



Statement of Thomas H. Adams, Executive Director, American Coal Ash Association

**House Energy & Commerce Subcommittee on Environment and the Economy**

January 22, 2015

Mr. Chairman, my name is Thomas Adams. I am the Executive Director of the American Coal Ash Association (ACAA). I would like to thank you for the opportunity to speak to you and the committee about one of America's greatest recycling success stories and how that success depends on regulatory certainty.

**About ACAA**

ACAA was established almost 50 years ago, in 1968, as a trade organization devoted to beneficially using the materials created when coal is burned to produce electricity. Our members comprise the world's foremost experts on coal ash (fly ash and bottom ash), and boiler slag, flue gas desulfurization gypsum or "synthetic" gypsum, and other "FGD" materials captured by emissions controls. While other organizations focus on disposal issues, ACAA's mission is to advance the management and use of coal combustion products (CCPs) in ways that are: environmentally responsible; technically sound; commercially competitive; and supportive of a sustainable global community.

ACAA is not a large Washington DC trade organization. We are headquartered in Farmington Hills, Michigan, and have only two full-time employees. We rely on our volunteer members to pursue an agenda that is mostly technical. For instance, to develop formal comments on EPA's Proposed Rule for regulating coal ash disposal, our members devoted more than 14,000 volunteer hours to reading, analyzing, and drafting our response. ACAA's membership is comprised of a diverse array of stakeholders, including academic professors and scientists, scientists within businesses associated with CCPs, former regulators, consultants, engineers, cement companies, coal ash marketers, CCP technology companies, international representatives within the CCP industry and utility representatives.

I would like to emphasize that many of ACAA's members are small businesses comprised of people who have dedicated entire careers to the cause of beneficial use and improving our environment. It is these small businesses that were hurt most by the regulatory uncertainty EPA created in 2009 when it suggested the possibility of an unwarranted "hazardous waste" designation for coal ash when it is disposed.

**About Coal Ash Beneficial Use**

Coal remains the largest fuel source for generating electricity in America and produces large volumes of coal ash — the generic term for several solid materials left over from the combustion process.

There are many good reasons to view coal ash as a resource, rather than a waste. Using it conserves natural resources, saves energy and significantly reduces greenhouse gas emissions from the manufacturing of products that are replaced. The benefits of using coal ash rather than disposing it are measured in the millions of tons annually – millions of tons of decreased landfill utilization, decreased natural resources production and decreased greenhouse gas emissions from manufacturing the materials coal ash replaces.

In many cases, products made with coal ash perform better than products made without it. For instance, coal ash makes concrete stronger and more durable. The American Road and Transportation Builders Association estimates use of coal fly ash in concrete roads and bridges saves highway builders more than \$5 billion per year.

Other major beneficial uses include synthetic gypsum utilized in wallboard and agricultural applications; boiler slag used for blasting grit and roofing granules; and fly ash and bottom ash used in a variety of geotechnical applications.

Our highways and bridges last longer because of beneficially used coal ash. Our fields are more productive and shed fewer pollutants because of beneficially used synthetic gypsum. These are all benefits worth protecting.

### **About Coal Ash Regulatory History**

The 1980 Bevill Amendment to the Resource Conservation and Recovery Act (RCRA) instructed the U.S. Environmental Protection Agency (EPA) 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 coal ash. In two Reports to Congress (1988 and 1999) EPA recommended that coal ash should not be regulated as a hazardous waste. A 1993 EPA Regulatory Determination found regulation as a hazardous waste "unwarranted." A 2000 EPA Final Regulatory Determination concluded coal ash materials "do not warrant regulation [as hazardous waste]" and that "the regulatory infrastructure is generally in place at the state level to ensure adequate management of these wastes."

Responding to the failure of a Tennessee coal ash disposal facility in December 2008, the EPA re-opened the coal ash regulatory debate proposed options for regulating coal ash disposal in proposed rules issued in June 2010. One of those options called for regulation under Subtitle C of the Resource Conservation and Recovery Act (RCRA), which is the section that covers "hazardous waste." The proposal quickly became controversial. More than 450,000 public comments were received. Environmental Non-Governmental Organizations (ENGOS) and a handful of companies that compete with recycled coal ash favored the Subtitle C "hazardous waste" regulatory approach. A large and diverse body of organizations opposed it – including every federal agency (other than EPA) that reviewed the proposal; state environmental regulators, departments of transportation, public service commissions, governors and mayors; utilities; ash recyclers; ash users and building materials standard setting organizations; labor unions; and more.

Given the controversy, the EPA rulemaking effort bogged down. Eventually, the Agency was sued by ENGOs and two of ACAA's marketing members to force a deadline to conclude the rulemaking. On December 19, 2014 – nearly six years after the Tennessee incident that triggered the rulemaking effort – EPA met its court directed deadline and correctly announced a Final Rule under the “non-hazardous” Subtitle D section of RCRA.

Under the Final Rule, coal ash beneficial use continues to be exempt from regulation. But as history shows, being exempt from regulation does not exempt coal ash from market impacts of disposal regulation.

### **About Coal Ash Material Characteristics**

It is important to remember that coal ash has never qualified as a hazardous waste based on its toxicity. It contains trace amounts of metals. Those metals are found at levels similar to the levels in soils and hundreds of items around your home. An ACAA study released in June 2012 analyzed recent U.S. Government information to show that concentrations of metals in coal ash, with few exceptions, are below environmental screening levels for residential soils and are similar in concentration to common dirt. Despite a drumbeat of publicity by anti-coal environmental groups, coal ash is no more “toxic” than the manufactured materials it replaces.

It's also important to remember that during the recent EPA rulemaking on coal ash disposal, the Agency's proposed landfill engineering specifications were essentially the same under both the “hazardous” and “non-hazardous” proposals. EPA's “hazardous waste” approach was not, therefore, “more stringent” from an engineering standpoint. The main difference between the “hazardous” and “non-hazardous” approaches boiled down to enforcement authority – direct federal enforcement with a “hazardous” designation versus citizen suit enforcement with the “non-hazardous” designation. This protracted debate was never about engineering or the nature of the material. It was mainly an argument over who gets to enforce the rules.

### **Disposal Regulations Affect Beneficial Use**

Unfortunately, this argument had real world negative consequences for the beneficial use of coal ash. When EPA began discussing a potential “hazardous waste” designation for coal ash in 2009, the Agency cast a cloud over beneficial use that caused coal ash users across the nation to decrease beneficial use activities. Simply put, people did not want to undertake the potential liabilities or risks of using a material that could be considered “hazardous waste” on the property of the people who produced it. People resisted committing capital to expand beneficial use capabilities in light of the regulatory uncertainty.

Beginning in 2009, beneficial use markets were affected negatively in at least three ways:

- Consumers of coal combustion products began to remove the materials from their specifications because of uncertainty regarding the safety of the material or because of concern over potential legal liability from using it. For instance, the Los Angeles Unified School District prohibited the use of coal fly ash in its concrete “until the EPA confirms fly ash to be a non-hazardous toxic waste.” It is important to remember that it doesn't matter whether health or legal liability concerns are scientifically or legally justified.

What matters is that people do not want to take the risks created by the potential “hazardous” designation and they can choose not to use the coal combustion products to avoid those risks. It takes time and money to defend even unjustified lawsuits.

- Manufacturers of products that compete with beneficially used coal ash began fanning the flames by citing the potential EPA “hazardous waste” designation. This occurred in markets for blasting grit, brick manufacturing, lightweight aggregate production, and concrete block manufacturing. One particularly egregious magazine advertisement featured a skull and crossbones for an illustration.
- Commercial liability insurance policies that contain exclusions for companies using products that contain fly ash began to appear. Examples of this disturbing development – as well as more examples of the other forms of stigma mentioned above – were collected and made available by an organization that is separate from ACAA (Citizens for Recycling First) at this website: <http://www.recyclingfirst.org/pdfs.php?cat=9>

Supporters of the “hazardous waste” designation said that recycling rates would increase under a “hazardous waste” designation, citing the experience of a handful of other industrial byproducts. The materials cited by EPA include electric arc furnace dust, electroplating wastewater sludge, chat from lead and zinc mining, used oil, spent etchants and spent solvents. The problem is that none of those materials are anything like coal ash. Most of them actually qualify as a hazardous waste based on their toxicity. (Coal ash does not.) Almost all of them are reprocessed prior to recycling. (Coal ash is not.) Most of them get recycled in industrial processes, often by the same companies that produced the materials in the first place. (Coal ash is distributed for recycling by thousands of other companies in tens of thousands of public and residential locations all over the country.) Many of them are produced and recycled very small quantities. (Coal ash recycling is measured in the millions of tons.)

### **Effects of the Most Recent Regulatory Uncertainty**

Coal ash beneficial use stalled after 2008 as EPA reopened its coal ash regulatory agenda. Volume utilization coal ash has been lower than 2008 in every year since.

The decline in beneficial use volumes stands in stark contrast to the previous decade’s trend. In 2000, when the recycling volume was 32.1 million tons, the EPA issued its Final Regulatory Determination that regulation of ash as a ‘hazardous waste’ was not warranted. Over the next eight years, EPA also began actively promoting the beneficial use of coal ash and the recycling volume soared to 60.6 million tons.

According to ACAA’s most recently released “Production and Use Survey,” 51.4 million tons of Coal Combustion Products were beneficially used in 2013 – down from 51.9 million tons in 2012 and well below the 2008 peak. In the closely watched category of fly ash used in concrete, utilization increased only slightly to 12.3 million tons, up by 577,705 tons over 2012, but still below 12.6 million tons in 2008.

The greatest irony of the lengthy debate over coal ash disposal regulations is that the debate caused more ash to be disposed. If the past five years had simply remained equal with 2008's utilization, we would have seen 26.4 million tons less coal ash deposited in landfills and impoundments.

Analysis of historic production and use data reaffirms that the recent decline in coal ash recycling is largely attributable to regulatory uncertainty and not general economic trends. During five recessionary periods since 1973, fly ash utilization out-performed overall concrete production in all but the most recent economic downturn. The current fly ash market continues to be depressed, even as ready mixed concrete volumes began to increase as early as 2010. In previous economic downturns, we actually saw fly ash utilization increase as concrete producers sought less expensive materials in an effort to reduce costs. That did not happen in our most recent economic downturn as regulatory uncertainty trumped economic incentives.

Factors like cost of disposal have little to do with whether coal ash gets beneficially used. Coal ash disposal costs did not change much between the 1990s and 2000s. What caused the dramatic growth of beneficial use in the 2000s was regulatory certainty that encouraged people to invest in recycling rather than disposal and a supportive EPA that actively encouraged beneficial use.

#### **Permanent Regulatory Solutions are Needed**

ACAA appreciates EPA's final decision to regulate coal ash as a "non-hazardous" material. We believe this decision puts science ahead of politics and clears the way for beneficial use of ash to begin growing again – thereby keeping ash out of landfills and disposal ponds in the first place.

We are also painfully aware, however, that EPA has made final decisions before only to reverse course in the future. A "hazardous vs. non-hazardous" debate occurred prior to the Agency's 2000 Final Regulatory Determination – which eight years later turned out to be not so final. Additionally, the Final Rule's preamble states that: "This rule defers a final Bevill Regulatory Determination with respect to CCR that is disposed in CCR landfills and CCR surface impoundments until additional information is available on a number of key technical and policy questions." Apparently 34 years of study, two reports to Congress, two formal regulatory determinations, and a Final Rule issued after a six-year rule making process may not be enough for EPA to make a truly final, Final Decision.

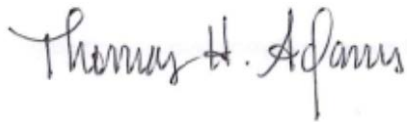
It may be time to recognize that there's a reason coal ash regulation remains controversial even after decades of study and regulatory activity. RCRA as currently configured may not be well suited to regulating a material characterized by very low toxicity but huge volumes. Specifically, the citizen suit enforcement mechanism available to EPA under the existing RCRA Subtitle D has been criticized by both sides of the debate.

Bills previously passed by the House would resolve these issues permanently. The bills would put enforcement responsibility and authority in the hands of professional state environmental regulators and expand EPA's authority to step in if states don't do the job.

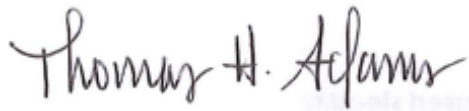
ACAA is on record by formal resolution supporting coal ash disposal regulation. ACAA has also supported and will continue to support actions by Congress to create a more effective regulatory structure than EPA can create with its existing toolbox.

Thank you, Mr. Chairman, for this committee's diligence in addressing this issue. And thank you for inviting ACAA to testify today. It's important to keep beneficial use at the forefront of U.S. coal ash management policy. The best solution to coal ash disposal problems is to quit throwing it away.

Respectfully submitted,

A handwritten signature in dark ink, reading "Thomas H. Adams". The signature is written in a cursive, flowing style.

Thomas H. Adams  
Executive Director  
American Coal Ash Association

A handwritten signature in dark ink, reading "Thomas H. Adams". The signature is written in a cursive, flowing style, similar to the one above.