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October 15, 2009

Mr. Mathy Stanislaus  
Assistant Administrator  
Office of Solid Waste and Emergency Response  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Ave., NW  
Washington, DC 20460  
VIA E-MAIL TRANSMISSION

Re: Federal Regulation of the Disposal of Coal  
Combustion Waste/U.S. EPA Consultation  
Pursuant to "Federalism" Executive Order 13132  
and the Unfunded Mandates Reform Act

Dear Mr. Stanislaus:

On behalf of the Environmental Council of the States (ECOS), I am pleased to provide written comments as follow-up to U.S. EPA's September 16 briefing on its forthcoming proposal to regulate Coal Combustion Waste (CCW).

ECOS is the non-profit, non-partisan association of state and territorial environmental commissioners. The association's position on the regulation of CCW is articulated in Resolution 08-14 adopted on September 22, 2008, entitled "The Regulation of Coal Combustion Products" (see Appendix 1).

In the resolution, ECOS expresses support of EPA's previous assessment that CCW disposal does not warrant regulation as hazardous waste under Subtitle C of the Resource Conservation and Recovery Act (RCRA). Moreover, ECOS agrees with EPA's finding in a 2005 study that "the regulatory infrastructure is generally in place at the state level" to ensure adequate management of these wastes.

Accordingly, the ECOS resolution calls on EPA to conclude that additional federal CCW regulations are unnecessary because they would be duplicative of most state programs. In addition, the resolution notes that a federal CCW regulatory program would require additional resources to revise or amend existing state programs to conform to new federal regulatory programs. It also points out that ECOS supports safe, beneficial reuse of CCW, including for geotechnical and civil engineering purposes. ECOS members have expressed serious concerns about the chilling effect that any RCRA C or hybrid RCRA C-D approach might have on beneficial reuse programs across the nation.

The Tennessee Valley Authority (TVA) spill in December 2008 brought renewed attention to the question about the need for federal regulation of CCW from coal-fired power plants. EPA has responded with a fast-track regulatory process in which it is considering three possible regulatory scenarios – regulation as a non-hazardous waste under Subtitle D; regulation as a hazardous waste under Subtitle C; or a hybrid C-D approach.

ECOS continues to question the value of a federal approach for CCW in light of the potential state fiscal impacts, the regulatory implications, and additional concerns detailed below.

### **ASTSWMO PHASE I AND PHASE II SURVEYS**

In February 2009, the CCW Ad Hoc Workgroup of the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) surveyed state waste and water program managers, working in conjunction with ECOS and the Association of State and Interstate Water Pollution Control Administrators. The Phase I survey sought information about state management practices for disposal of CCW. The survey revealed that, contrary to claims from environmental groups and the media, most States regulate the disposal of CCW. Thirty-six out of 42 States (86%) that have facilities producing CCW have permit programs for CCW landfills.

On August 27, 2009, the ASTSWMO CCW Ad Hoc Workgroup conducted a follow-up survey (Phase II) to its February 2009 Coal Combustion Waste Survey of state management practices. The purpose of the Phase II survey was to obtain information regarding the costs, workload, and expertise impacts on state programs of regulating CCW under the RCRA Subtitle C and RCRA Subtitle D regulatory options.

Both Phase I and Phase II surveys sought information from States about the beneficial uses of coal ash. An example of a beneficial use that is important to States is the use of CCW in state highway projects. This use is not only cost-effective for state Departments of Transportation but also diverts these wastes from landfills. The American Coal Ash Association reports that 43% of CCW is currently used in a beneficial way rather than disposed in a landfill. If EPA decides to regulate CCW as a hazardous waste, most experts agree it will have a chilling effect on the beneficial use of CCW. This is only one of the deleterious effects on States of the potential federal regulation of CCW as a hazardous waste. ASTSWMO's state surveys reveal a number of other likely adverse impacts.

All 50 States and the District of Columbia responded to the Phase II survey. Obtaining 100% participation of States in a survey with such a short turnaround is remarkable and demonstrates the importance of this issue to the States.

### **STATE OPPOSITION TO SUBTITLE C REGULATION**

All state respondents oppose EPA regulation of CCW under RCRA Subtitle C, with the exception of two States (one that by statute does not regulate CCW as a solid waste and one that does not generate CCW). A major objection to listing CCW as a hazardous waste is that the vast state experience with testing CCW using the standard EPA test for determining if a waste is hazardous under RCRA (the

Toxicity Characteristic Leaching Procedure (TCLP)) shows that it is generally not characteristically hazardous. As demonstrated by the state survey results, this is a critical point because regulating CCW as a hazardous waste is burdensome on federally underfunded state waste programs and also diverts resources from protecting threats to health and the environment posed by actual hazardous wastes. EPA acknowledges that technically, CCW can be safely regulated as a non-hazardous waste under Subtitle D with the appropriate management standards. This Administration's stated policy that regulatory decisions will be based on scientific evidence demands that CCW not be regulated a hazardous waste under RCRA Subtitle C.

#### **IMPACT ON EXISTING HAZARDOUS WASTE REGULATION**

If CCW meets the established scientific threshold criteria for regulation as a hazardous waste, then the question of Subtitle D versus Subtitle C is moot – the material should be regulated under Subtitle C. However, this determination has not been made, and in fact the opposite determination was made by EPA in a 2000 regulatory determination.

A major concern with adding lower risk, high volume wastes which do not meet the threshold criteria to the Subtitle C inventory is that those higher threat wastes which do meet the criteria and legitimately warrant Subtitle C controls will become lost in the shuffle due to the staggering difference in volume (two million tons versus 134 million tons per year) and will divert attention and vigilance from the higher threat waste streams.

#### **STATE WASTE PROGRAM CAPACITY**

The fiscal impact on States of EPA's proposed regulations cannot be ignored, particularly in light of the budget crises so many States are experiencing. Adding the unnecessary burden of regulating a non-hazardous waste (i.e., one that does not meet RCRA hazardous waste testing standards) under Subtitle C, which is already under funded – when so many States are imposing staff furloughs, hiring freezes, and layoffs – is unthinkable. Regulating CCW as a hazardous waste under Subtitle C will impose a significantly greater resource burden on state waste programs than regulating it as a non-hazardous waste under Subtitle D, which many States are already doing.

When asked how many facilities that could be affected by the new regulations have a Subtitle C disposal permit, all 44 States that responded to this question said "none." The capacity to regulate those facilities under Subtitle C does not exist in most States. At least 38 States will need additional staff if EPA regulates CCW as a hazardous waste under Subtitle C. The increased workload will require additional technical expertise for the various Subtitle C program elements: Permitting, Inspections (including storage and record-keeping requirements), Financial Assurance, Facility-wide Corrective Action, Closure (Interim Status), Post-Closure Permits, Generator/Transporter Requirements, and Siting Controls. Several States could not even guess what impact regulating CCW under Subtitle C would have on their programs, but 29 States estimated that at least 140 Full Time Equivalents (FTEs) would have to be hired at a cost of \$12M, or an estimated \$414K per State.

By contrast, only 18 States will need additional FTEs if EPA regulates CCW under Subtitle D. In other words, twice as many States will be impacted financially under Subtitle C regulation – a full three quarters of the States in this country. That vast majority of States indicated that no new FTEs will be needed if CCW is regulated under Subtitle D. The cost estimate is significantly less as well. The 18 States that could estimate how many additional FTEs would be needed if EPA regulates CCW under Subtitle D, estimated that 40 FTEs would be needed at a cost of \$3.8M/year or an estimated \$211K per State.

There is no doubt that adding CCW to the wastes that are regulated as hazardous wastes will be a significant difficulty for state Subtitle C programs that are already underfunded. ASTSWMO's Hazardous Waste Subcommittee conducted a pilot program to determine the cost to States of implementing a complete and adequate RCRA Subtitle C Program in 2006. The report, entitled *State RCRA Subtitle C Core Hazardous Waste Management Program Implementation Costs - Final Report (January 2007)*, revealed that the cost to States of implementing a complete and adequate RCRA Program (converted to 2008 dollars) is, at a minimum, \$275M in state and federal funding. The state share should be \$69M (25%), with the remaining \$206M in State Hazardous Waste Financial Assistance grants. However, the FY 2008 federal appropriation was slightly less than half of what States needed. Congress appropriated \$101M rather than \$206M. States are making up the difference for these federally mandated programs from already strained state budgets. These programs are already stretched to the breaking point. Expectations should not be high for a successful incorporation of CCW into state Subtitle C programs without the guarantee of commensurate increases in state grant funding.

The difference in cost to the States between Subtitle C and Subtitle D is a significant factor in the current climate of substantial state budget revenue shortfalls. Either way, nearly all States (94%) will not be able to add FTEs to accommodate the additional workload without financial support from EPA.

#### **TRAINING COSTS**

A significant majority of States (79% of responding States) indicated staff training will be needed if CCW is regulated under RCRA Subtitle C. That is another cost that is not accounted for in the survey results. Not only will training be needed, but it will also be costly to develop. There have been few if any new Subtitle C facilities permitted for 15-20 years, and most Interim Status facility closures were performed and Initial Operating Permits issued in the 1980s. Expertise and training is a significant issue because it has been that long since some States have gone through the process needed for permitting a new facility, issuing an initial permit to an Interim Status facility, or overseeing closure/post-closure activities and issuing initial Post-Closure permits for Interim Status facilities.

Fewer States (31% of responding States) will need staff training if CCW is regulated under RCRA Subtitle D.

#### **BENEFICIAL USE**

A compelling reason not to impose Subtitle C regulations is that the beneficial use of CCW has been very successful. As noted above, the vast state experience with testing CCW shows that it is generally not characteristically hazardous. CCW rarely

if ever fails the criteria by which materials are determined to be hazardous waste. Regulation under RCRA Subtitle C has the potential to put an end to many beneficial uses for CCW. In most States, a primary requirement for a beneficial use determination is that the waste *not* be hazardous. Labeling CCW a hazardous waste will have an adverse effect on its beneficial use. This has happened previously with other materials. For example, the DuPont Edgemoor titanium dioxide plant in Delaware produced a material called "Iron Rich" which was used as a fill material. It was used in several construction projects in a pilot project capacity until it was deemed to be a listed hazardous waste (K178). The State is now having issues developing a remedial alternative for the stockpile of material left in place, and the material that is being newly generated is being managed and disposed of as hazardous waste.

This concern is also supported by the ongoing controversy and legal challenges over the recent changes to the Definition of Solid Waste (DSW), which are primarily related to concerns over the appropriateness of relaxing regulatory controls on defined hazardous wastes for the purpose of encouraging reuse and recycling.

#### **DISPOSAL CAPACITY**

The American Coal Ash Association reports that 43% of CCW is currently used in a beneficial way rather than disposed in a landfill. Currently, 56%, or 75 million tons, is not beneficially used. States are concerned that designating CCW as a hazardous waste under Subtitle C will prevent beneficial use of CCW (as was the case with "Iron Rich" noted above), which will result in 134 million tons of CCW being shipped to hazardous waste landfills annually. According to EPA's *National Biennial RCRA Hazardous Waste Report*, in 2007 (the most recent data published), 1.6 million tons of hazardous waste were received by off-site hazardous waste landfills and surface impoundments (<http://www.epa.gov/epawaste/inforesources/data/br07/national07.pdf>, Exhibit 3.9). Using a conservative estimate that 2 million tons of hazardous waste is disposed at off-site facilities annually, disposing of CCW as a hazardous waste will result in as much as 67 times more waste being disposed in landfills. Even if beneficial use continues at its current rate, an additional 75 million tons per year (or 38 times) more waste will have to be disposed in hazardous waste landfills annually.

Even more alarming is the fact that disposing of CCW in hazardous waste landfills will consume the Commercial Subtitle C Management Capacity projected for the year 2013 in a matter of months. EPA's expected maximum capacity for Subtitle C landfill capacity for 2013 is 34 million tons ([http://www.epa.gov/osw/hazard/tsd/capacity/appb\\_1f.pdf](http://www.epa.gov/osw/hazard/tsd/capacity/appb_1f.pdf)). Assuming all CCW will be disposed in commercial Subtitle C landfills, the 2013 capacity will be exhausted within 3 months. Even if beneficial use continues at its current rate, the 2013 capacity will be exhausted in less than 6 months. In the unlikely event that beneficial use continues at its current rate *and* half of the coal fired utilities seek Subtitle C permits for the disposal facilities that they manage, the 2013 capacity will be consumed in less than one year. Consuming the commercial hazardous waste landfill capacity not only means that CCW will begin to pile up unmanaged at utilities, but that the current 2 million tons of hazardous waste generated by industry and hazardous waste site remedial activities will also begin to accumulate

on-site. This will bring a halt to Superfund cleanups that require disposal of hazardous wastes and have an undesirable impact on vital industries and facilities generating nearly half of the country's electrical power. It can take years to permit a new hazardous waste landfill.

States already know that there is not sufficient hazardous waste landfill capacity if CCW is designated a hazardous waste, as reflected in the Phase II survey.

- **91%** of States responding to the question **do not have sufficient existing permitted Subtitle C disposal capacity** for all CCW in-state.
- **86%** of States responding to the question **will need new off-site capacity** to be sited if CCW is regulated as a hazardous waste.

Conversely, a majority of States have sufficient permitted non-hazardous waste disposal capacity for CCW. More than half of that permitted capacity is located on-site at the generator facility, which significantly reduces the amount of coal ash that must be transported for disposal.

- **Only 31%** of States responding to the question **do not have sufficient existing permitted non-hazardous waste disposal capacity** for all CCW in-state.
- **Only 35%** of States responding to the question **will need new off-site capacity** to be sited if CCW is regulated as non-hazardous waste.

Transportation issues associated with CCW designated as hazardous waste is another cause for concern. According to EPA's most recent data, 7 million tons of hazardous waste was shipped in one year by 16,258 shippers (<http://www.epa.gov/epawaste/inforesources/data/br07/national07.pdf>, Exhibit 3.1). Each State has rigorous standards for licensing hazardous waste transporters. Most CCW is currently managed on-site at the generation facility. If the material becomes regulated as a hazardous waste, it is likely that much of this material will then be managed off-site, which will increase hazardous waste transportation by up to 20 times more waste than the current annual rate. The impact on transportation infrastructure and communities through which this new "hazardous waste" will be transported will be overwhelming. Only a handful of States have commercial Subtitle C landfills, which means that most CCW will have to be shipped out of state.

#### **REGULATORY BURDEN**

Drafting, proposing, and finalizing regulations is a labor-intensive and costly process. Currently, 36 out of 42 States have CCW solid waste permit programs for CCW landfills (86%). Only three States responded "no" and three States did not respond. Most States regulate CCW under general solid waste regulations (43%) and general industrial waste regulations (43%). Several States use regulations specifically designed for CCW (29%). Many States voluntarily impose minimum performance standards (such as those being considered by EPA for regulation of CCW), demonstrating that minimum federal Subtitle D requirements will be

sufficient to ensure that state regulation of CCW is protective of human health and the environment.

<b>Percentage of Responding States with CCW Landfills with Specific Regulatory Requirements</b>	
<b>Regulatory Requirement</b>	<b>Percentage</b>
<b>Bottom Liner</b>	64%
<b>GW Monitoring</b>	81%
<b>Leachate Collection</b>	52%
<b>Final Cover System</b>	79%
<b>Post Closure Care</b>	79%
<b>Siting Controls</b>	83%
<b>Corrective Action</b>	86%
<b>Structural Stability</b>	69%
<b>Financial Assurance</b>	69%

If EPA designates CCW as a hazardous waste, all 48 RCRA-authorized States will have to develop new Subtitle C regulations, despite the fact that regulation under Subtitle D will provide sufficient protection of health and the environment. This is a very costly and unnecessary burden that will divert resources from more productive activities.

#### **FEDERAL VERSUS STATE AUTHORITY**

EPA acknowledges that CCW can be safely regulated under Subtitle D. EPA suggests there are two primary reasons that EPA may propose Subtitle C regulation: 1) Subtitle D does not allow federal enforcement except under citizen suits; and 2) EPA cannot require States to permit landfills under Subtitle D.

#### Enforcement

EPA suggests that Subtitle C is necessary so that EPA will have direct enforcement authority. States are held accountable by their citizens through state statutes and obligations to regularly inspect landfills and investigate complaints, and to utilize state enforcement authority as warranted. Subtitle D requires state programs to have the necessary enforcement authority as part of the federal approval process.

This approach has been successful for more than a decade as evidenced by the relative absence of federal citizen suits or demonstrated failure of state Subtitle D programs. The States are not aware of EPA expressing concerns regarding this state-based enforcement approach in the municipal solid waste landfill program. A similar Subtitle D approach can successfully ensure compliance with minimum federal standards for CCW disposal facilities.

#### Permitting Requirement

While EPA cannot require that States permit Subtitle D facilities, most States do so without a federal mandate. As already discussed, ASTSWMO's Phase I survey revealed that 36 out of 42 States in which CCW is generated have permit programs for CCW landfills (86%). Only 3 States responded "no" and 3 States did not respond. Imposing the more stringent requirements of Subtitle C regulation on States to ensure that they permit facilities is not justified when most States already do so.

#### **LEGISLATIVE ISSUES**

EPA's proposed regulation of CCW will have a significant impact on both state executive and legislative branches. Whether EPA proposes regulation as hazardous (Subtitle C) or non-hazardous (Subtitle D), funding state environmental agency programs will become even more difficult. The budget impact will be more substantial if EPA proposes regulating CCW as a hazardous waste, not only because the cost will be greater for Subtitle C regulation, but also as noted above, because federal funding for state hazardous waste programs is already only half of what States need from the federal government to fund adequate Subtitle C core programs. Mandating another significant federal standard for these programs without commensurate guarantees of increased and sustained federal funding support will be devastating to state environmental program budgets.

In the ASTSWMO survey, States also commented on other legislative impacts of EPA's proposed regulation of CCW. For example:

#### Florida

"If USEPA decides to call coal ash a hazardous waste under Subtitle C, then current Florida law (Section 403.7222, Florida Statutes) would prohibit the disposal of this coal ash in landfills unless it was first treated to be non-hazardous. This could add tremendous costs to the power industry for managing this material. They would either have to treat their ash before disposal or ship it out of state for disposal. It is also likely that if existing disposal areas were disturbed after [EPA] determined coal ash was a hazardous waste, then these old disposal sites could become hazardous waste disposal units too."

#### Kansas

"Kansas state law prohibits the landfilling of hazardous waste so our laws would either need to be changed or all waste would need to be exported which is totally impractical."

#### Michigan

"RCRA Subtitle C wastes in Michigan are currently regulated under Part 111, Hazardous Waste Management, of the Natural Resources and Environmental



Protection Act (NREPA). The regulation of coal ash under full RCRA Subtitle C would end the current beneficial uses of coal ash. Existing surface impoundments and landfills would be subject to more stringent design standards and would require either 1) retrofitting of existing landfills (if even possible) or 2) closure of those disposal facilities. Neither of these options could be implemented immediately."

**CONCLUSION**

In light of the facts and arguments presented above, ECOS asserts that the federal regulation of CCW is unwarranted.

Once again, ECOS appreciates the opportunity to engage in early consultation in this rulemaking. If you have any questions or need additional information, please do not hesitate to contact me at (202) 624-3660 or [sbrown@sso.org](mailto:sbrown@sso.org). Alternatively, you may contact Lia Parisien, who staffs the ECOS Waste Committee, at (202) 624-3674 or [lparisie@sso.org](mailto:lparisie@sso.org).

Regards,



R. Steven Brown  
Executive Director

## APPENDIX 1



Resolution Number 08-14  
Approved September 22, 2008  
Branson, Missouri

As certified by  
R. Steven Brown  
Executive Director

### **THE REGULATION OF COAL COMBUSTION PRODUCTS**

WHEREAS, The 1980 Bevill Amendment to the Resource Conservation and Recovery Act (RCRA) requires the U.S. Environmental Protection Agency (USEPA) to "conduct a detailed and comprehensive study and submit a report" to Congress on the "adverse effects on human health and the environment, if any, of the disposal and utilization" of fly ash, bottom ash, slag, flue gas emission control wastes, and other byproducts from the combustion of coal and other fossil fuels and "to consider actions of state and other federal agencies with a view to avoiding duplication of effort;" and

WHEREAS, USEPA conducted the comprehensive study required by the Bevill Amendment and reported its findings to Congress on March 8, 1988 and on March 31, 1999, and in both Reports recommended that coal combustion wastes (CCW) not be regulated as hazardous waste under RCRA Subtitle C; and

WHEREAS, on August 9, 1993, USEPA published a regulatory determination that regulation of the four large volume coal combustion wastes (fly ash, bottom ash, boiler slag, and flue gas emission control waste) as hazardous waste under RCRA Subtitle C is "unwarranted;" and

WHEREAS, on May 22, 2000, USEPA published a final regulatory determination that fossil fuel combustion wastes, including coal combustion wastes, "do not warrant regulation [as hazardous waste] under Subtitle C of RCRA," and that "the regulatory infrastructure is generally in place at the state level to ensure adequate management of these wastes;" and

WHEREAS, USEPA is under no statutory obligation to promulgate federal regulations applicable to CCW disposal following the regulatory determination that hazardous waste regulation of CCW disposal is not warranted, and throughout the entire Bevill regulatory process, CCW disposal has remained a state regulatory responsibility and the states have developed and implemented robust regulatory programs tailored to the wide-ranging circumstances of CCW management throughout the country; and

WHEREAS, In 2005, USEPA and the U.S. Department of Energy (DOE) published a study of CCW disposal facilities constructed or expanded since 1994 and evolving state regulatory programs that found: state CCW regulatory requirements have become more stringent in recent years, the vast majority of new and expanded CCW disposal facilities have state-of-the-art environmental controls, and deviations from state regulatory requirements were being granted only on the basis of sound technical criteria; and

WHEREAS, the states have demonstrated a continuing commitment to ensure proper management of CCWs and several states have announced proposals for revising and upgrading their state CCW regulatory programs.

NOW, THEREFORE BE IT RESOLVED THAT THE ENVIRONMENTAL COUNCIL OF THE STATES:

Agrees with USEPA's assessment that CCW disposal does not warrant regulation as hazardous wastes under RCRA Subtitle C; and

Agrees with USEPA's finding in the 2005 study previously cited that "the regulatory infrastructure is generally in place at the state level to ensure adequate management of these wastes" and believes that states should continue to be the principal regulatory authority for regulating CCW as they are best suited to develop and implement CCW regulatory programs tailored to specific climate and geological conditions designed to protect human health and the environment; and

Supports safe, beneficial reuse of CCW, including for geotechnical and civil engineering purposes; and

Believes that the adoption and implementation of a federal CCW regulatory program would create an additional level of oversight that is not warranted, would be duplicative of existing state regulatory programs, and require additional resources to revise or amend existing state programs to conform to new federal regulatory programs and to seek USEPA program approval; and

Therefore calls upon USEPA to conclude that additional federal CCW regulations would be duplicative of most state programs, are unnecessary, and should not be adopted, and instead, calls upon EPA to begin a collaborative dialogue with the states to develop and promote a national framework for beneficial use of CCW including use principles and guidelines, and to accelerate the development of markets for this material.