

**Utility Solid Waste Activities Group**

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**U S W A G**

February 7, 2008

Stephen Pattison  
Assistant Secretary  
Department of the Environment  
1800 Washington Boulevard  
Baltimore, MD 21230

**Via e-mail: [spattison@mde.state.md.us](mailto:spattison@mde.state.md.us)**

**Re: Proposed Revisions to COMAR 26.04.07 Solid Waste Management, COMAR 26.04.07 Management of Coal Combustion Byproducts, COMAR 26.20.24 Special Performance Standards, and COMAR 26.21.04 Utilization of Coal Combustion Byproducts in Surface Mine Reclamation, published at 34 Md. Reg. 2287-2298 (December 21, 2007)**

Dear Mr. Pattison:

On behalf of the Utility Solid Waste Activities Group ("USWAG"), I am pleased to submit the following comments on the Maryland Department of the Environment's proposed revisions to regulations addressing the management of coal combustion byproducts. In general, we commend MDE for initiating this regulatory initiative that will bring certainty to Maryland utilities. Our comments are intended to provide a broader context for this effort and to recommend revisions to the proposed regulations.

USWAG was formed in 1978, and is an association of approximately 80 energy industry operating companies and associations, including the Edison Electric Institute, the National Rural Electric Cooperative Association, and the American Public Power Association. Together, USWAG's members represent more than 85% of the total electric generating capacity of the U.S., and service more than 95% of the nation's consumers of electricity. USWAG is responsible for representing utility industry interests associated with solid and hazardous wastes, toxic substances, and chemical management. USWAG members in the state of Maryland include: Allegheny Energy, AES, Constellation Energy, and Mirant Mid-Atlantic.

## **I. Background on CCP Regulation.**

### *A. Federal vs. State Regulation.*

Let us begin by clarifying the regulatory history of CCPs. Since the enactment of RCRA in 1976, nonhazardous solid wastes have been the regulatory responsibility primarily of state environmental agencies. When Congress passed RCRA, it distinguished between hazardous wastes and nonhazardous solid wastes. Hazardous waste regulation, codified in Subtitle C of RCRA, was governed by federal regulations with implementation delegated to states that have adopted hazardous waste programs that are no less stringent than the federal rules. Nonhazardous solid wastes, codified in Subtitle D, are subject to federal landfill criteria that identify which land disposal units are sanitary landfills and which are open dumps. These are binding federal regulations applicable to CCP disposal facilities.<sup>1</sup> Although Congress envisioned a very limited role for the federal government in regulating nonhazardous wastes and left the primary regulatory responsibility with the states, it is not correct to say that there are no federal regulations applicable to CCP disposal. In addition, in 2003, EPA, together with the Association of State & Territorial Solid Waste Management Officials ("ASTSWMO"), jointly published a Guide for Industrial Waste Management that applies to industrial solid wastes such as CCPs.

### *B. Hazardous vs. Nonhazardous Regulation of CCPs.*

MDE correctly notes that EPA has been working to develop federal regulations for CCPs since 2000, but no regulations have as yet been proposed.

In 1980, Congress passed the Beville Amendment to RCRA, which required EPA to study the management of CCPs, including disposal, utilization, proven environmental damage attributable to CCPs, and economics. Pending the completion of that study, EPA was barred from applying its hazardous waste regulations to CCPs. Once the study was completed, EPA was required to report its findings and recommendations to Congress, and after notice and comment rulemaking, determine whether hazardous waste regulation was or was not warranted. EPA divided the study into two phases, and in 1993 determined that coal combustion wastes do not warrant hazardous waste regulation. Then, in 2000, it determined that the remaining fossil fuel combustion wastes do not warrant hazardous waste regulation.

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<sup>1</sup> 40 C.F.R. Part 257 Subpart A.

### C. EPA's Concerns.

#### 1. DISPOSAL.

Despite its determination that hazardous waste regulation of CCPs is not warranted, EPA identified several concerns with CCP disposal practices as they existed in 1994 when the administrative record of its study closed:

- Composition of the waste could present danger to human health and the environment under certain conditions;
- Identification of 11 documented cases of proven damage resulting from management of CCPs in landfills and surface impoundments;
- Insufficient controls in place under current disposal practices, especially with respect to groundwater monitoring; and
- Gaps in state oversight.<sup>2</sup>

These concerns led EPA to announce plans for developing national RCRA solid waste regulations for CCP disposal.

#### 2. BENEFICIAL USE.

EPA also made findings regarding the beneficial use of CCPs. Except for mine placement of CCPs, which EPA addressed separately, EPA found no beneficial uses of CCPs "that are likely to present significant risks to human health or the environment" and "no documented cases of damage to human health or the environment" from beneficial uses of CCPs.<sup>3</sup>

#### 3. MINE PLACEMENT.

EPA was uncertain how to regulate mine placement of CCPs. One option was to regulate mine placement under RCRA; a second option was to regulate it under the Surface Mining Control & Reclamation Act ("SMCRA"); and a third was to regulate using a combination of the two statutes. Congress directed EPA to refer the subject of mine placement to the National Academy of Sciences/National Research Council, which issued a detailed report in 2006. That organization found mine placement to be a beneficial practice, but recommended that federal regulations be promulgated to govern the practice. It also found that the SMCRA program, administered by the Office of Surface Mining Reclamation and Enforcement ("OSM") of the U.S. Department of

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<sup>2</sup> 65 Fed. Reg. 32214, 32221 (May 22, 2000).

<sup>3</sup> *Id.* at 32229-30.

Interior would provide the appropriate regulatory framework for such regulations. OSM and EPA agreed that OSM would take the lead in developing regulations, and it expects to publish proposed regulations later this year.

## **II. MDE Proposal.**

It has always been USWAG's position that CCP regulation is primarily a state responsibility, and we commend MDE for stepping up to the plate when it perceived a need for tighter regulatory controls. In many respects, the proposed regulations are well designed and consistent with recommendations USWAG has made in the past for sound regulatory policy for CCP management, namely, a performance-based regulatory approach. We support:

- The use of industrial waste landfill permits for authorizing new facilities is sound.
- Distinguishing between new and expanded facility requirements on the one hand and regulatory requirements for existing facilities.
- Allowing existing facilities to continue to operate under current authorizations subject to the right of MDE to impose additional controls or requirements as necessary to protect public health and the environment.
- Establishing environmental performance standards for managing CCPs.

USWAG also recommends some changes in the proposed regulations:

1. We recommend that MDE adopt the widely accepted terminology for these materials. Both EPA in their Coal Combustion Products Partnership ("C<sup>2</sup>P<sup>2</sup>") and ASTM International use the term "Coal Combustion Products." That is what these materials are – products. EPA has committed itself to a strategic goal of achieving beneficial use of 50% of the materials generated by 2011. In 2006 (the most recent time period for which CCP use data are readily available) the percentage of CCPs beneficially used was nearly 44%. Terms like "byproducts" and "waste" simply discourage utilization of these materials by stigmatizing them with terms that connote something worthless and intended to be discarded. MDE would certainly not want to discourage increased beneficial use of these materials.

2. There are a number of places in the proposed regulations in which MDE would require use of the toxicity characteristic leaching procedure ("TCLP" or "Test Method 1311") to characterize CCPs for various applications. This is an unsound test method for determining the environmental soundness of CCP applications. The TCLP is a test method for simulating the conditions in a municipal solid waste landfill where a wide range of very different wastes are co-disposed. CCPs are rarely managed in municipal landfills, and the proposed regulations are not setting standards for municipal landfilling of CCPs. An alternative test, such as synthetic precipitation leaching procedure ("Test

Method 1312"), would be more appropriate. What is needed is a test that would more accurately predict the performance of CCP management than would the TCLP.

3. We recommend that MDE modify the definition of "beneficial use." The implication of the current definition is that any use that results in a net adverse effect to public health or the environment does not qualify as a beneficial use. But unless MDE applies that standard uniformly to all products against which CCPs compete in the marketplace, a standard of no net adverse effects to public health or the environment may actually promote competing unregulated manufacturing processes that in fact may result in greater adverse environmental or public health effects than particular uses of CCPs. CCPs are widely used – in road and highway applications as road base, subbase and embankments under state DOT approval, in engineered structural fills, as flowable fills, and in mining applications for mitigation of acid mine drainage, for subsidence control and for reclamation of surface mines in restoring approximate original contours. There are examples of these latter CCP utilization activities in Western Maryland. CCP utilization conserves natural resources and saves energy; these energy savings can be translated into greenhouse gas ("GHG") emissions reductions. The proposed restriction on "beneficial use" of CCPs may complicate the calculation or crediting of GHG emission reductions credits should we become subject to a regulatory program involving the capping and trading of GHG emissions.

4. We also recommend several changes in how MDE addresses the issue of mine placement of CCPs. To exclude mine placement from the definition of beneficial use is inconsistent with sound science and in fact is incompatible with promoting environmental protection. The National Academy of Sciences/National Research Council found that CCP mine placement has several advantages such as (1) assisting in meeting reclamation goals (including remediation of abandoned mine lands) and (2) avoiding the need for additional landfill or surface impoundment sites at undisturbed locations.<sup>4</sup> There is nothing inherently wrong with mine placement of CCPs so long as it is conducted in a manner that minimizes the risk to the environment. That is also why USWAG is supporting OSM's plans for developing regulations under SMCR to govern CCP mine placement. OSM has already outlined some of its ideas for regulation in an advance notice of proposed rulemaking,<sup>5</sup> and a formal proposal is scheduled for publication later this year.

We therefore recommend that MDE postpone action on regulating mine placement of CCPs until the OSM rulemaking on the same subject is completed. For MDE to jump ahead of OSM, the agency with expertise on mine reclamation, may require MDE to engage in a second rulemaking to conform its program to whatever requirements OSM promulgates.

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<sup>4</sup> National Research Council, *Managing Coal Combustion Residues in Mines*, pp. 178-79 (2006).

<sup>5</sup> 72 Fed. Reg. 12026 (March 14, 2007).

One final point about mine placement deserves mention. The subject of CCP mine placement has become controversial because of the opposition to the practice by some activist groups. EPA and OSM have looked carefully at the practice and have searched for examples of environmental damage resulting from CCP mine placement. To date, not a single case of environmental damage resulting from mine placement of CCPs has been proved. To be sure, there are numerous examples of environmental problems associated with post-mining conditions, but none has ever been proved to result from the placement of CCPs in the mine. In fact, some of the examples cited by the activist groups of damage cases are mines at which no CCPs were ever placed. Rather, the evidence is strong that environmental conditions have improved as a result of placing alkaline CCPs in mines plagued by acid mine drainage.

We appreciate this opportunity to provide these comments. Please feel free to contact me at [jim.roewer@uswag.org](mailto:jim.roewer@uswag.org) or 202-508-5645 with any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Roewer", with a long horizontal flourish extending to the right.

James R. Roewer  
Executive Director