

COALEX STATE COMPARISON REPORT - 256

June 1993

Bill Bledsoe Department of Mines, Minerals and Energy Division of Mined Land Reclamation P.O. Drawer 900 Big Stone Gap, Virginia 24219

TOPIC: APPLICATION OF COAL MINE WASTE REGULATIONS IN BACKFILL OPERATIONS

INQUIRY: Different interpretations have been made with regard to the applicability of 816/817.81 and 816/817.83 to coal mine waste used in certain backfill operations as opposed to disposal in a refuse pile (Section 816/817.83). Is there consistency among the IMCC member states in interpretation and application of the regulations? Has the issue been administratively or judiciously resolved in any member state?

30 CFR Section 816/817.81 provide Coal Mine Waste: General Requirements. 30 CFR Section 816/817.83 provide Coal Mine Waste: Refuse Piles requirements.

30 CFR Sections 816/817.104 (thin overburden) and 816/817.106 (previous mined lands) require that suitable coal mine waste generated by the operation be used in the backfilling, if necessary, to achieve highwall elimination/AOC. Section 816.102 provides "disposal of coal processing waste and underground development waste in the mined-out area shall be in accordance with Section 816/817.81 and 816/817.83 except that a long-term static safety factor of 1.3 shall be achieved." [816.102(e)]

SEARCH RESULTS: Ten IMCC states, including Virginia, responded to the questionnaire. Generally, the states responding interpret the regulations in a manner similar to Virginia's interpretations; in particular, 816/817.102(e) is read to mean that the general requirements of 816/817.81 are always applied to the use of coal mine waste and the specific requirements of 816/817.83 are applied only when a true refuse pile is involved. Table of responses to each question and background materials are attached.



QUESTIONNAIRE RESULTS

STATE	SECTIONS 816.102/817.102	SECTIONS 816.81/817.81	SECTIONS 816.83/817.83
ARKANSAS	Yes	Yes	Yes
INDIANA	Not Required	Not Required	Not Required
KENTUCKY	Yes	Yes	No
MARYLAND	Not Required	Not Required	Not Required
MISSOURI	Yes	No	No
OHIO*	Yes	Yes	No
OKLAHOMA	Yes	Yes	No
PENNSYLVANIA	Not Required	Not Required	Not Required
VIRGINIA	Yes	Yes	No
West Virginia**	Yes	Yes	No

*Ohio does not REQUIRE disposal of coal mine wastes in the backfilling of highwalls. However, if it was so required, 816/817.102, 816/817.81 and 816/817.41(f) would be applied.

**West Virginia does not REQUIRE use of coal mine waste in the backfilling of a highwall. When it ALLOWS such use, these are the regulations that are followed: basically follows 816/817.81 and uses parts of 816/817.83, depending on the site, site conditions, etc. NOTE: If refuse alone is used as fill, or disposed of separate from spoil, the answers and asterisked footnotes apply. If refuse is mixed with spoil, see question 5 answer below.

816/817.83?				
STATE	2. YES/NO	3. SECTIONS 816.102/817.102	3. SECTIONS 816.81/817.81	3. SECTIONS 816.83/817.83
ARKANSAS	Yes	Yes	Yes	Yes
INDIANA	Yes	Yes	Yes	Yes
KENTUCKY	Yes	Yes	Yes	No
MARYLAND	Yes	Yes	Yes	No
MISSOURI	Yes	Yes*	No	No
OHIO	Yes	Yes**	Yes	No



OKLAHOMA	Yes	Yes	Yes	No
PENNSYLVANIA	***See Note Below	****See Note Below	****See Note Below	****See Note Below
VIRGINIA	Yes	Yes	Yes	No
West Virginia	Yes	Yes****	Yes	No

*Missouri would apply these only if disposal area is not in the mine workings or excavation.

**Ohio would also apply 816/817.41(f).

***Pennsylvania limits the amount of coal refuse that can be disposed of in an active surface mine. These operations are treated more like surface mines than coal refuse disposal areas. While many of the requirements of 817.102, 816.81 and 816.83 are directly or indirectly addressed, some are not covered when activities are treated as surface mines; e.g., design of fills to attain specified static safety factors, diversion of springs and seeps, assessment of mass stability, foundation investigations, design of diversions to handle 100-year precipitation events, and specified inspections by registered professional engineers. [See attached regulations.]

****Pennsylvania: Most refuse disposal operations in active surface mines involve disposing of coal refuse as compacted pods within the backfilled soil.

*****West Virginia basically follows 816/817.81 and uses parts of 816/817.83, depending on the site, site conditions, etc.

	e disposal of coal mine Ills pursuant to 816/817		ed-out area other than the
standards?		1102(0), de jea a	ppi) are renering
STATE	SECTIONS	SECTIONS	SECTIONS 816.83/817.83
	816.102/817.102	816.81/817.81	
ARKANSAS	Yes	Yes	Yes
INDIANA	Yes	Yes	Yes
KENTUCKY	No	Yes	Yes
MARYLAND	No	Yes	Yes
MISSOURI	Yes	N/A	N/A
OHIO*	Yes	Yes	No
OKLAHOMA	Yes	Yes	Yes
PENNSYLVANIA**	Yes	Yes	Yes
VIRGINIA	Yes	Yes	Yes
West Virginia***	Yes	Yes	No



*Ohio would also apply 816/817.41(f).

**Pennsylvania requires an operator who proposes to backfill an abandoned surface mine with coal refuse to obtain a full-fledged coal refuse disposal permit.

***West Virginia basically follows 816/817.81 and uses parts of 816/817.83, depending on the site, site conditions, etc.

5. When coal mine waste is mixed with spoil in the backfilling of a highwall pursuant to 816/817.104 or 816/817.106, do you apply the following standards?			
STATE	SECTIONS 816.102/817.102	SECTIONS 816.81/817.81	SECTIONS 816.83/817.83
ARKANSAS	Yes	Yes	Yes
INDIANA	Yes	Yes	Yes
KENTUCKY	Yes	Yes	No
MARYLAND*	Yes	Yes	No
MISSOURI	Yes	No	No
OHIO**	Yes	Yes	No
OKLAHOMA	Yes	Yes	No
PENNSYLVANIA	***See Note Below	***See Note Below	***See Note Below
VIRGINIA	Yes	Yes	No
West Virginia****	Yes	No	No

*Maryland does not have any instances of using mine waste to reclaim highwalls. However, counterparts to .102 and .81 would probably be used.

**Ohio would also apply 816/817.41(f).

***Pennsylvania: See the answer to (3) above.

****West Virginia: When coal mine waste is mixed with spoil, it is treated as any other type of material.



STATE	6. Yes/No	7. Yes/No
ARKANSAS	Yes	No
INDIANA	Yes	No
KENTUCKY	Yes	No
MARYLAND	N/A	No
MISSOURI	N/A	No
OHIO	N/A	No
OKLAHOMA	N/A	No
PENNSYLVANIA		No
VIRGINIA	N/A	No
West Virginia	*See Note Below	No**

*WV: The determination as to which regulations are applied depends on the site specific conditions.

**WV: OSM has not issued West Virginia any TDNs on disposal of refuse in backfills (or related issues, such as diversions around such fills).

ATTACHMENTS

- A. 30 CFR Sections 817.81, 817.83, 817.102, 817.106 an 816.104.
- B. PENNSYLVANIA: Chapter 25, Section 90.128 Coal refuse disposal: active surface mines (1991).
- C. VIRGINIA Department of Mines, Minerals and Energy response to OSM's tenday notice dated March 23, 1993 and additional correspondence with OSM dated April 16, 1993.
- D. Excerpts from the FEDERAL REGISTER:
 - 1. 55 FR 14319 (APRIL 17, 1990). Notice of inquiry. Parts 780, 785 and 816 [Backfilling and grading].
 - 2. 53 FR 43970 (OCTOBER 31, 1988). Proposed rule. Parts 761, 785, 816 and 817 [Coal mine waste and disposal of excess spoil].
 - 3. 53 FR 21764 (JUNE 9, 1988). Notice of reinstatement of suspended rules. Parts 701, 800, 816 and 817 [Coal mine waste: Refuse piles].
 - 4. 48 FR 32910 (JULY 19, 1983). Final rule. [Definition of underground development waste].
 - 5. 47 FR 26598 (JUNE 18, 1982). Proposed rule. [Coal mine waste.]
 - 6. 44 FR 14902 (MARCH 13, 1979). Final rule. [Preambles to 784.19, 816/817.71-861/817.74.]
- E. Complete FEDERAL REGISTER preambles:
 - 1. 56 FR 65612 (DECEMBER 17, 1991). Final rule. Parts 761, 780, 784, 785, 816 and 817 [Disposal of coal mine waste].



- 2. 48 FR 44006 (SEPTEMBER 26, 1983). Final rule. Parts 701, 816 and 817 [Coal mine waste].
- 3. 48 FR 41720 (SEPTEMBER 16, 1983). Final rule. Parts 701, 816 and 817 [Remining highwalls].
- 4. 48 FR 23356 (MAY 24, 1983). Final rule. Parts 816, 817 and 826 [Backfilling and grading].