ILLINOIS
DEPARTMENT OF
NATURAL RESOURCES
Office of Mines and Minerals
524 South Second Street, Springfield 62701-1787
Jim Edgar, Governor ● Brent Manning, Director

Land Reclamation Division Memorandum No. 95-8

TO: All Coal Operators

DATE: October 31, 1995

FROM: Scott Schmitz, Supervisor
Land Reclamation Division

RE: Beneficial use of Coal Combustion By-Product and Storage or Disposal of Coal Combustion Waste at Permitted Facilities

The Environmental Protection Act (Act) was recently amended to define coal combustion by-product (CCB). Additional amendments to the Act establish the conditions for approval of the beneficial use of CCB. This memorandum establishes the Department's procedures for approving the beneficial use of CCB and the Department's procedures concerning the disposal of coal combustion waste (CCW). The procedures addressed in this memorandum are in addition to those found in Memorandum 92-11 - Permitting Guidelines for the Disposal of Coal Combustion Waste. Memorandum 92-11 is attached for your convenience.

Approval of the use of Coal Combustion By-Product

Section 3.94 of the Act defines CCB as coal combustion waste used beneficially. Examples of CCB used beneficially include but are not limited to the following purposes: mine subsidence control, mine fire control, mine sealing, a substitute for agricultural lime, fill material, road base and mine reclamation. The use of CCB may be applied for through a permit application, significant permit revision, insignificant permit revision or incidental boundary revision depending on the situation and magnitude of the changes proposed.

A request for the use of the CCB must include the following:

1. A description of the CCB including the type and its source and an estimate of the quantity to be used.

2. The applicant must demonstrate that the coal combustion by-product is being used beneficially. A detailed description of the application, handling and placement operations of the CCB, including the operational procedures to be followed in the field to place the material in a controlled manner shall be provided. If the CCB is

Effective July 1, 1995, the Illinois Department of Natural Resources was created through the consolidation of the Illinois Department of Conservation, Department of Mines and Minerals, Abandoned Mined Lands Reclamation Council, the Department of Transportation's Division of Water Resources, and the Illinois State Museum and Scientific Surveys from the Illinois Department of Energy and Natural Resources.

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to be incorporated with other materials, the proposal should address the mixing, handling and/or sequence for placement of the material.

3. A discussion demonstrating that the CCB will have no adverse impacts to the environment. To evaluate the chemical characteristics of the CCB or mixtures of CCB proposed, the following chemical analyses shall be conducted. The CCB shall not exceed Class I Groundwater Standards for metals when utilizing test method ASTM D3987-85. The test shall be conducted for the following:

Arsenic	Chromium	Lead	Selenium
Barium	Cobalt	Manganese	Silver
Boron	Copper	Mercury	Phenol
Cadmium	Iron	Nickel	Zinc
Antimony	Beryllium	Thallium	

All of these tests must be run on a representative sample of the CCB mixture based on the disposal plan proposed. Details of the representative sampling procedure shall be addressed.

4. Appropriate maps shall be provided showing the area where the beneficial use of the CCB is to occur and enough of the surrounding area to evaluate site conditions.

5. The operational procedures shall incorporate necessary erosion control measures as well as dust control measures to minimize wind erosion of CCB during transport, storage and handling activities.

6. The applicant must provide a reclamation plan for the CCB site. Any modifications to soil grading, covering and/or amendment, seeding and mulching activities related specifically to the area shall be described.

The CCB shall not be mixed with hazardous waste prior to use, pursuant to Section 3.94(10)(A) of the Act. Pursuant to Section 3.94(10)(C) of the Act, the Department will not require a permit revision for pavement base, parking lot base or building base projects utilizing less than 10,000 tons of CCB, flowable fill/grout projects utilizing less than 1,000 cubic yards of CCB or other applications utilizing less than 100 tons of CCB.

Requirements Concerning the Disposal of Coal Combustion Waste

Section 21(r)(3)(ii) of the Act establishes the four provisions which must be achieved in order to receive approval to store or dispose of coal combustion waste (CCW). These provisions are addressed in Memorandum 92-11 and shall continue to apply.

In addition to the requirements of Memorandum 92-11, the Department hereby establishes the following procedures concerning the disposal of CCW.

- The proposed disposal site must be adjacent to the mine site. Also, CCW disposal must be associated with coal sales of the applicant. This may be considered on a company wide basis rather than a mine specific basis, but if the CCW source has not purchased coal from the coal operator, the operator will not be allowed to dispose of that source's CCW.

- The total amount of CCW a coal company is allowed to receive shall not exceed 35% of the company wide coal sales tabulated on an annual basis, but in no case shall the CCW received from a given CCW source exceed 35% of the coal sold to that source. The 35% limit shall apply unless the operator supplies appropriate information justifying a higher percentage.

- Due to the increased magnitude of CCW disposal, and to assure proper monitoring of disposal operations, the Department requires that all operators disposing of CCW provide the following information:

1. In addition to the testing required by the third provision of Memorandum 92-11, the additional chemical constituents added by an August 11, 1994 amendment to the I-EPA's Groundwater Quality Standards shall also be included. These are antimony, beryllium and thallium which shall be tested in accordance with the Toxicity Characteristics Leaching Procedures (TCLP). This information shall be submitted on a quarterly basis unless otherwise approved by the Department.

2. The quantity of CCW from each source as well as the total quantity of CCW received at the disposal site shall be reported on a quarterly basis along with any other required monitoring as addressed in Memorandum 92-11, this memorandum and any specific permit conditions. At the same time the quantity of coal sales to each CCW source for that quarter shall be reported.

3. A representative weighted composite of all CCW disposed during a given quarter shall be reported on a quarterly basis. Such analyses shall include all constituents identified in Memorandum 92-11, plus antimony, beryllium and thallium.

The monitoring requirements and percentage limitations of this memorandum shall apply to previously approved coal combustion waste disposal operations. All quarterly monitoring shall be based on a calendar quarter with reports due on the following schedule - May 1, August 1, November 1 and February 1.

Enc.