

STATEMENT OF JIM HECKER
ENVIRONMENTAL ENFORCEMENT DIRECTOR, PUBLIC JUSTICE
BEFORE THE SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES
REGARDING OSM'S PROPOSED STREAM PROTECTION RULE
October 27, 2015

Chairman Murkowski and members of the committee, thank you for the opportunity to testify about OSM's proposed Stream Protection Rule.

I have been a public interest attorney for 35 years and the Environmental Enforcement Director at Public Justice for the last 25 years. Public Justice is a national public interest law firm with offices in Washington, D.C. and Oakland, CA. For the past 17 years, I have litigated mountaintop mining cases on behalf of environmental groups in federal courts in West Virginia, Kentucky and Virginia. Some of these cases were citizen suits to enforce permit requirements. Others sought judicial review of agency permitting actions. The cases have focused on the harm to streams caused by valley fills and mine runoff. I have analyzed scores of water discharge permits, valley fill permits, and mining permits. I have also co-chaired trials in federal court where expert biologists have testified in detail about the harm caused by mountaintop mining.

The existing OSM rules under the Surface Mining Control and Reclamation Act (SMCRA) for protecting streams are over 30 years old. They do not incorporate the best available science. They are not preventing serious, persistent and unmitigated environmental harm. A new and stronger stream protection rule is needed.

There are four major kinds of harm from coal mining. First, mine waste is dumped in valley fills that directly bury streams. Between 1985 and 2001, 724 miles of streams were buried, and many more miles have been buried since then. OSM, 2008 FEIS at IV-145. Efforts to compensate for that loss have mostly failed. A recent peer-reviewed scientific study synthesized information from 434 stream mitigation projects from 117 permits for surface mining in Appalachia. That study analyzed both stream restoration and stream creation projects and concluded that "the data show that mitigation efforts being implemented in southern Appalachia for coal mining are not meeting the objectives of the Clean Water Act to replace lost or degraded streams ecosystems and their functions." Palmer, 2014 Study, Abstract. In fact, "97% of the projects reported suboptimal or marginal habitat even after 5 years of monitoring." *Id.*

Second, mine drainage contains toxic chemicals like selenium that causes fish to suffer birth defects and reproductive failure. It also contains sulfate and other dissolved salts that increase stream conductivity and harm aquatic life. Streams below valley fills often have 30-40 fold increases in sulfate concentrations and conductivity levels compared to unmined reference streams. EPA found in 2009 that 90% of the streams below valley fills were biologically impaired due to elevated conductivity. EPA, 2009 Letter at 4. West Virginia's 2014 water quality report found that over one-quarter of the streams in central Appalachia are impaired by mine drainage and violate water quality standards. WVDEP, 2014 Report at 20. The excessive selenium is only being treated and removed at a fraction of mine sites, and the elevated conductivity is not being treated anywhere. This pollution will persist long after mining is completed. A recent peer-reviewed study found "that highly elevated ionic concentrations may persist for 30 years post-reclamation and that these chemical signatures result in damaged aquatic communities." Pond, 2014 Study at 930.

Third, underground longwall mines have fractured aquifers and dewatered streams. Fourth, recent peer-reviewed studies have found that coal mining is strongly associated with elevated disease and mortality rates for residents in nearby communities.

In short, the harms are serious and persistent, and mitigation is not working. Compounding this problem is the fact that several large coal companies have recently declared bankruptcy. In its bankruptcy filing, Patriot Coal Corporation listed a selenium treatment liability of 411 million dollars that it did not plan to cover. *In re: Patriot Coal Corp.*, Doc. 1428 at 7. These continuing costs for long-term treatment will fall on already overburdened state bonding systems that cannot even handle the existing backlog of water treatment problems at abandoned mine sites.

OSM's proposed stream protection rule contains several provisions that I support and that would significantly improve the existing rules:

1. Enhanced Monitoring Requirements. The proposed rule requires more extensive monitoring of water quality and stream flow in areas impacted by mining, including requirements to monitor for selenium, conductivity and other pollutants, as well as the presence of important aquatic species. This information is essential to establish baseline conditions and to monitor adverse effects after mining begins to ensure that mining operations do not cause violations of water quality standards or "material damage" under OSM's new proposed definition.

2. Improved Analyses of Mining Impacts to Surface and Ground Water. Under SMCRA, before the regulatory agency issues a mining permit, it must prepare a "cumulative hydrologic impact analysis" (CHIA) to ensure that the mining operation will prevent "material damage" to surface and ground water outside the permit area and will minimize such damage within the permit area. Existing regulations do not define the term "material damage," nor do they provide specifics regarding what baseline data must be collected or how "material damage" should be assessed. The proposed rule, in contrast, includes the first-ever definition of "material damage", and requires CHIAs to contain enforceable, site-specific, numerical material damage criteria for each parameter of concern. In addition, the proposed definition of material damage would prevent regulatory agencies from approving any proposed operation that is predicted to cause subsidence that would result in the dewatering of perennial or intermittent streams. This regulatory change would significantly limit damage from underground "longwall" mining, which often causes land subsidence and stream dewatering.

3. Restoration of Stream Functions. The proposed rule requires mine operators to restore both the hydrologic form and ecological functions of stream segments disturbed by mining, consistent with the Clean Water Act. OSM has proposed a requirement that the restored stream be in good biological condition, i.e. sufficient to fully support aquatic life for existing and designated uses, as measured by an assessment of multiple biological and chemical indicators.

4. Improved Bonding Provisions. The proposed rule strengthens bonding requirements, by requiring financial assurance that long-term pollution discharges will be treated. Current bonding rules do not address this huge long-term problem.

While I support these aspects of the proposed rule, there are several other important areas that I want to highlight where the proposed rule is too weak and should be strengthened. Other areas are discussed in the comments that I filed with OSM yesterday:

1. Stream Buffer Zones. The 1983 rule prohibits mining disturbance within a buffer zone that extends 100 feet on either side of intermittent or perennial streams, if the disturbance would adversely affect the environmental resources of the stream. 30 C.F.R. 816.57(a)(1). The

proposed rule would eliminate this buffer zone and allow mine operators to mine through and fill an unlimited length of streams. I believe the existing buffer zone requirement should be retained and the direct burial and destruction of streams should be severely limited.

2. Compliance with Water Quality Standards. Water quality standards are the foundation for protecting water quality under both the Clean Water Act and SMCRA. Coal mining states routinely allow mining companies to evade compliance with water quality standards. Consequently, there has been essentially no state enforcement of the narrative water quality standard violations caused by conductivity pollution from mountaintop mines except for citizen enforcement by environmental groups. A federal judge has stated that West Virginia's refusal to enforce this standard is "an abdication of responsibility." *OVEC v. Elk Run Coal Co.*, 24 F. Supp. 3d 532, 549 (S.D.W.Va. 2014). Since states are doing so little enforcement, it is essential that the proposed rule impose a clear requirement to comply with those standards and make that requirement directly enforceable by citizens. OSM appears to intend to impose such a requirement, but the language in the proposed rule should be clearer.

3. Standard for "Material Damage to the Hydrologic Balance Outside the Permit Area." In the proposed rule, OSM states that material damage only occurs if mining impacts are sufficient to "preclude any designated surface-water use under sections 101(a) and 303(c) of the Clean Water Act or any existing or reasonably foreseeable use of surface water or groundwater outside the permit area." This standard should be strengthened in two respects to make it consistent with the Clean Water Act. First, OSM should define material damage to include violations of water quality standards. Those violations are used as the basis for listing streams as impaired under the Clean Water Act. OSM's definition fails to capture and remedy all activities causing impaired streams, and therefore is inconsistent with the Clean Water Act. Second, the word "preclude" suggests that the damage must be so severe that it is impossible to fish or recreate in a stream. EPA interprets the Clean Water to be violated if an activity partially or completely eliminates an existing use, or significantly degrades the aquatic ecosystem. That stronger EPA standard should be used in the definition instead of a standard based on preclusion of an existing use.

Finally, I would like to address the issue of OSM's authority to promulgate the stream protection rule. When it enacted the 1983 rule, OSM recognized that its authority to do so included both sections 102 and 201 of SMCRA. 48 Fed. Reg. 30312 (June 30, 1983). Under § 201, the administration of SMCRA is entrusted to the Secretary of the Interior, acting through OSM. 30 U.S.C. § 1211(c)(1). In § 201(c)(2), Congress empowered the Secretary to "publish and promulgate such rules and regulations as may be necessary to carry out the *purposes* and provisions of [SMCRA]." *Id.*, § 1211(c)(2) (emphasis added). Thus, OSM's rulemaking authority is as broad as those "purposes," and is not limited to the specific "provisions" in SMCRA.

In § 102, Congress identified thirteen purposes of SMCRA. *Id.*, § 1202. The first and fourth are intended to protect the environment. Those purposes are to "establish a nationwide program to protect society and the environment from the adverse effects of surface coal mining operations" and "assure that surface coal mining operations are so conducted as to protect the environment." *Id.*, § 1202(a) and (d). The second purpose is to protect surface landowners from mining operations. *Id.*, § 1202(b). The third and fifth purposes are to ensure adequate reclamation, including prohibiting mining in areas where reclamation is not feasible. *Id.*, § 1202(c) and (e). Thus, the first five purposes are all protective in nature. The purpose of mining coal to supply energy appears after these and is listed sixth. Even that purpose is framed as one

that seeks to “strike a balance between protection of the environment and . . . the Nation’s need for coal as an essential source of energy.” *Id.*, § 1202(f). Thus, Congress’ primary goal was environmental protection, not development of coal resources. *Nat’l Mining Assoc. v. Kempthorne*, 512 F.3d 702, 710 (D.C. Cir. 2008) (“protecting against the harmful effects of surface mining . . . is the primary aim of the statute.”).

OSM has broad rulemaking authority to carry out these protective purposes, irrespective of the more specific environmental performance standards enumerated later in the section 515. A rule that protects the environment from the adverse effects of mining is consistent with the purposes of SMCRA and therefore is fully authorized by Congress. The stream protection rule could prohibit all mining in streams and be fully consistent with the purposes of the Act.

Indeed, the third purpose is to “assure that surface mining operations are *not* conducted where reclamation as required by this Act is not feasible.” *Id.*, § 1202(c) (emphasis added). Thus, this purpose authorizes a prohibition on mining in areas where reclamation has failed or is not likely to succeed. Reclamation plans under SMCRA can be deemed to be a failure when they do not “comply with applicable air and water quality laws.” *Id.*, § 1258(a)(9). As I have noted above, there are widespread reclamation failures in Appalachia.

In addition to § 102, § 515(b) of SMCRA lists 25 environmental protection performance standards applicable to surface coal mining. 30 U.S.C. § 1265(b). The first thing to emphasize about these § 515(b) standards is that Congress explicitly characterized them “as a minimum” level of protection, not a maximum. That phrase appears at the very beginning of § 515(b). *Id.* Thus, those standards provide a floor, not a ceiling, for determining what is required.

Furthermore, section 515(a) of SMCRA provides that permits shall require coal mining operations to meet “all applicable performance standards of this chapter, *and such other requirements as the regulatory authority shall promulgate.*” *Id.*, § 1265(a) (emphasis added). Because Congress explicitly authorized OSM in § 515(a) to impose “other requirements,” the performance standards in § 515(b) are not exclusive and do not prevent OSM for imposing additional standards.

The § 515(b) standards most relevant to the proposed stream protection rule are those in paragraphs 2, 10, 22, 23 and 24 of § 515.

The tenth standard requires mining operators to “minimize the disturbance to the prevailing hydrologic balance at the mine-site and in associated offsite areas and to the quality and quantity of water in surface and ground water.” 30 U.S.C. § 1265(b)(10). Similarly, the twenty-fourth standard requires mining operators to “minimize disturbances and adverse impacts.” *Id.*, § 1265(b)(24).

Under the prior Administration, OSM interpreted the word “minimize” to be the *maximum* amount of environmental protection that it was required to provide. So long as the mine operator uses the best technology currently available to minimize impacts to the extent possible, OSM argued that its obligation to reduce environmental impacts is discharged and nothing further is, or can legally be, required. *See* 73 Fed. Reg. at 75815-16, 75824, 75849; 69 Fed. Reg. at 1043 (“SMCRA in most cases requires the mining operation to minimize, rather than completely prevent, adverse environmental impacts”). OSM assumed that placing mining spoil in streams is acceptable so long as the amount is “minimized.” OSM then concluded that this “minimization” standard strikes the only “balance” that Congress could have intended in SMCRA, and that no other alternative measures to protect the environment need be considered. OSM, 2008 FEIS at II-27.

This interpretation is erroneous. As I have shown above, OSM has the statutory authority to require environmental protection standards that are stricter than minimization. It can prohibit mining where reclamation is not feasible or where OSM cannot assure that the environment will be protected from the adverse effects of mining. Congress did not rule out other measures in addition to fill minimization if those measures are needed to ensure protection of the environment.

The second environmental protection performance standard in § 515(b) is that mining operations must “restore the land affected to a condition capable of supporting the uses which it was capable of supporting prior to any mining, or higher or better uses . . . so long as such . . . uses do not present any . . . actual or probable threat of water . . . pollution . . .” 30 U.S.C. § 1265(b)(2). Valley fills and other mining disturbances are degrading existing uses of waters and causing unmitigated water pollution.

The twenty-third standard is that mine operators must “meet such other criteria as are necessary to achieve reclamation in accordance with the purposes of this chapter.” *Id.*, § 1265(b)(23). This standard authorizes more protective criteria when reclamation plans have failed to control water pollution and caused violations of water quality standards.

The twenty-second standard provides, in part, that excess spoil material may not be placed in “springs, natural water courses or wet weather seeps” unless “lateral drains are constructed from the wet areas to the main underdrains in such a manner that filtration of the water into the spoil pile will be prevented.” *Id.*, § 1265(b)(22)(D). The prior Administration relied on this provision as evidence that Congress did not intend to prohibit the placement of valley fills in streams. OSM, 2008 FEIS at II-26 to II-27.

At most, this provision “recognizes the *possibility* of placing excess spoil material in waters of the United States.” *Kentuckians for the Commonwealth v. Rivenburgh*, 317 F.3d 425, 443 (4th Cir. 1977) (emphasis added). However, that possibility is only a *minimum* standard for fill placement. It does not preclude more stringent prohibitions on fill placement that may be necessary to carry out the purposes of SMCRA. Section 515(a) expressly authorizes OSM to impose requirements that go beyond the minimum standards in § 515(b). Furthermore, as I have shown above, Congress gave OSM broad authority to protect against a range of adverse effects, including water pollution, hydrologic imbalance, damage to wildlife, and the infeasibility of reclamation. The overriding goals of SMCRA are environmental protection and effective reclamation of sites to their prior or higher uses.

References

- In re: Patriot Coal Corp.*, Bkrcty. Case No. 15-32450 (E.D. Va.), Doc. 1428, Objections of the United States of America to Debtors’ Fourth Amended Joint Plan of Reorganization. OSM, Final Environmental Impact Statement, Excess Spoil Minimization, Stream Buffer Zones, OSM-EIS-34, September 2008.
- Palmer & Hondula, *Restoration as Mitigation: Analysis of Stream Mitigation for Coal Mining Impacts in Southern Appalachia*. Environ. Sci. Technol. 48: 10552-60 (2014).
- Pond, *Long-Term Impacts on Macroinvertebrates Downstream of Reclaimed Mountaintop Mining ValleyFills in Central Appalachia*. Environmental Management 54(4): 919-933 (2014).
- U.S. EPA Region 3, October 16, 2009 Letter to US Army Corps of Engineers re: Spruce No. 1 Surface Mine Permit.
- WVDEP, 2014 West Virginia Integrated Water Quality Assessment and Monitoring Report.