



MEMORANDUM

June 15, 2009

To: Senate Committee on Environment and Public Works
Attention: Matthew Hite

From: Claudia Copeland, Specialist in Resources and Environmental Policy

Subject: **S. 696, the Appalachia Restoration Act**

This memorandum responds to your request for analysis of S. 696, the Appalachia Restoration Act. This bill would amend the Clean Water Act (CWA) to add a definition of the term “fill material.” The definition of what is fill material is important in determining whether a particular discharge from a point source is subject to the act’s regulatory and permit requirements for the discharge of dredge and fill material, under Section 404, or for all other authorized discharges, under Section 402, called the National Pollutant Discharge Elimination System (NPDES) permit program. The term “fill material” currently is not defined in the CWA.

Discharges of dredged material and fill material can be authorized under Section 404. The U.S. Army Corps of Engineers (Corps) and the Environmental Protection Agency (EPA) have complementary roles and regulations for the Section 404 program. In 2002 they adopted, by regulation, identical definitions of “fill material.”¹ According to the agencies, the principal environmental concern with discharges of fill material is the loss of a portion of the water body itself.

(e)(1) Except as specified in paragraph (e)(3) of this section, the term fill material means material placed in waters of the United States where the material has the effect of:

- (i) Replacing any portion of a water of the United States with dry land, or
- (ii) Changing the bottom elevation of any portion of a water of the United States.

(2) Examples of such fill material include, but are not limited to: rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in the waters of the United States.

(3) The term fill material does not include trash or garbage.

Materials not eligible for a Section 404 permit are regulated under Section 402. Under that program, pollutant discharges are controlled through the imposition of effluent limitations which restrict the quantities, rates, and concentrations of discharged constituents. Section 402 permits include limitations that reflect treatment with available pollution control technology, either to meet national minimum

¹ 33 CFR § 323.2(e) (Corps definition); also see 40 CFR § 232.2 (EPA definition).

standards established by EPA, or more stringent treatment levels where needed to meet state-established water quality standards.

Because Section 402 discharge requirements are more restrictive than those for Section 404, some discharges that could be permitted under Section 404 cannot be authorized under Section 402.

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The pending legislation has been introduced partially in response to public concern about the long-standing use of Section 404 to authorize discharge of waste material from coal surface mining operations into waters of the United States, particularly about operations in the Appalachia region that employ a type of practice called mountaintop mining. Some critics of the environmental impacts of mountaintop mining favor prohibiting it outright, while others favor making operational requirements more restrictive, in order to severely limit its feasibility. In remarks accompanying introduction of S. 696, Senator Cardin described its purpose:

Mountaintop mining produces less than five percent of the coal mined in the United States. This bill does not ban other methods of coal mining. Instead, it is narrowly tailored to stop a practice that has earned the condemnation of communities across Appalachia as well as citizens across the rest of the country.²

The bill would add a definition of “fill material” to the general definitions provision of the CWA, Section 502. Similar to the current Corps-EPA regulatory definition, it would include within the term “any pollutant that (i) replaces a portion of the waters of the United States with dry land; or (ii) modifies the bottom elevation of a body of water for any purpose.”

The bill would expressly exclude some materials from the definition of “fill material.” Like the current regulatory definition, it would exclude “trash or garbage” from the definition, meaning that discharge of any such material could not be authorized by a Section 404 permit. The key provision in the bill, with respect to mountaintop mining practices, is one that would also exclude from the proposed definition of “fill material” “the disposal of excess spoil material (as described in section 515(b)(22) of the Surface Mining Control and Reclamation Act (30 U.S.C. 1265(b)(22)) in waters of the United States.” As a result, disposal of that material in U.S. waters would be subject to more stringent requirements under CWA Section 402.

Analysis

At issue is what types of mining practices would be affected by this latter provision in the bill. Because discharges of excess spoil material from any excluded practices would be non-fill material, they could not be authorized under CWA Section 404. The key is Section 515 of the Surface Mining Control and Reclamation Act (SMCRA), which is titled “Environmental protection performance standards.” Subsection (a) requires a permit to conduct “surface coal mining operations,” and subsection (b) details general performance standards applicable to “all surface mining and reclamation operations.” Further, paragraph (b)(22), referenced in S. 696, specifically addresses placement of “all excess spoil material resulting from coal surface mining and reclamation activities”.

² Honorable Benjamin Cardin, “Introduction of S. 696,” Remarks in the Senate, *Congressional Record*, daily edition, March 25, 2009, p. S3789.

No part of Section 515 is limited only to mountaintop mining (also sometimes called mountaintop removal). By referring to SMCRA Section 515(b)(2), the bill appears to exclude all coal surface mining practices from the proposed CWA definition of fill. Thus, it is important to determine what is meant by the term “surface coal mining.” First, SMCRA Section 701(27) (30 USC § 1291(27)) defines “surface coal mining and reclamation operations” to mean “surface mining operations and all activities necessary and incident to the reclamation of such operations after August 3, 1977.” Second, SMCRA Section 701(28) (30 USC § 1291(28)) broadly defines activities related to “surface coal mining operations” to mean:

(A) activities conducted on the surface of lands in connection with a surface coal mine or subject to the requirements of section 1266 of this title surface operations and surface impacts incident to an underground coal mine, the products of which enter commerce or the operations of which directly or indirectly affect interstate commerce. Such activities include excavation for the purpose of obtaining coal including such common methods as contour, strip, auger, mountaintop removal, box cut, open pit, and area mining, the uses of explosives and blasting, and in situ distillation or retorting, leaching or other chemical or physical processing, and the cleaning, concentrating or other processing or preparation, loading of coal for interstate commerce at or near the mine site: Provided, however, That such activities do not include the extraction of coal incidental to the extraction of other minerals where coal does not exceed 16-2/3 per centum of the tonnage of minerals removed for purposes of commercial use or sale or coal explorations subject to section 1262 of this title;

Based on the above definition, which expressly includes “mountaintop removal,” S. 696 would exclude excess waste disposal from mountaintop mining operations from the bill’s proposed CWA definition of “fill material,” thus requiring that any discharges be authorized only under the more restrictive requirements of CWA Section 402, not Section 404. At the same time, it would also exclude from the definition of fill material other types of coal mining practices defined in the above SMCRA Section 701(28), such as contour, strip, auger, box cut, open pit and area mining from Section 404 permits, making these wastes also subject to CWA Section 402.

The proposed exclusion in the legislation would not apply to mining of other minerals, such as clay, stone, sand, and gravel, which are defined in SMCRA Section 701(14) as “other minerals,” or hardrock minerals, which are regulated under federal law primarily by the General Mining Law of 1872 (17 Stat. 91, 1872, as amended), not SMCRA.

There is no existing statutory definition of “mountaintop removal,” but there is a regulatory definition. In this regulation, promulgated in 1979 at 30 CFR 785.14(b), it is defined as follows:

§ 785.14 Mountaintop removal mining.

(b) Mountaintop removal mining means surface mining activities, where the mining operation removes an entire coal seam or seams running through the upper fraction of a mountain, ridge, or hill, except as provided for in 30 CFR 824.11(a)(6), by removing substantially all of the overburden off the bench and creating a level plateau or a gently rolling contour, with no highwalls remaining, and capable of supporting postmining land uses in accordance with the requirements of this section.

The other regulatory provision referenced in this paragraph, 30 CFR § 824.11, describes performance standards that are applicable to mountaintop removal activities. Subsection (a)(6) reads as follows:

§ 824.11 Mountaintop removal: Performance standards.

(a) Under an approved regulatory program, surface coal mining activities may be conducted under a variance from the requirement of this subchapter for restoring affected areas to their approximate original contour, if—

(6) An outcrop barrier of sufficient width, consisting of the toe of the lowest coal seam, and its associated overburden, are retained to prevent slides and erosion, except that the regulatory authority may permit an exemption to the retention of the coal barrier requirement if the following conditions are satisfied:

(i) The proposed mine site was mined prior to May 3, 1978, and the toe of the lowest seam has been removed; or

(ii) A coal barrier adjacent to a head-of-hollow fill may be removed after the elevation of a head-of-hollow fill attains the elevation of the coal barrier if the head-of-hollow fill provides the stability otherwise ensured by the retention of a coal barrier;

In summary, it appears that the definition of “fill material” proposed in S. 696 would exclude excess spoil discharges from mountaintop mining from authorization under a Section 404 permit, but it also would exclude such discharges from any surface coal mining operation.

Please contact me if I can assist you further.