rules or guidance was issued.

Nationwide Permit 21

As noted previously, disposal of excess overburden associated with mountaintop removal mining has generally been permitted by the Corps under Nationwide Permit 21 (NWP 21), which authorizes surface coal mining discharges with no more than minimal impacts to the aquatic environment. As part of the MOU and IAP, in July 2009, the Corps published a two-part proposal concerning the use of NWP 21 to authorize mountaintop removal mining activities.³¹ First, the Corps proposed permanent modification of this NWP to prohibit its use in conjunction with surface coal mining activities in the Appalachian region. Second, because modification of the NWP is a long-term process, the Corps also proposed to temporarily suspend NWP 21 for surface coal mining activities in the Appalachian region in order to quickly halt the use of NWP 21 in the region. Surface coal mining activities in other regions would not be affected. The proposed suspension and modification would mean that surface coal mining activities in Appalachia would need to be evaluated through the Corps' detailed individual permit review process, rather than under a streamlined nationwide permit. The Corps explained its reason in the proposal:

[T]he Corps now believes that impacts of these activities on jurisdictional waters of the United States, particularly cumulative impacts, would be more appropriately evaluated through the individual permit process, which entails increased public and agency involvement, including an opportunity for public comment on individual projects.³²

Subsequently, in June 2010, the Corps acted to suspend use of NWP 21 in the Appalachian region immediately (the second part of the July 2009 proposal) as an interim measure while continuing to evaluate permanent modification or suspension of the permit. According to the Corps' announcement, NWP 21 activities in the affected region that had been verified by the Corps prior to June 18, 2010, would continue to be authorized until March 18, 2012, unless modified on a case-by-case basis.³³ The Corps estimated that the immediate suspension would affect

³⁰ For information on the proposed rule, see CRS Report R44150, *The Office of Surface Mining's Proposed Stream Protection Rule: An Overview*, by (name redacted) .

³¹ Department of Defense, Department of the Army, Corps of Engineers, "Proposed Suspension and Modification of Nationwide Permit 21," 74 *Federal Register* 34311-34316, July 15, 2009.

³² *Id.* at 34313.

³³ Department of Defense, Department of the Army, Corps of Engineers, "Suspension of Nationwide Permit 21," 75 (continued...)

approximately six operations that at the time were seeking to use NWP 21; they would then have to submit applications for individual permits to authorize their activities.

In 2012, the Corps reissued all of the existing nationwide permits, with modification of a number of them, including NWP 21.³⁴ The previous version of NWP 21, issued in 2007, did not have any acreage or linear foot limits and relied on permit conditions and pre-construction notification reviews to reduce adverse impacts on the aquatic environment. The Corps determined that this approach had not adequately protected against loss of aquatic resources; thus the reissued permit added a ½-acre and 300-linear foot limit for the loss of stream beds when NWP 21 is used. Further, the reissued permit strictly prohibited use of NWP 21 to authorize discharges of dredged or fill material into U.S. waters to construct valley fills associated with surface coal mining.

EPA Guidance on Permitting

Throughout the Administration's review of activities that began in 2009, mining industry representatives have vigorously criticized EPA's actions and questioned what criteria are being used for permit reviews, saying that the agencies are needlessly delaying important projects, thus negatively affecting both jobs and the nation's energy security. The mining industry, environmental advocates, and elected officials in the affected region all had been asking for greater clarity. EPA and the Corps committed to issue guidance to strengthen environmental review of surface coal mining permits and operations and to clarify applicable criteria.

In 2010, EPA released a 31-page interim guidance memorandum to clarify the agency's tightened requirements for surface coal mining in Appalachia. The guidance would be applied as a framework for EPA's approval of all pending and future reviews for permits to dispose of coal mining waste—through CWA Section 404 permits—and other types of discharges from Appalachian surface coal mining that are authorized by Section 402/NPDES permits. According to EPA, the guidance is not intended to bring a complete halt to mountaintop removal mining, but it should force the industry to adopt a practice of minimal or zero filling of valleys with mining debris. In addition to applying the guidance to reviewing 404 permits, since late 2010, EPA has cited the scientific evidence in the guidance in comments and some objections to proposed NPDES permits for coal mining projects in Kentucky and West Virginia.

Among other items, the document set strict numeric limits on conductivity levels in waters affected by mining activities and valley fills. Conductivity is a measure of the level of salinity in water, which is expressed as microSiemens per centimeter, or $\mu\text{S}/\text{cm}$. As conductivity levels rise, fish, amphibians, mussels, and other aquatic organisms can be adversely affected. In the guidance (and in its ongoing review of pending Section 404 and 402 permit applications), EPA refers to increasing scientific recognition of a strong relationship between elevated total dissolved solids and conductivity levels in Appalachian streams and adverse impacts to aquatic life in streams and rivers below surface coal mining operations. Based on its review of recent scientific literature, EPA has concluded that, as a general matter, where conductivity levels will exceed 500 $\mu\text{S}/\text{cm}$ in central Appalachia, there is a reasonable potential that aquatic biota will be adversely affected and applicable water quality standards will be violated, thus establishing this as a likely upper limit to be allowed in permits. Environmental groups support EPA's use of conductivity to

(...continued)

Federal Register 117, June 18, 2010.

³⁴ Department of Defense, Department of the Army, Corps of Engineers, "Reissuance of Nationwide Permits," 77 *Federal Register* 10184-10290, February 21, 2012. Under the CWA, the previous nationwide permits, which were issued in March 2007, expired after five years and required renewal.

assess water quality impacts of coal mining, but industry groups have been highly critical, asserting that the science linking conductivity to water quality impairment is uncertain and that acceptable numeric levels are arbitrary. While the 2010 interim guidance was effective immediately, EPA also sought public comment to inform possible future changes to the guidance. Conductivity, and its use in assessing coal mining impacts on water quality, has become a focus of debate and public comment.

The EPA interim guidance also referenced two draft reports produced by EPA's Office of Research and Development that were used, together with peer-reviewed science, in preparing the guidance. The first draft report assessed the state of the science on the environmental impacts of mountaintop mines and valley fills on streams in Central Appalachia. The second developed a conductivity benchmark value that is intended to protect the biological integrity of aquatic life in waters in the region.

At EPA's request, the agency's Science Advisory Board (SAB) conducted evaluations of the EPA scientific documents, in view of the reports' likely importance to regulatory actions. The panel agreed with EPA's overall conclusions that there is strong evidence for a causal relationship between mountaintop removal mining/valley fills and harm to downstream water quality and to biological impacts on organisms that live in and on the bottom of streams. The panel also concluded that there is clear evidence that valley fills are associated with increased levels of dissolved ions (measured as conductivity) in downstream waters and that these increased levels of conductivity are associated with changes in the composition of stream biological communities.

For both reports, the SAB panel made a number of recommendations to strengthen both the supportive and the cautionary aspects of its comments on the EPA draft documents. For example, the conductivity report derives a benchmark that is intended to avoid the extinction of native species exposed to mountaintop removal mining/valley fills in Appalachian streams. The SAB panel stated that because the complete loss of a genus is an extreme ecological effect, it may be appropriate to develop a more appropriate endpoint recognizing less severe, but still significant, effects that occur at lower exposure levels. A consequence of doing so could be EPA's adoption of a more protective conductivity benchmark than contained in the April 2010 guidance described above and application beyond Appalachian mountaintop mines, at least in areas where sufficient data exist. At the same time, the SAB told EPA that the reports need to be clarified to emphasize that both conductivity and total dissolved solids (both referring to an increase in salinity in otherwise dilute freshwater) are "coarse" indicators of water quality, because of confounding factors such as the presence of other elements, and should not be used exclusively as surrogates for water quality. Thus, the SAB supported conductivity along with other field-based tests and cautioned that EPA should not over-rely on conductivity tests; the agency needs to weigh a variety of environmental factors in its assessments. Based on the SAB reviews, EPA released final versions of the two scientific reports in 2011.³⁵

The 2010 interim guidance was very controversial. Environmental advocates defend EPA's implementation of the guidance as a way to protect streams from the harmful effects of surface coal mining in Appalachia. But industry and some states oppose EPA's efforts. Lawsuits were brought by the states of Kentucky and West Virginia, and were consolidated with the litigation brought by coal companies and trade associations over the ECP process (*National Mining*

³⁵ The final EPA reports are entitled *The Effects of Mountaintop Mines and Valley Fills on Aquatic Ecosystems of the Central Appalachian Coalfields* (EPA/600/R-09/138F) and *A Field-Based Aquatic Life Benchmark for Conductivity in Central Appalachian Streams* (EPA/600/R-10/023F). Both are available at <http://www.epa.gov/ncea>. The SAB's reviews are available under "reports" at <http://yosemite.epa.gov/sab/sabpeople.nsf/WebCommittees/BOARD>.

Association v. Jackson, discussed above). They argued that the conductivity benchmark is set below background levels for some healthy streams in the region, making it too difficult to achieve. The lawsuits also argued that the guidance is an attempt to write new rules without following the notice-and-comment requirements of the Administrative Procedure Act.

EPA released final guidance to improve the agency's review of Appalachian surface coal mining operations in 2011.³⁶ The final document retains the same numeric limits on conductivity as in the interim guidance. However, EPA officials describe the final guidance as including considerable flexibility, based on considering public comments and experience in implementing the interim guidance since 2010. For example, the final guidance reflects the SAB's recommendations that the specific conductivity limits not be used outside waters of West Virginia and Kentucky, until the limits can be scientifically verified as applicable to other waters. Further, the final guidance acknowledges that at sites where the strict conductivity limits cannot be attained, EPA may recommend alternative permit conditions such as limits on individual ions, specifying particular best management practices for mining project design to minimize harmful impacts, or allowing for offsets in some circumstances. Environmental groups endorsed the final guidance, saying that it is key to strengthening permitting processes. Industry groups continue to argue that EPA has unlawfully expanded its statutory authority and infringed on the role of states.

In 2012, a federal judge issued summary judgment for mining industry and state plaintiffs who had challenged EPA's use of the guidance.³⁷ The court rejected the government's arguments that the guidance is a nonbinding document to help EPA assess whether a mine's actions would violate CWA standards. Instead, the district court agreed with plaintiffs' contentions that the guidance is being implemented as binding and having a practical effect on the permitting process for new Appalachian surface coal mining projects. Further, the court concluded that the guidance impermissibly sets a conductivity criterion for water quality standards, overstepping authority that the CWA assigns to states.

The government appealed both this ruling and the same court's 2011 invalidation of the ECP process, described above. In 2014, both rulings were overturned in a ruling by a federal appeals court.³⁸ Regarding the ECP, the court rejected plaintiffs' arguments that EPA overstepped its authority by coordinating with the Corps throughout the permit process. Further, the court dismissed plaintiffs' challenge to the conductivity guidance, on the basis that it is not a final agency action subject to judicial review because it did not add new obligations or have enforcement or other legal consequences for regulated entities. That is, the guidance itself does not represent an order compelling the regulated entity to do anything. Following the ruling, some industry sources said that it effectively declares the guidance as being completely voluntary, meaning that states and industry could ignore the guidance if they wish to do so. The court also said that, if a future permit were denied based on noncompliance with the guidance, the applicant could then seek judicial review, since that would be a final agency action.

EPA's Veto of a Mountaintop Removal Mining Permit

In addition to directing EPA to issue the environmental guidelines used by the Corps to evaluate permit applications (CWA Section 404(b)), Section 404 also authorizes EPA to prohibit or otherwise restrict the specification by the Corps of a site for the discharge of dredged or fill

³⁶ See <http://www.epa.gov/owow/wetlands/guidance/mining.html>.

³⁷ *National Mining Association v. Jackson*, 856 F.Supp.2d 150 (D.D.C. 2012).

³⁸ *National Mining Association v. McCarthy*, D.C. Cir., No. 12-5310, July 11, 2014.

material, if the agency determines that the activity will have an unacceptable adverse effect on water supplies, fish, wildlife, or recreational areas. EPA has used this veto authority, under Section 404(c), only 13 times since 1972. None of the previous vetoes involved a surface coal mining or mountaintop removal mining project.

In January 2011, the agency reached a determination to veto a permit for a mountaintop removal mining operation in West Virginia. According to EPA, the Spruce No. 1 mine in Logan County, West Virginia, as proposed, would be one of the largest surface mining operations ever authorized in Appalachia, and waste disposal from the mine would bury over 7 miles of streams, directly impact 2,278 acres of forestland, and degrade water quality in streams adjacent to the mine. The Corps issued a permit for the project in 2007, but it was subsequently delayed by litigation and has been operating on a limited scale since then. EPA acknowledges that the project has been modified in order to reduce impacts, but the veto determination is based on the agency's conclusion that the project could result in unacceptable adverse impacts to wildlife and fishery resources.³⁹ Some of the water quality problems cited in EPA's veto of the permit are from increased loads of pollutants that the project would discharge—particularly selenium and total dissolved solids—which contribute to increased stream conductivity, the same adverse impact cited by EPA in the permitting guidance document discussed above.

EPA's veto of the permit has been very controversial, in part because it involved cancelling a permit previously issued by the Corps.⁴⁰ Coal industry groups and organizations representing manufacturing and other sectors have been highly critical of EPA's actions, many saying that to revoke an existing permit creates huge uncertainty about whether water quality permits would be rescinded in the future, producing a ripple effect beyond the coal industry.

The owner of the site, the Mingo Logan Coal Company, challenged EPA's action in federal court, even before the veto was finalized. EPA argued that the veto, while highly unusual, is justified because the project involves unacceptable environmental impacts. The agency said that it is not currently reviewing any other previously authorized Appalachian surface coal mining project pursuant to Section 404(c). In 2012, a federal district court agreed with the industry petitioners and concluded that the CWA does not give EPA the power to render a permit invalid once it has been issued by the Corps. Although the language of 404(c) is "awkwardly written and extremely unclear," the court found EPA's view that it has such authority an unreasonable interpretation of the statute.⁴¹ Thus, it overturned the veto.

However, in 2013, a federal appeals court disagreed and reversed the district court's ruling, thus upholding EPA's authority to retroactively veto Section 404 permits. The appellate court said that the statute "imposes no temporal limit on the [EPA] Administrator's authority to withdraw the Corps' specification 'whenever' he makes a determination that the statutory 'unacceptable adverse effect' will occur."⁴² The mining company involved in the veto case, coal industry groups, and

³⁹ U.S. Environmental Protection Agency, "Final Determination of the Assistant Administrator for Water Pursuant to Section 404(c) of the Clean Water Act Concerning the Spruce No. 1 Mine, Logan County, WV; Notice," 76 *Federal Register* 3126-3128, January 19, 2011. The Final Determination and related materials are available at <http://water.epa.gov/lawsregs/guidance/cwa/dredgdis/spruce.cfm>.

⁴⁰ There is some ambiguity about whether it is the first EPA veto of a previously issued permit. Initially, EPA said that the agency had never done so, but agency officials subsequently have cited the 1981 veto of a project in North Miami Beach, FL, and a 1992 veto for a municipal water supply reservoir project. The facts of those cases differ from the Spruce No. 1 mine case and did not involve a surface mining project.

⁴¹ *Mingo Logan Coal Co. v. U.S. EPA*, 850 F.Supp.2d 133 (D.D.C. 2012).

⁴² *Mingo Logan Coal Co. v. EPA*, 714 F.3d 608 (D.C. Cir. 2013).

others, including several states, petitioned the Supreme Court to review and reverse the appellate ruling; the Court denied the petitions for review.

Viewed broadly, the Obama Administration's combined actions on mountaintop removal mining displease both industry and environmental advocates. The additional scrutiny of permits, more stringent requirements, and EPA's veto of a previously authorized project have angered the coal industry and many of its supporters. At the same time, while environmental groups support the veto and EPA's steps to restrict the practice, many favor tougher requirements or even total rejection of mountaintop removal mining in Appalachia.

The Obama Administration's record when federal courts have reviewed its stepped-up actions involving Appalachian surface mining is somewhat mixed. Several Administration initiatives were rejected by federal district courts, but those rulings were later overturned on appeal. As described above, a federal court ruled that OSM exceeded its authority in seeking to revise the stream buffer rule without complete administrative procedures, but the same court vacated the 2008 rule that OSM is seeking to rewrite. A court also ruled that EPA exceeded its authority by using the Enhanced Coordination Process (the ECP) and developing its 2011 permitting guidance, but these rulings were overturned on appeal. EPA's veto of the Spruce No. 1 mine permit also was reversed by a court, but then was overturned on appeal. The Supreme Court declined to review that ruling, thus leaving the veto in place.

Congressional Actions

Congressional interest in these issues also has been evident and has increased substantially recently. Bills dealing with several of the topics discussed above—the regulatory definition of “fill material,” EPA's veto of a surface coal mine project, OSM's stream buffer rule, and mountaintop removal mining generally—have been introduced, and hearings have been held.

In the 113th Congress (as in several prior Congresses), legislation to reverse the 2002 revised regulations that define “fill material,” discussed previously, was introduced (H.R. 1837, the Clean Water Protection Act). This bill would sharply restrict mountaintop removal mining by excluding from the definition of “fill material” any pollutant that is discharged into water primarily for the purpose of disposing of waste. This provision would allow pollutant discharges that replace portions of the waters of the United States with dry land or which change the bottom elevation of a water body for any purpose to be considered fill material. But it rejects the view reflected in the 2002 regulations that some discharges for purposes of waste disposal (including mine overburden) should be allowable within the definition of fill. Separate legislation that would codify the current regulatory definition of fill material was approved by a House committee in July 2014 (H.R. 5077).

The 113th Congress also twice included a provision barring the Corps from developing or implementing revised regulations concerning definitions of “fill material” or “discharge of fill material” in appropriations legislation, although the Corps has not begun work on revisions or indicated any intention to do so. The provision was included as part of the Consolidated Appropriations Act, 2014 (P.L. 113-76) and also the Consolidated and Further Continuing Appropriations Act, 2015 (P.L. 113-235) and the Consolidated Appropriations Act, 2016 (P.L. 114-113).

On several occasions, proposals have been considered in appropriations bills to restrict EPA's and the Corps' activities concerning mountaintop removal mining. However, none of these provisions has been enacted.

As noted above, EPA's 2011 veto of a Section 404 permit for the Spruce No. 1 mine in West Virginia has been very controversial, including in Congress. In the 111th and 112th Congresses, legislation was introduced to delete Section 404(c) from the CWA, thus removing EPA's authority to veto permits for projects. In addition, other bills were introduced that were intended to address the veto of the Spruce No. 1 mine project, including proposals to bar EPA from using the 404(c) authority "after the fact," that is, after the Corps has issued a 404 permit; to set deadlines for EPA's 404(c) authority; and to clarify procedures for elevating 404 permitting decisions to higher level agency and department officials.

Following the court of appeals ruling in 2013 that upheld EPA's authority to retroactively veto a 404 permit (discussed above), legislation was introduced in the 113th Congress to prohibit EPA from vetoing a project retroactively, that is, from using the 404(c) authority after the Corps has issued a permit (H.R. 524 and S. 830). A third bill that would limit 404(c) actions also was introduced (S. 2156); it would bar EPA from issuing retroactive vetoes and also would invalidate any previous veto that occurred after a permit issuance, such as that of the Spruce No. 1 mine. A fourth bill (H.R. 4854) was essentially a companion bill to H.R. 524; it would prohibit EPA from issuing preemptive vetoes, before the Corps has rendered a permit decision. EPA recently initiated administrative steps to preemptively veto a copper mine site in Alaska, the Pebble deposit, but has not reached a final decision to do so; H.R. 4854 was considered a response to EPA's pending actions in that case.⁴³ The House Transportation and Infrastructure Committee approved H.R. 524 in April 2014 and approved H.R. 4854 in July 2014. No further action occurred.

In the 114th Congress, bills were introduced seeking to clarify or restrict EPA's 404(c) veto authority, including limiting vetoes to up to the time of permit issuance by the Corps (i.e., bar retroactive vetoes). These bills were S. 55/S. 234, H.R. 896, and H.R. 1203.

The House Transportation Subcommittee on Water Resources and Environment held oversight hearings on these issues in 2011, and the House Oversight and Government Reform Subcommittee on Regulatory Affairs held similar hearings in 2011 and 2012.

OSM's efforts to revise the 2008 stream buffer zone rule also have been controversial. The House Natural Resources Committee held a number of hearings since the 112th Congress to air concerns that the expected rewrite of the rule would have harmful job impacts on surface coal mining. Committee leaders criticized OSM's lengthy efforts to revise the 2008 rule as costly and wasteful. In 2014, the House passed legislation (H.R. 2824) to limit the authority of the Secretary of the Interior to issue a revised rule for at least five years and to require states to implement the 2008 stream buffer zone rule—now withdrawn by OSM—thus seeking to preempt any states that have adopted separate stream buffer protection requirements. Legislation in the 114th Congress, H.R. 1644/S. 1458, would prevent OSM from releasing a revised stream buffer rule pending a study by the National Research Council on economic and scientific data in the rule. The House passed H.R. 1644 in January 2016, but there was no further action.

Also in the 114th Congress, legislation intended to put a partial moratorium on mountaintop removal mining, pending health effects studies, was introduced (H.R. 912). This bill would require the Department of Health and Human Services to investigate links between mountaintop removal mining and human health impacts. Until completion of such research and a determination that mountaintop removal mining does not present health risk to residents in nearby communities, there would be a moratorium on new mountaintop removal mining permits issued

⁴³ For information on EPA's actions in relation to the mine development project in the Bristol Bay watershed of Alaska, see <http://www2.epa.gov/bristolbay>.

by the Corps, EPA, or the Secretary of the Interior, as well as expansion of existing permits. Similar legislation was introduced in the 113th Congress.

The Obama Administration did not present formal views on legislation in the 114th Congress that would have affected CWA permitting or SMCRA, but the Administration did issue a statement of opposition to one appropriations bill, H.R. 2822, expressing concerns with restrictions in that bill on several EPA and OSM initiatives.⁴⁴

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⁴⁴ Executive Office of The President, Office of Management and Budget, “Statement of Administration Policy, H.R. 2822” June 23, 2015, https://www.whitehouse.gov/sites/default/files/omb/legislative/sap/114/saphr2822r_20150623.pdf. The Administration did express strong opposition to bills in the 112th Congress dealing with CWA permitting and standard setting and with OSM’s stream buffer zone rule. See Executive Office of The President, Office of Management and Budget, “Statement of Administration Policy, H.R. 2018” July 12, 2011, http://www.whitehouse.gov/sites/default/files/omb/legislative/sap/112/saphr2018r_20110712.pdf. Executive Office of The President, Office of Management and Budget, “Statement of Administration Policy, H.R. 3409,” September 19, 2012, http://www.whitehouse.gov/sites/default/files/omb/legislative/sap/112/saphr3409r_20120919.pdf.

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