

STATEMENT OF  
JANICE M. SCHNEIDER, ASSISTANT SECRETARY,  
LAND AND MINERALS MANAGEMENT  
U.S. DEPARTMENT OF THE INTERIOR

BEFORE THE  
COMMITTEE ON ENERGY AND NATURAL RESOURCES  
U.S. SENATE

ON THE  
PROPOSED STREAM PROTECTION RULE

OCTOBER 27, 2015

Chairman Murkowski and members of the committee, thank you for the opportunity to testify on the proposed Stream Protection Rule (SPR).

**Introduction**

The proposed Stream Protection Rule includes reasonable and straightforward reforms to revise 30-year-old regulations for coal mining in order to avoid or minimize impacts on surface water, groundwater, fish, wildlife, and other natural resources that residents of these communities will rely on for decades. The proposed Stream Protection Rule will accomplish what Americans expect from their government – a modern and balanced approach to energy development that safeguards our environment, protects water quality, supports the energy needs of the nation, and makes coalfield communities more resilient for a diversified economic future for generations to come.

The proposed rule keeps pace with current science, technology, and modern mining practices, while also safeguarding communities from the long-term effects of pollution

and environmental degradation that endanger public health and undermine future economic opportunities, all while acknowledging, as the Energy Information Administration (EIA) does in their forecast, that coal mining and coal-fired electricity production will be a part of our energy mix for decades to come.

Every reclamation practice contained in the proposed rule has been successfully implemented by a mine operator somewhere in the country. Through this proposed rule, we are doing no more than leveraging innovations of the industry by adopting best practices developed over the last 30 years to improve the regulations.

I would like to stress that this is a proposed rule. It has been available for public review and comment for close to three-and-a-half months, including one extension of the comment period. We have actively sought public comment in some of the most impacted areas of the country, holding public hearings in Denver, Colorado; Lexington, Kentucky; St. Louis, Missouri; Pittsburgh, Pennsylvania; Big Stone Gap, Virginia; and Charleston, West Virginia. After this robust outreach process, we are looking forward to reviewing the public comments and input on the proposed rule so that we may improve upon it through the use of the many thoughtful comments received. To date, there have been more than 40,000 comments received on the rule.

### **Background**

Along with responsible oil and gas development and growth of clean, renewable energy, coal is an important part of our Nation's energy portfolio. The responsible development

of this important resource is a key part of America's energy and economic security. Coal-fired power plants generate more than one-third of the electricity produced in this country. Metallurgical coal is a critical element of the steelmaking process.

In 1977, Congress enacted the Surface Mining Control and Reclamation Act of 1977 (SMCRA), which established a program to regulate coal mining. Congress recognized the importance of both coal production and protecting the environment from the adverse effects of coal mining. In 1979, the OSMRE published the original version of its permanent regulatory program regulations, and revised the regulations in 1983. Mining in or near streams has long been a controversial topic. Over the years, OSMRE has adopted four different sets of regulations on this topic, most recently in 2008. On February 20, 2014, however, a federal district court vacated the 2008 rule, finding that the failure to consult with the U.S. Fish and Wildlife Service on the rule violated the Endangered Species Act. The court ordered reinstatement of the 1983 version of the stream buffer zone rule. That rule was adopted over 30 years ago – it does not consider or take into account new scientific evidence, or the significant advances in mining and reclamation techniques that have occurred over the past 30 years.

The regulations that OSMRE adopted in 1983 to implement SMCRA sought to strike a balance between coal production and environmental protection. Nevertheless, we have learned a great deal over the last three decades and it is clear that coal mining operations can, and often do, still adversely impact water quality for people, fish, and wildlife. Those impacts include loss of headwater streams, long-term degradation of water quality

in streams downstream of a mine, displacement of pollution-sensitive native species by highly competitive non-native species that inhibit reestablishment of native plant communities, fragmentation of large blocks of mature hardwood forests, and compaction and improper construction of postmining soils that result in reduced site productivity and adverse impacts on watershed hydrology.

By lessening these impacts, the proposed Stream Protection Rule would better achieve the purposes of SMCRA, would assure that surface coal mining operations are conducted in an environmentally protective manner, would better protect society and the environment from the adverse effects of surface coal mining operations, and would help assure that mining will not occur where reclamation is not feasible. We believe that the proposed rule strikes an appropriate balance between environmental protection, agricultural productivity and the Nation's need for coal as an essential source of energy, while providing greater regulatory certainty to the mining industry.

SMCRA established two primary programs: first, a regulatory program to protect society and the environment from the adverse effects of coal mining operations; and, second, an abandoned mine lands (AML) reclamation program to address the hazards and environmental degradation remaining from two centuries of loosely regulated mining. These programs are important to protect public health and safety, promote the environmental well-being of the coal mining areas of the United States, and restore lands to economically viable conditions after use. Initially, OSMRE directly regulated coal mining and arranged cleanup of abandoned mine lands while states developed their own

programs under SMCRA. Today, as Congress envisioned, most coal mining states have the primary responsibility for the regulation of coal mining and reclamation of abandoned mine lands, which allows OSMRE to focus on overseeing the administration and maintenance of the state programs and assisting the states and tribes in implementation of those programs.

### **Goals of Proposed Rule**

In this proposed rule, OSMRE seeks to incorporate the best practices of today's coal mining industry from across the country while providing more comprehensive water protection than the existing rule and its predecessors, which focus primarily on streams and their buffer zones. Specifically, OSMRE's analysis and outreach to stakeholders identified the following seven areas for improvement to ensure regulatory certainty, and uphold the obligations of SMCRA in 2015 to protect public health and safety while promoting the environmental well-being of the coal mining areas in the United States:

*First*, perennial and intermittent streams derive their flow from both groundwater discharges and surface runoff from precipitation events. Therefore, there is a need to define the point at which adverse mining-related impacts on groundwater and surface water reach an unacceptable level. SMCRA has always provided that no permit may be approved unless the regulatory authority finds that the proposed operation will not result in material damage to the hydrologic balance outside the permit area, but neither the Act nor the existing regulations define "material damage" or establish criteria for determining what level of adverse impacts would constitute material damage. The proposed rule

would require the regulatory authority to establish numerical standards for material damage and incorporate those standards into the permit. This definition tailors the rule to fit the streams of a specific region.

*Second*, the proposed rule would require that the permit applicant collect adequate pre-mining baseline data about the site of the proposed mining operation and adjacent areas. This will establish an adequate baseline with which the impacts of mining may be compared. The existing rules require data only for a limited number of water quality parameters rather than the full suite needed to establish a complete baseline against which the impacts of mining can be compared. The existing rules also fail to cover the complete hydrologic cycle, which limits the value of the collected data. Furthermore, the existing rules contain no requirement for determining the biological condition of streams within the proposed permit and adjacent areas, so there is no assurance that the permit application will include baseline data on aquatic life.

*Third*, the proposed rule would provide for effective, comprehensive monitoring of groundwater, surface water, and the biological condition of streams during and after mining and reclamation. Proper monitoring enables timely detection of any adverse trends and allows timely implementation of any necessary corrective measures. Proper implementation of corrective measures can prevent the mine operator from incurring very costly long-term water treatment obligations and would also protect community water resources. The existing rules require monitoring of only water quantity and a limited number of water-quality parameters, not all parameters necessary to evaluate the impact

of mining and reclamation. The existing rules also do not ensure that the number and location of monitoring points, or the length monitoring will continue, will be adequate to determine the impact of mining and reclamation. As a result, the proposed rule would require more comprehensive monitoring, and for monitoring data to be evaluated as part of any application for bond release. No bond could be released if the monitoring data show adverse trends that could result in material damage to the hydrologic balance outside the permit area.

*Fourth*, the proposed rule would ensure the protection or restoration of streams and related resources. This includes the headwater streams that are important to maintaining the ecological health and productivity of downstream waters. The existing rules have not always been applied in a manner sufficient to ensure protection or restoration of streams, especially with respect to the ecological function of streams. The proposed rule would prohibit mining activities in or within 100 feet of perennial and intermittent streams unless the regulatory authority finds that the proposed activity will not preclude any premining, designated, or reasonably foreseeable uses of the stream. If a mine operator chooses to mine through a perennial or intermittent stream, the proposed rule would require the operator to restore both the hydrological form and the ecological function of the affected stream segments.

The proposed rule also includes best practices intended to minimize the length of stream buried by excess spoil fills, and require that excess spoil fills be designed and constructed to be no larger than necessary to dispose of the excess spoil generated. Fill construction

techniques that involve end-dumping would be prohibited as inconsistent with SMCRA, which requires that excess spoil be transported and placed in a controlled manner. These new standards would protect downstream water quality and the long-term stability of the fill. In addition, an operator choosing to construct an excess spoil fill in a perennial or intermittent stream would be required to implement fish and wildlife enhancement measures to offset the environmental harm resulting from the fill.

Maintenance, restoration, or establishment of riparian corridors or buffers, comprised of native species, for streams is also a critical element of stream protection. In forested areas, riparian buffers for streams moderate the temperature of water in the stream, provide food (in the form of fallen leaves and other plant parts) for the aquatic food web, stabilize stream banks, reduce surface runoff, and filter sediment and nutrients in surface runoff. As a result, the proposed rule also would require that the operator establish a 100-foot-wide riparian corridor, using suitable native species, on disturbed lands along each bank of perennial, intermittent, and ephemeral streams, unless and until a conflicting postmining land use is implemented.

*Fifth*, the proposed rule would ensure that operators and regulatory authorities make use of advances in information, technology, science, and methodologies related to surface and groundwater hydrology, surface-runoff management, stream restoration, soils, and revegetation, all of which relate directly or indirectly to protection of water resources.

*Sixth*, the proposed rule would ensure that land disturbed by surface coal mining



operations is restored to a condition capable of supporting the uses that it could support before any mining, including both those uses dependent upon stream protection or restoration and those uses that promote or support protection and restoration of streams and related environmental values. Existing rules and permitting practices have focused primarily on the land's suitability for a single approved postmining land use and they have not always been applied in a manner that results in the construction of postmining soils that provide a growth medium suitable for restoration of premining site productivity. For example, postmining soils must include a sufficient root zone to support those uses and soil materials must be placed in a manner that minimizes compaction. Trees and other desirable vegetation struggle to survive on thin, compacted soils. A corollary provision in the proposed rule would require that reclaimed minesites be revegetated with native species unless and until a conflicting postmining land use, such as intensive agriculture, is implemented. Soil characteristics and the degree and type of revegetation have a major impact on precipitation infiltration and surface-water runoff quantity and quality as well as on aquatic life and the terrestrial ecosystems dependent upon perennial and intermittent streams. Nonnative grasslands on mined land throughout Appalachia are not as productive as the native hardwood forests they replaced. These existing reclamation practices reduce the region's future potential economic opportunities.

*Seventh*, the proposed rule would update and codify requirements and procedures to protect threatened and endangered species and designated critical habitat under the Endangered Species Act of 1973 to help provide regulatory certainty for mining

operators. It also would better explain how the fish and wildlife protection and enhancement provisions of SMCRA should be implemented.

### **Regulatory Impact Analysis**

We have used a highly experienced team to develop the draft Regulatory Impact Analysis (RIA) for the proposed rule. The draft RIA estimates that, for the 21-year period from 2020 to 2040, thousands of miles of stream will be in better condition if the proposed rule is adopted.

In addition, the draft RIA estimates that nearly 60 thousand acres would be reforested or reforested in an improved manner under the proposed rule. These are expected to result in significant environmental and ultimately health benefits to local communities.

Consistent with Energy Information Administration (EIA) forecasts, the draft RIA finds that coal production is expected to decline, even under the existing regulations, but coal will be part of our energy mix well into the future. The draft RIA also finds that market conditions such as the demand for coal and the availability and low price of natural gas and alternative sources of energy will result in a decline in annual coal production of approximately 15 percent (162 million tons) over the 21-year evaluation period without any changes to the existing regulations.

The draft RIA estimates that over the same period the proposed rule would reduce annual coal production by 0.2 percent, result in an increase in coal prices of 0.02 to 1.2%, and an increase of 0.01% in national electricity production costs for utilities.

The draft RIA also estimates that industry compliance costs would average 0.1% or less of aggregate annual industry revenues.

This Administration understands and is sensitive to the importance of high wage mine jobs to rural communities. Moreover, we are aware of the shifting economic trends – irrespective of this rulemaking – impacting the coal industry and are concerned about future generations and the resources that will be left behind for them to sustain the life they know. The draft RIA predicts that the proposed rule would have minimal impacts on employment, with an average annual reduction of 260 jobs related to coal production and an annual average increase of 250 jobs related to compliance with the proposed rule. This means production-related job losses would be largely offset by increases in compliance-related jobs resulting in a net loss of approximately 10 jobs.

### **Public Participation**

Hearing directly from the public is an important component of the rulemaking process that we take very seriously. To that end, as noted above, the OSMRE conducted six public hearings between September 1, 2015, and September 17, 2015, in Denver, Colorado; Lexington, Kentucky; St. Louis, Missouri; Pittsburgh, Pennsylvania; Big Stone Gap, Virginia; and Charleston, West Virginia.

OSMRE also extended the comment period through October 26, 2015, to allow organizations and individuals additional time (for a total of almost 3 and a half months) to prepare and submit their comments. We will evaluate all comments received in developing a final rule. We have also conducted outreach to Congressional leadership, spoken to state officials, gone out in the field, and met with various stakeholders to discuss their concerns and found these interactions to be helpful and productive. The process has been tremendously enhanced as a result of input from states, industry and NGOs.

### **Conclusion**

Thank you for the opportunity to appear before the committee today to testify on the development of the proposed Stream Protection Rule. The proposal of this rule furthers the Administration's goal to establish a modern and balanced approach to energy development that safeguards our environment, protects water quality, supports the energy needs of the nation, and makes coalfield communities more resilient for a diversified economic future for generations to come. I would be happy to answer your questions.