

**Testimony of Mathy Stanislaus  
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**Before the Subcommittee on Environment and Economy  
Committee on Energy and Commerce  
United States House of Representatives**

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Mr. Chairman and members of the Subcommittee, thank you for the opportunity to testify today on EPA's regulatory efforts and on Congressional legislative efforts to address coal combustion residuals (CCRs). My testimony provides our views regarding key elements to address the safe management of CCRs.

As discussed in our proposed rule<sup>1</sup>, CCRs are one of the largest waste streams generated in the United States, with approximately 136 million tons generated in 2008. Of this, approximately 34% (46 million tons) are landfilled; approximately 21% (29 million tons) are disposed of in surface impoundments; approximately 37% (50 million tons) are beneficially used; and approximately 8% (11 million tons) are placed in mines. CCRs contain constituents, such as arsenic, cadmium, and mercury, which can pose threats to public health and the environment, if improperly managed. The Agency continues to obtain information on damage cases around the country, which demonstrates that the improper management of CCRs, poses a threat to public health and the environment. Thus, proper management of this waste stream is essential to protecting public health and the environment.

## **IMPROPER MANAGEMENT OF CCRS**

At the time, EPA issued its proposed CCR rule (on June 21, 2010), EPA had documented evidence of damages to groundwater or surface water in 27 cases, 17 cases of damage to groundwater, and ten cases of damage to surface water. All but one of the proven damage cases to groundwater involved disposal in unlined units. In the remaining unit, there was not enough information as to whether or not the unit had a liner. In addition, EPA identified 40 cases of potential damage to groundwater or surface water. In the majority of cases, damage to groundwater or surface water were associated with practices such as the use of unlined impoundments/units and the failure to monitor those impoundments/units.

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<sup>1</sup> Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities; Proposed Rule, 75 FR 35128-35264, June 10, 2010.

EPA also had documented evidence of a number of damage cases due to the catastrophic structural failure of the CCR impoundments, such as at the Martins Creek Power Plant, Martins Creek, Pennsylvania and Tennessee Valley Authority (TVA) Kingston facility, Harriman, Tennessee. The sudden failure of a surface impoundment retaining wall at the TVA Kingston facility in December 2008, and the resulting catastrophic spill of coal ash, highlighted the issue of impoundment stability. In response, EPA developed a proposed rule that would establish regulatory requirements designed to ensure proper management of this waste stream, including measures to prevent future catastrophic releases, as well as other types of environmental impacts associated with the disposal of CCRs in landfills and surface impoundments.

Since EPA's proposed rule was issued, a number of additional reports have been submitted to EPA by several environmental organizations that identified dozens of additional damage cases that these organizations believe resulted from the potential mismanagement of coal combustion residuals; these reports were made available for comment on October 12, 2011. In addition, for states that have begun to require groundwater monitoring of surface impoundments, in almost all cases, groundwater contamination has been identified. Thus, it appears, based on information received in response to the proposed rule, that without proper management, the disposal of coal combustion residuals in landfills and surface impoundments can pose a threat to human health and the environment.

EPA received more than 450,000 comments on the proposed rule, which raised a number of complex issues. In addition, as part of the rulemaking effort, EPA solicited and received additional technical data. The information, technical data, and comments the agency received on the proposal will help inform the final rule.

## **BENEFICIAL USE**

The beneficial use of CCRs can provide environmental benefits and new applications may provide even greater benefits, based on current studies. Some of the information confirms or strengthens EPA's views on the benefits of CCRs. However, some information indicates that certain uses may raise concerns and merit additional attention.

Evaluations of beneficial use can be quite complex, in that some of these uses are in an encapsulated form, while other uses are in an unencapsulated form, and any evaluation of the potential risks of these uses must take these differences into account. EPA believes that the great bulk of beneficial uses, particularly in an encapsulated form, as in concrete and wallboard, do not raise concerns and offer important environmental benefits. However, some questions have been raised about the use of CCRs in the environment an unencapsulated form. Thus, EPA's proposal sought additional information and requested specific comment on certain aspects of the beneficial use of coal combustion residuals.

We recognize that questions regarding the environmental consequences of beneficially using CCRs have been raised. To help address these questions, EPA is in the process of developing a methodology, which can be used to determine whether encapsulated products containing CCRs are comparable to analogous non-coal combustion residual products, as well as a draft application report utilizing the draft methodology for the use of coal fly ash in concrete

and the use of FGD gypsum in wallboard as replacement materials. EPA is also developing a draft methodology for evaluating current unencapsulated beneficial uses of CCRs.

## **CCR LEGISLATION**

The Discussion Draft of the Coal Ash Recycling and Oversight Act appears to establish a framework for the management of CCRs. The documented damages associated with the mismanagement of CCRs support the need for action to address those risks. We support the development, implementation, and enforcement of appropriate standards for facilities managing coal ash, while encouraging the beneficial use of this economically important material. The proper management of CCRs should include clear requirements that address the risks associated with the coal ash disposal and management, consideration of the best science and data available, adequate evaluation of structural integrity, protective solutions for existing as well as new facilities, and appropriate public information and comment.

The Discussion Draft of the Coal Ash Recycling and Oversight Act addresses some of the principles discussed above for effective CCR management. Although the Discussion draft contains key provisions that require states to implement CCR programs that address specific contaminants, address leaking surface impoundments and, require the establishment of groundwater monitoring, we note that it does not clearly address timelines for the development and implementation of state programs, criteria for EPA to use to determine when a state program is deficient, criteria for CCR unit structural integrity, deadlines for closure of unlined or leaking impoundments/units, including inactive or abandoned impoundments/units, and the universe of CCR disposal units subject to a permit program including impoundments, landfills, waste piles, pits and quarries, and other disposal scenarios.

## **CONCLUSION**

The regulation of CCRs raises complex issues – from the scientific analyses to public and regulatory policy. Should Congress decide to address the regulation of CCRs through legislation, EPA stands ready to assist in that effort to help ensure that legislation establishes a regulatory framework to regulate the management of CCRs in a nationally consistent manner that fully protects human health and the environment.