
Blake Korb
HOLDING OUR BREATH: WAITING FOR THE FEDERAL GOVERNMENT TO RECOGNIZE COAL ASH AS A HAZARDOUS WASTE

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I. INTRODUCTION

Each year, the nation’s coal-fired power plants generate more than 140 million tons of residual waste known as coal ash.1 Coal ash is a toxic sludge comprised of carcinogenic and neurotoxic chemicals such as arsenic, lead, hexavalent chromium, cadmium and mercury.2 Coal ash waste poses health risks to humans and threatens to destroy the environment.3 Coal ash is stored in over a thousand wet ash ponds and dry ash landfills in nearly every state.4 Despite its dangerous toxicity, however, most ponds and landfills are unstable, and most states do not have regulations prepared to keep the toxic coal ash safely out of air and drinking water.5 Thus, we wait for federal regulation of coal ash that will adequately protect public health and the environment.6

To address these issues, Part II of this Comment discusses the components of coal ash and details its adverse effects on public health and the environment. Additionally, this section illustrates the added harms coal ash causes during coal ash leaks and spills. Part III then analyzes the different coal ash regulations currently

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2. Id.; see also Steven T. Moon & Amanda B. Turner, Coal Ash Law and Regulations in the United States: An Overview, 18 SOUTHEASTERN ENVT'L L.J. 173, 174 (2010) (stating that coal ash waste "can be as much as fifteen percent of the total weight of the coal fired").
4. Evans et al., supra note 1, at 3.
5. Id.
6. Id. at 21.
enforced by states attempting to alleviate the hazards of coal ash, and explains why these efforts fail. Part III also stresses why the Environmental Protection Agency (EPA) must classify coal ash as a hazardous waste, which necessitates federal regulation. Finally, Part IV advocates that the regulation option that classifies coal ash as a hazardous waste should be enacted.

II. BACKGROUND

Coal-fired power plants produce coal ash by burning coal to create electricity for communities. Coal ash is the residue left behind after the coal has been burned. Depending on how the coal is used and how it is burned, the resulting coal ash waste will have different physical and chemical properties.

A. The Sickening Side Effects of Coal Ash

Typically, coal ash consists of several hazardous chemicals, including but not limited to arsenic, cadmium, hexavalent chromium, lead, mercury and selenium. Consequently, “if coal ash comes in contact with water, these hazardous chemicals leach out of the ash and contaminate drinking water,” which can cause serious health problems to those who drink it, such as cancer and nervous system damage. Moreover, there is no safe level for exposure to lead, which can cause brain swelling, kidney disease, and even death if consumed through drinking water.

8. Farrand Coal Co. v. Haplin, 140 N.E.2d 698, 701 (Ill. 1957) (holding that the sale of coal to a utility company constitutes tangible personal property because the coal is consumed entirely when burned to generate electricity, except for the coal ash residue it leaves behind).
9. Barbara Gottlieb et al., Coal Ash: The Toxic Threat to Our Health and Environment, 9 (2010), http://www.psr.org/assets/pdfs/coal-ash.pdf (stating that the different types of coal ash include fly ash, bottom ash, boiler slag, fluidized bed combustion (FBC), and flue gas desulfurization (FGD) gypsum).
10. Evans et al., supra note 1, at 5.
11. Id.; see also Gottlieb et al., supra note 9, at 19 (explaining that “leaching” is a process through which coal ash chemicals dissolve into water and permeates the earth); Berkowitz, supra note 3, at 446 (affirming that up to three percent of the materials in coal combustion waste have been found to be water-leachable). See generally 40 C.F.R. § 257.2 (2011) (defining leached chemicals as “liquid that has passed through or emerged from solid waste and contains soluble, suspended or miscible materials removed from such wastes”).
12. See generally Evans et al., supra note 1, at 5 (stating that children who are exposed to coal ash toxins are especially susceptible to health problems, such as cancer and asthma).
13. Gottlieb et al., supra note 9, at 15 (adding that evidence from the Agency for Toxic Substances and Disease Registry (ATSDR) indicates that long-term exposure to arsenic in young children may cause lower IQ scores).
Coal ash not only pollutes drinking water, but it also pollutes fish.\textsuperscript{14} Thus, when metals such as mercury and selenium are leached from coal ash into the water, fish may absorb these metals, which will later be consumed by the animals and people who eat the fish.\textsuperscript{15}

In 2010, the EPA published its findings of the significant risks coal ash ponds and landfills pose to human health.\textsuperscript{16} Its report stated that exposure to coal combustion waste resulted in nine hundred cancer cases per 100,000 individuals exposed to coal combustion waste, compared to one hundred cancer cases per 100,000 individuals who smoked a pack of cigarettes a day.\textsuperscript{17}

The EPA also stated that living next to a coal ash disposal site can increase your risk of cancer or other diseases, especially if the site is unlined and located near your drinking water source.\textsuperscript{18} Most coal ash dumps are located close to power plants, which are often situated in rural areas where cheap land abounds.\textsuperscript{19} Unfortunately, low-income communities are at higher risk of exposure to the presence of coal ash in their drinking water and to the resulting adverse health consequences.\textsuperscript{20}

Coal ash also poisons the air we breathe with toxic residue.\textsuperscript{21} Airborne particles from coal ash, known as “fugitive dust,” are dangerous to human health when inhaled.\textsuperscript{22} For instance,
beryllium, a contaminant inside the air residual from coal ash, can cause acute beryllium disease, which is similar to pneumonia. When chromium (IV), a chemical within coal ash, is inhaled, it can cause lung cancer and several other breathing problems.

Despite these numerous and grave health risks, most coal ash ponds and landfills are unlined or improperly lined, and unmonitored. Not only does coal ash threaten human health, but the hazardous waste also poses equally serious threats to the environment.

B. Extreme Environmental Effects

The current methods of storing and disposing all the toxic coal ash produced each year by all the nation’s power plants pose serious dangers to the environment. In reality, the entire cycle of coal use is harmful to the environment: the extraction of coal leaves landscapes and natural resources destroyed; the burning of coal discharges pollution into the air and water; and the disposal of coal waste leaks heavy metals into water systems.

Dry coal ash is usually stored in landfills. Coal ash that becomes wet when it is washed away by water is stored in ponds, which pose higher risks to the environment than the landfills do.

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24. Gottlieb et al., supra note 9, at 13.

25. Widawsky et al., supra note 20, at 8 (explaining that it is critical for coal ash ponds and landfills to be constantly supervised).

26. Id.


28. Stant et al., supra note 21, at 12.

29. Gottlieb et al., supra note 9, at 17.

30. Id. (describing how sometimes coal ash is mixed with water so that if can be stored in ponds that are really “surface impoundments” because they are usually only pits in the ground and are easy to construct).

31. Id. (estimating that about thirty-six percent of coal ash is stored in landfills); see also 40 C.F.R. § 257.2 (differentiating landfills as land areas with permanent storage of dry coal ash and ponds as surface impoundments that hold wet coal ash that are a either natural topographic depression, human-made excavation, or diked area formed mainly out of earthen materials); Bo Petersen, Dorchester Dump Eyed; SCE&G, Spurned by Colleton Residents, Looks for New Site to Deposit Coal Ash, POST AND COURIER, Sept. 24, 2011, http://archives.postandcourier.com/archive/arch11/0911/arch092412701957.shtml (claiming that digging up a wet ash pond with a history of leaking and replacing it with a dry ash landfill is a better alternative than continuing to
Despite its dangers, coal ash has not been designated as a hazardous waste, and it is sometimes recycled in concrete mixes to cover old landfills, which increases exposure.\footnote{32} When coal ash waste from landfills leaks, it can be very dangerous, mostly because it goes unnoticed.\footnote{33}

Also problematic is the surge in the country’s use of electricity, which increases the steadily accumulating amount of coal ash generated.\footnote{34} The EPA estimates that the storage capacity for all existing coal ash ponds and landfills is approximately 864,000 acres.\footnote{35} Coal ash has become the second largest industrial waste stream in the nation.\footnote{36}

\footnote{32}{See generally John D. Boyd,  \textit{Fight Over Coal Ash: Popular Waste Materials from Power Plants Face Potential Challenge from EPA Scrutiny}, J. OF COMM. 23, (Sept. 26, 2011), available at http://www.jocdigital.com/09262011/09262011/11/1#&pageSet=11 (stating that it is argued that because coal ash is such an important part of highway and airport construction and because coal ash is inexpensive, EPA designation of coal ash as a hazardous material could increase costs for concrete and even shut down or delay some planned projects); see also Patrick Reis, \textit{Is Coal Ash Hazardous?}, SCI. AM., (Jan. 13, 2010), available at http://www.scientificamerican.com/article.cfm?id=coal-ash-waste-hazardous-standard-regulation (stating that the coal industry fears that the designation of coal ash as a hazardous waste will destroy an ash-recycling enterprise that generates between five and ten billion dollars annually); but see Jeff Stant & Lisa Evans, \textit{Coal Ash: Seven Myths the Utility Industry Wants You to Believe and Seven Facts You Need to Know}, EARTHJUSTICE, (Mar. 2011), http://earthjustice.org/sites/default/files/CoalAshMythFactSheetMar2011.pdf (arguing recycling coal ash is simply just using coal ash to fill mines and quarries in order to avoid disposal costs; only 20-25% of coal is safely and beneficially recycled; and classifying coal ash as a hazardous waste will not kill the ash recycling industry, but will actually provide incentives for utility companies to recycle their coal ash due to the high costs of disposal).}

\footnote{33}{See, e.g., Redland Soccer Club, Inc. v. Dep’t of the Army, 55 F.3d 827, 834-35 (3d Cir. 1995) (illustrating a class action suit in which the plaintiffs, who all lived nearby, played or worked on a local soccer field and discovered that it had once been a landfill used by the Army). When the Army no longer used the landfill, they covered it with coal ash, which eventually leaked out onto the soccer field undetected. \textit{Id.} The plaintiffs claimed that the exposure to the hazardous chemicals from the landfill and the coal ash caused them to suffer several grave health issues, such as one child who was diagnosed with leukemia. \textit{Id.} The court dismissed the case, however, for lack of evidence. \textit{Id.} at 857.}

\footnote{34}{Moon & Turner, \textit{supra} note 2, at 174.}

\footnote{35}{Gottlieb et al., \textit{supra} note 9, at 18.}

\footnote{36}{Evans et al., \textit{supra} note 1, at 3; see also Berkowitz, \textit{supra} note 3, at 453}
When the coal ash sludge seeps into the groundwater, it damages the planet's sediments and surface waters. Coal ash contamination has killed wildlife at dozens of dumpsites across the country. Just as humans are poisoned when they eat fish that have absorbed coal ash metals, birds and other wildlife are also poisoned when they eat fish contaminated by coal ash. Once animals are exposed to coal ash, the toxins build up inside the animals' organs, including their reproductive organs, which consequently can reduce the species' reproductive rates. When aquatic and semi-aquatic animals lay eggs in surface waters, selenium leached from coal ash can contaminate the embryos, causing physical deformities or even death.

Despite these severe and very real environmental threats, Congress has failed to enact federal regulations of coal ash in order to protect the health of our ecosystems. The federal government's refusal to recognize coal ash as hazardous waste has resulted in devastating spills.

(explaining that because waste streams hold an array of toxins, they require several treatments before they can be finally released).

37. Widawsky et al., supra note 20, at 9.
38. Gottlieb et al., supra note 9, at 19-20.
39. Id. at 22.
40. Id. at 30 (elaborating on a study of contaminated and non-contaminated frog tadpoles where ninety percent of the contaminated tadpoles had mouth deformities while none of the non-contaminated tadpoles did; more importantly, the contaminated tadpoles weighed significantly less and had decreased development rates, which ultimately can have a negative effect on their survival rate).
41. Id. at 30-31 (describing how the physical deformities caused by the coal ash contaminations can negatively affect the animals' ability to swim, feed, and avoid predators).
42. See id. at 33. (stressing the need for research of the effects of coal ash on the environment, as well as on the health of people who work at the coal ash disposal sites).
43. Amanda King, Cleaning Up the Problem of Post-Combustion Coal Waste 9 SUSTAINABLE DEV. L. & POL'Y 41 (2009), available at http://digitalcommons.wcl.american.edu/cgi/viewcontent.cgi?article=1132&context=sdlp. See generally Resource Conservation and Recovery Act, 42 U.S.C. § 6921 (2011) (leaving coal ash off the list of hazardous wastes to be regulated); see also Emmet B. Moore, THE ENVIRONMENTAL IMPACT STATEMENT PROCESS AND ENVIRONMENTAL LAW 68 (2d ed. 2000) (expressing how coal combustion wastes are exempt from Resource Conservation and Recovery Act (RCRA) regulations); Gottlieb et al., supra note 9, at 9 (exclaiming that not only is coal ash still not designated as a hazardous waste, but there are no federal standards on how to dispose of it or even recycle it).
Holding Our Breath

C. Scary Spills

1. A Nation’s Nightmare

Since 2002, there have been major breaks in coal ash ponds, on average, every three years, releasing millions of pounds of toxic slush into water systems, including sources of drinking water. While these dramatic spills often grab the nation’s attention, the dangerous chemicals leached from coal ash are quietly and continually seeping into the nation’s waterways through improperly lined and unmonitored coal ash dumps, which the public generally neglects.

Breaks in dams and big spills are the major ways that coal ash contaminates the planet. For instance, in Euharlee, Georgia in July 2002, a four-acre sinkhole fractured a coal ash pond and released over two million pounds of toxin-ridden coal ash into a river that serves as a drinking source for Rome, Georgia. In August 2005, a Pennsylvania coal ash dam broke and released over one hundred million gallons of coal ash into the Delaware River, a spill that could not be contained for four days. Between February 2007 and January 2008, a Martinsville, Indiana power plant breached twice, and each time discharged thirty million gallons of coal ash into the White River, none of which was ever recovered. And in October 2011, a Wisconsin bluff collapsed and dumped coal ash directly into Lake Michigan, which serves as a drinking water supply for forty million people.

These are just a few examples of the many coal ash disasters that have happened across the country, as the clock ticks away for the next multi-million-gallon spill.

2. The Spill that Broke the Camel’s Back

In December 2008, a coal ash dam at the Tennessee Valley Authority (TVA) Kingston Fossil Plant broke, dumping 1.1 billion gallons of coal ash into the Emory and Clinch rivers. The spill

44. Evans et al., supra note 1, at 4.
45. Id. at 5.
46. Id.
47. Id.
48. Id.
49. Id.
50. Ismail, supra note 19.
51. Evans et al., supra note 1, at 4.
52. Id.; see also Charlotte E. Tucker, EPA Cites 27 Cases of Environmental Damage in Proposal to Regulate Power Plant Coal Ash, 25 TOXICS L. REP. (BNA) 528 (May 27, 2010) (stating that the EPA revealed that coal ash has been responsible for damage to human health or the environment in twenty-seven incidents, and providing that environmental advocates say there are actually more incidents).
53. See Evans et al., supra note 1, at 4, 19 (claiming that the collapse of the
was “more than [five] million cubic yards of coal ash slurry,”54 and it deposited as deep as six feet into the ground.55 “By volume, [the Kingston] spill is the largest environmental disaster in U.S. history—100 times greater than the Exxon Valdez oil spill and [five] times larger than the BP Deepwater Horizon spill of 2010.”56 The slushy waste swept away homes, vehicles, trees, and more, and killed a vast amount of fish in the rivers.57 The cleanup is expected to take a decade and cost over one billion dollars.58

The residents and businesses in the path of the spill filed a class action lawsuit against TVA.59 The plaintiffs claimed that they suffered physical, personal, financial, and environmental damages from the spill.60 The various causes of actions asserted by the class of plaintiffs include negligence, trespass, nuisance, strict liability, and more.61 Their complaint also alleged that the TVA knew beforehand that the coal waste pond could fail and release
The TVA spill grabbed the attention of the nation, especially the EPA, which began considering federal regulation over coal ash disposal. Thus, in May 2010, the EPA proposed two options for federal regulation over coal ash. Both proposed rules fall under the Resource Conservation and Recovery Act (RCRA). It is

62. Id. at *8. In August 2012, the Eastern District of Tennessee held the TVA liable for the coal ash spill. Id. at *62; see also Bobby Allyn, **TVA Held Responsible for Massive Coal Ash Spill**, USA TODAY, Aug. 23, 2012, available at http://www.usatoday.com/news/nation/story/2012-08-23/tva-coal-ash-spill/57246824/1. See generally Lief Cabraser Heimann & Bernstein, **Press Release: Tennessee Family Files Lawsuit Against Tennessee Valley Authority (TVA) Seeking Medical and Environmental Testing**, LIEFFCABRASER.COM (Jan. 12, 2009), http://www.liefcabraser.com/media.php?NewsID=102 (stating that the lawsuit filed by those affected by the TVA spill alleged that TVA had knowledge that the coal ash pond was in danger of spilling but did not take measures to prevent it); **Allegations—Negligent Failure to Inspect Coal Mine Owned and Operated by Tennessee Valley Authority 14A AM. JUR. PL. & PR. FORMS INSPECTION LAWS § 3.30** (Apr. 2011) (alleging that TVA should have known how dangerous the coal ash was to human health and the local ecosystem and that TVA had a duty to maintain the coal ash pond so that it would not spill).

63. U.S. Envtl. Prot. Agency, **Coal Combustion Residuals—Proposed Rule**, EPA.GOV (June 13, 2012), http://www.epa.gov/epawaste/nonhaz/industrial/special/fossil/ercr-rule/index.htm (claiming that the coal ash spill in Kingston, Tennessee emphasized the need for national regulation of coal combustion waste); see also Avery Fellow, **Jackson Says EPA Will Not Issue Final Regulation on Coal Ash in 2011**, 26 TOXICS L. REP. (BNA) 277 (Mar. 2011) (explaining that the TVA spill caused the EPA to finally propose two options for regulation coal ash, but that no regulation will be enacted by the end of 2011); **EPA Seeks Public Comment on Proposed Coal Ash Rules**, 19-4 MEALEY’S EMERG. TOXIC TORTS 14 (May 2010) (explaining how EPA reacted to the TVA coal ash spill by proposing two options for federal regulations and invited public comments on both); Tomich, supra note 7 (stating the TVA spill forced the EPA to review the current regulations and standards over coal ash and ultimately compelled the EPA to propose federal requirements).

64. Tomich, supra note 7.

65. 75 Fed. Reg. 118, 42; see also Fellow, supra note 63 (establishing that RCRA governs management of hazardous waste); Valverde, supra note 54 (explaining that the first proposed option would regulate coal ash as a solid waste under Subtitle D of RCRA, which is favored by most utility companies, and that the second proposed option would regulate coal ash as a hazardous waste under Subtitle C of RCRA, which is favored by most environmental advocacy groups); Moore, supra note 43, at 68 (elucidating hazardous waste under RCRA to be any solid waste that because of its quantity, concentration, or physical and chemical characteristics may cause serious illness, contribute to an increase in mortality, or pose a substantial hazard to human health or the environment when improperly managed); Evans et al., supra note 1, at 4 (clarifying that currently, coal ash is regulated by the states under Subtitle D of RCRA and arguing that continuing to regulate coal ash under Subtitle D is too low of a standard); Tucker, supra note 52 (explaining that classifying coal ash as a toxic waste would “phase out the wet storage of coal ash” and would require stricter requirements for dry landfills); Sandy Smith, **Contamination from Coal Ash at Some Sites High Enough to Trigger Open Dumping RCRA**
uncertain, however, if and when the new coal ash regulation will be enacted, as no regulation was passed as of September 1, 2012. As the country waits for federal protection, most of the ponds and landfills still seep coal ash waste into the earth and contaminate groundwater, which threatens the public’s health and destroys ecosystems.

III. ANALYSIS

Given the lack of federal regulation, this section discusses current state regulations of coal ash and analyzes their inadequacies that fail to protect public health and the environment from this hazardous waste. This section also explores the economic impacts of continued state regulation of coal ash versus the economic impacts of federal regulation of coal ash.

Provisions, EHSTODAY (June 27, 2011), http://ehstoday.com/environment/hazardous-waste/contamination-coal-ash-open-dumping-rcra-provisions-0627/ (explaining how the EPA currently cannot enforce requirements under Subtitle D against the states, and that the states do not receive any funds to implement the current standards; and explaining that if Subtitle C was enacted it would require closure or cleanups of all the current coal ash dumps that are contaminating groundwater above the drinking water limits, unless a state can show that actual sources of drinking water will not be contaminated).

66. Fellow, supra note 63 (stating how the EPA announced the new coal ash regulation will not be ready by the end of 2011, due largely in part to the agency having to sift through more than 450,000 public comments received on the proposal); see also U.S. Envtl. Prot. Agency, Frequent Questions: Coal Combustion Residuals, EPA.GOV (Apr. 3, 2012), http://www.epa.gov/osw/nonhaz/industrial/special/fossil/ccr-rule/ccrfaq.htm (stating that “EPA understands the need to move quickly to address the environmental and public health concerns posed by coal ash”); Janice Valverde, EPA Eyes Final Coal Ash Regulation, but Swell of Comment Could Cause Delay, 26 TOXICS L. REP. (BNA) 103 (describing how the EPA cannot estimate when the coal ash regulation will be finalized, due not only to the public comments received, but also to heaps of testimony from public hearings and data from power plant operators, to which the EPA wants to give all equal consideration).

67. S. Res. 64, supra note 3 (stating that the U.S. Senate recognizes the need for the EPA to enact a federal regulation over coal ash as quickly as possible); see also Evans et al., supra note 1, at 4 (stating that the EPA expects that less than half the total coal ash in the country is managed properly by the states and has admitted that if states continue to regulate coal ash on their own under Subtitle D, most communities will be left unprotected from the toxic chemicals leaching from coal ash); Gottlieb et al., supra note 9, at 32-33 (declaring that it is essential for the EPA to enact federal standards; and insisting that the precautionary principle be used with coal ash, meaning that the burden of proof that using coal is not harmful falls on those who would take the actions with coal ash, the same principle used with the Food and Drug Administration).
A. Piecemeal Regulations Among the States Prove to Provide Inadequate Protection

There are currently 495 coal-fired power plants in the nation, and coal ash dumps are located in at least forty-six states, although it is hard to specify the actual number of coal ash dumps.68 Most states do not require the most basic of safeguards for coal ash ponds and landfills.69 Not only do most states lack proper measures to prevent coal ash from polluting our air and water, but also most states currently do not require the implementation of proper measures that detect pollution from coal ash.70 Thus, the lack of federal regulation of coal ash has resulted in a patchwork of inadequate state regulations placing the public health and environment at risk.71

Two non-profit groups, Earthjustice and Appalachian Mountain Advocates, recently conducted a study of state regulations in thirty-seven states that encompass over ninety-eight percent of all the coal ash generated.72 In its study, the groups found that only three states require composite liners for all new coal ash ponds and only five states require composite liners for all new coal ash landfills.73 Additionally, the study found that only two states require groundwater monitoring of all coal ash ponds and only four states require groundwater monitoring of all coal ash landfills.74

In order to provide adequate protection from coal ash, the structural integrity of coal ash ponds must be sound, yet the study found that only seventeen states require regular inspections of the structural integrity of its coal ash ponds.75 The catastrophic threat of a coal ash dam collapsing, just like the TVA spill disaster in 2008, necessitates additional regulatory requirements to ensure

68. Gottlieb et al., supra note 9, at 7-8.
69. Evans et al., supra note 1, at 3.
70. Id. at 6.
71. Gottlieb et al., supra note 9, at 9; see also Evans et al., supra note 1, at 10 (arguing that inconsistent state regulations are not only giving unequal treatment among the different states, but also unequal treatment internally within each state).
72. Evans et al., supra note 1, at 3.
73. Id.; see also Gottlieb et al., supra note 9, at 17 (explaining how composite liners offer the best protection from coal ash ponds and describing how they are comprised of several layers of man-made plastics on top of clay). But Gottlieb also explains how composite liners have a finite lifespan and argues that a more long-term solution is needed. Id.
74. Evans et al., supra note 1, at 3. Evans also claims that improperly lined and unmonitored coal ash dumps are one of the main reasons coal ash toxins are seeping into groundwater. Id. at 5.
75. Id. at 3 (claiming that regularly monitoring coal ash dams is one of the best ways to prevent a structural break in that dam, which could result in a devastating spill).
the structural integrity of coal ash dams. Nonetheless, seven states do not even require coal ash dams to be designed or supervised by an engineer.

The inconsistencies throughout state regulations lead to unequal protection of communities from toxic waste. One effect of inconsistent state regulations is cross-border dumping, in which states receive coal ash from other states. For instance, residents in Perry County, Alabama filed a lawsuit in June 2011 against the operators of a county landfill that agreed to accept three million tons of coal ash recovered from the 2008 TVA. The residents allege that the coal ash dust and foul odor coming from the landfill have caused them injuries.

In October 2011, a Nevada Indian tribe filed a lawsuit seeking to prevent the expansion of a coal ash landfill at a Nevada power plant. The tribe filed the suit against the Southern Nevada Health District after it signed off on a permit to expand the landfill. The tribal community, which lives about one half mile south of the power plant landfill, claims they can smell and taste the coal ash when the wind blows south. They also claim that the coal ash metals are being washed into their nearby river system. The tribe, along with the non-profit group Sierra Club, is challenging the landfill expansion because they know that the expansion will increase the operations of the neighboring power plant. The tribal members blame the power plant and landfill for their medical ailments, including headaches, nosebleeds, and

76. Id. at 9.
77. Id.
79. Evans et al., supra note 1, at 10.
81. Id. (stating that the Plaintiffs are seeking damages for their claims of negligence, nuisance, trespass, emotional distress, and mental anguish, as well as injunctive relief).
83. Id.
84. Id.
85. Id.
86. Id.
respiratory problems.  
This Indian reservation is just one of the countless communities poisoned by coal ash. In response, the EPA finally decided to address coal ash hazards. In May 2010, the EPA announced it was considering two options for regulating coal ash and welcomed comments from the public on its proposed options. Under the first option, the EPA would regulate coal ash as a nonhazardous waste under Subtitle D of the Resource Conservation and Recovery Act. Under the second option, the EPA would regulate coal ash as a hazardous waste under Subtitle C of the RCRA. A hazardous waste designation would phase out wet coal ash ponds and require states to meet stricter requirements for lining, permitting, and monitoring coal ash landfills.

Many environmentalists and concerned citizens, however, have been disappointed in the EPA’s lengthy delay to move forward with its proposed federal regulatory options. The EPA blames its delay on having to sift through more than 450,000 public comments it received on its proposals, as well as having to deal with opposition from Congress.

B. Jobs in Jeopardy and Recycling Coal Ash Concerns

On October 14, 2011, the House of Representatives voted to approve the Coal Residues and Reuse and Management Act, H.R. 2273, a bill in favor of state regulations that would preempt the EPA from regulating coal ash as a hazardous waste. The

87. Id.; see also An Ill Wind: The Secret Threat of Coal Ash, EARTHJUSTICE, http://earthjustice.org/illwind (last visited Sept. 17, 2012) (arguing that the wind carries pollution from the power plant straight onto the Indian reservation, which is connected to high rates of heart, lung, and thyroid disease among tribe members). Some of the tribe members have been encouraged to work on green energy as a solution to stop the neighboring power plant. Id.
88. Brean, supra note 82.
89. Id.
90. Tucker, supra note 52.
91. Id. (explaining that under Subtitle D, it would be left up to the individual states to manage coal ash disposal).
92. Id.
93. Id.
94. Fellow, supra note 63.
95. Id.
representatives that voted for the bill fear that the EPA’s proposed regulations will drive up costs for energy consumers and would cause thousands of people to lose their jobs.97 Representatives in favor of the bill also believe that designating coal ash as a hazardous waste will place excessive uncertainty on the coal ash recycling industry.98

1. Congress’s Concern with Jobs Affected by Coal Ash

While H.R. 2273 will establish a framework for regulating coal ash, it will leave the inspection and monitoring of coal ash ponds and landfills up to the states without any intervention from the EPA.99 Most of the representatives that voted for the bill believe that not only will it protect jobs, but it will still protect the environment and public health because states’ experts will be in charge of regulating coal ash.100 However, a recent report from Tufts University provides convincing evidence that federal coal ash regulation would actually net gain 28,000 jobs.101 The study argues that the data that the House relied on, which shows that over 300,000 jobs will be lost due to federal regulation, is full of errors and flaws.102 Furthermore, the study provides that only one economist conducted the research used by the House, who himself admitted that his research was limited and that the data should be interpreted with caution.103

Representatives who voted against H.R. 2273 considered the

97. Sessions, supra note 96.
98. Id.
102. Ackerman, supra note 101, at 4.
103. Id. at 6.
Tufts University data and admitted that while they are concerned with losing jobs, they need more data and believe that creating jobs does not have to be at the expense of the public health or the environment.104

2. Congress’s Concern with Recycling Coal Ash

Another criticized effect of the proposed EPA legislation is that it would substantially harm the coal ash recycling industry because businesses would no longer want to recycle something that is designated as a hazardous material.105 Between 1999 and 2009, over 519 million tons of coal ash were recycled, which decreased more than 138 million tons of harmful emissions.106 Opponents of federal regulation argue, therefore, that it will hinder the coal ash recycling industry, which will ultimately increase the amount of coal ash stored in landfills.107 Days before H.R. 2273 passed in the House, thirty-eight organizations in the coal industry sent a letter to the Speaker of the House, the House Minority Leader, and the House Energy and Commerce Committee Chairman expressing their support for the bill due to fear of the excessive burdens EPA regulations would put on the coal ash recycling industry.108

However, the Tufts University study also reveals that regulating coal ash under Subtitle C of RCRA only applies to the disposal of coal ash, not its reuse.109 The study acknowledges the coal industry’s argument that federal regulation will attach a stigma to the reuse of coal, but points out that there are many products with a hazardous designation, including gasoline, household cleaners, nail polish, and more, that are commonly recycled, and whose markets have never been crippled with the stigma of being labeled as hazardous materials.110

104. Press Release, Office of Illinois Rep. Mike Quigley, supra note 100; see also Corporate Job Creation Claims Exaggerated, LEFT IN ALABAMA (Oct. 14, 2011), http://www.leftinalabama.com/diary/8802/corporate-job-creation-claims-exaggerated (arguing that Republicans are using the economy as a Trojan Horse to block regulation over coal ash).


106. Id.

107. Id. (arguing that a hazardous waste designation over coal ash “would eventually impact every industry and government sector that uses coal as a fuel source . . . ”); but see Stant & Evans, supra note 32 (arguing that businesses will actually have an incentive to recycle coal ash more due to the excessive costs of disposing coal ash otherwise). Some coal ash that is currently recycled, however, is dangerous to human health. Id.

108. Corporate Job Creation Claims Exaggerated, supra note 104.

109. Ackerman, supra note 101, at 7.

110. Id.
While H.R. 2273 allows the EPA to step in if a state is not meeting any federal baseline to regulate its coal ash, the bill does not permit the EPA to reverse the bad decisions a state makes that jeopardizes public health.\(^{111}\) House representatives who voted against H.R. 2273 primarily argue that the bill circumvents the federal government’s ability to create uniform standards in order to protect all American communities.\(^{112}\) Opponents of the bill also maintain that it is inadequate to leave decisions about toxic coal ash and its effects on public health in the hands of states because the states are allowed to waive the standards under Subtitle D of RCRA by merely deciding that the standards are not needed for coal ash management, including the obligation to clean up badly polluted drinking water.\(^{113}\)

Critics of H.R. 2273 also argue that the lack of federal regulation creates the issue of who will be the named state experts in charge of making decisions about coal ash.\(^{114}\) This is cause for concern because a few states do not have any experience in regulating coal ash.\(^{115}\)

C. The Undecided Future of Coal Ash

The Obama Administration opposes H.R. 2273 because it insufficiently addresses the risks of coal ash disposal and management.\(^{116}\) The Administration says that it encourages the

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114. Id.

115. *Id.* (elaborating with an example that in West Virginia, the toxic coal ash management decisions will be left up to the West Virginia Department of Environmental Protection, whose secretary has admitted he is not an expert in public health); see also Katie Greenhaw, *House Coal Ash Bill Is a Threat to Public Health*, OMB WATCH (Oct. 14, 2011), http://www.ombwatch.org/node/11881 (pointing out one of the greatest concerns with state experts is that most states have not even established standards to manage coal ash disposal).

economic uses of coal ash, but that it supports managing the coal ash facilities adequately in order to protect the public health and the environment. The Administration has not yet threatened to veto the bill, however, even though it openly opposes it.

A bill similar to H.R. 2273 is now pending in the Senate, and although the Senate has previously recognized the need for the EPA to “end decades of delay and utilize existing authority under the Resource Conservation and Recovery Act to comprehensively regulate coal combustion waste . . .”, a few senators have already endorsed the bill. While the country waits for the Senate to vote on this bill, coal ash is still being insufficiently regulated and continues to leach toxins into groundwater and poison

(naming one of organizations that oppose the bill to be the Natural Resources Defense Council, which argued that individuals’ health is doubly harmed by poisoning them first with burning coal and poisoning them again by leaking coal ash waste into their environment).

117. Press Release, The Natural Resources Defense Council, supra note 116 (stating how the Obama Administration believes that any approach to managing coal ash would need to include: (1) clear requirements that address the risks associated with the coal ash disposal and management, (2) consideration of the best science and data available, (3) adequate evaluation of structural integrity, (4) protective solutions for existing as well as new facilities, and (5) appropriate public information and comment, and that H.R. 2273 is deficient in these areas).

118. Id.; see also Press Release, EarthJustice, White House Strongly Opposes Congressional Effort to Scuttle Coal Ash Protections (Oct. 12, 2011), available at http://earthjustice.org/news/press/2011/white-house-strongly-opposes-congressional-effort-to-scuttle-coal-ash-protections (stating how the White House recognizes that H.R. 2273 ignores “cancer threats, the creation of 28,000 new jobs every year, and the protection of our drinking waters” and therefore it strongly opposes the House bill). The White House stated that “those who will pay the greatest price aren’t the polluters who would have to clean up their mess, it’s the communities families living near these toxic dumps.” Id.

communities.\textsuperscript{120}

IV. PROPOSAL

It is critical that the EPA’s proposed regulation under Subtitle C of RCRA be enacted as soon as possible in order to give the entire country the protection it deserves from coal ash waste.\textsuperscript{121} There is no question that the contaminants in coal ash cause serious health problems.\textsuperscript{122} Therefore, the EPA needs to be allowed to designate coal ash as a hazardous waste, but H.R. 2733 prevents it from doing so.\textsuperscript{123}

This section advocates that the EPA’s proposed federal regulation of coal ash as a hazardous waste under Subtitle C of RCRA should be enacted as soon as possible because it is the best method to protect all American communities from the toxic threat of coal ash.

A. “D” Is for Deficient Protection from Coal Ash

One of the EPA’s proposed regulations of coal ash is Subtitle D under RCRA, which would leave the responsibility of coal ash regulation entirely up to the states.\textsuperscript{124} However, Subtitle D is insufficient to protect communities from coal ash poisoning their water and air.\textsuperscript{125}

Not surprisingly, H.R. 2733 prevents the EPA from regulating coal ash under Subtitle C, but not under Subtitle D.\textsuperscript{126} Moreover, H.R. 2733 does not set up any legal standard for states to abide by in their disposal of coal ash, which will make it difficult for the EPA to determine that a state regulatory program is deficient.\textsuperscript{127} Neither the newly passed House bill nor the pending bill in the Senate allows the EPA to meaningfully evaluate states’ coal ash programs.\textsuperscript{128} Instead, they limit the EPA’s ability to review state

\textsuperscript{120} Evans et al., \textit{supra} note 1, at 4 (stating how the clock is ticking while communities continue to be unprotected from the serious dangers created by the improper disposal of coal ash); \textit{see also} Ismail, \textit{supra} note 19 (arguing that federal regulation of coal ash is needed as soon as possible because most of the states’ regulations are insufficient to prevent environmental damage and inadequate to protect the public health from serious problems that are the consequences from mismanagement over coal ash).

\textsuperscript{121} Ismail, \textit{supra} note 19.


\textsuperscript{123} \textit{Id.}

\textsuperscript{124} Evans et al., \textit{supra} note 1, at 4.

\textsuperscript{125} \textit{Id.}


\textsuperscript{127} \textit{Id.}

\textsuperscript{128} \textit{Id.}
regulation in multiple ways.  

Even though the EPA proposed regulation under Subtitle D under RCRA as an alternative to Subtitle C under RCRA, the EPA admits that Subtitle D regulation will leave most communities without protections from coal ash contamination.

B. “C” Is for Cleaning Up Coal Ash

On the other hand, if the EPA were to regulate coal ash as a hazardous waste under Subtitle C of RCRA, all coal ash facilities would need to meet stricter requirements governing the entire coal ash disposal process.

The EPA estimates that if Subtitle C under RCRA is not enacted, less than half the coal ash generated in this country will be adequately regulated by the states. Only regulation of coal ash under Subtitle C would ensure the greatest measure of public safety.

Furthermore, Subtitle C guarantees better protection from coal ash because it will regulate the entire life of coal ash residue, from its generation to its final disposal, and even to the closures of disposal sites.

The EPA proposed federal regulation options over coal ash due, in large part, to the TVA spill disaster. Subtitle C is the best response to the TVA disaster, as it manages the entire process of coal ash disposal, including the structural integrity of dams, and it answers all the questions the TVA spill disaster raised regarding spill prevention.

Thus, “[n]othing short of federally enforceable standards will protect our most vulnerable communities from continuing harm.”

129. Id.; see also Mark Harrison Foster, Jr., Note, Ash Holes: The Failure to Classify Coal Combustion Residuals as a Hazardous Waste Under RCRA and the Burden Borne by a Minority Community in Alabama, 12 VT. J. ENVTL. L. 735, 760 (2011) (stating the under Subtitle D of RCRA, in which coal ash would not be designated as a hazardous waste, the EPA “may act only if the handling, storage, treatment, transportation, or disposal of such wastes may present an imminent and substantial endangerment to health or the environment.

130. Evans et al., supra note 1, at 4.
131. Foster, Jr., supra note 129, at 759-60.
132. Evans et al., supra note 1, at 4.
133. Foster, Jr., supra note 129, at 758.
134. Id. at 759.
135. Id. at 758; see also Pearl, supra note 27, at 199 (claiming that “[i]t seems as if neither the federal nor the state governments took the coal ash impoundment problem seriously until the disaster in Tennessee.

136. Foster, Jr., supra note 129, at 759-60.
137. Evans et al., supra note 1, at 4.
C. Jobs at the Cost of Public Health

One of the biggest obstacles in the way of the EPA regulating coal ash as a hazardous waste is the high cost that the regulation will cause the coal ash industry.\textsuperscript{138} Heavy lobbying from the industry has delayed implementation of a federal regulation at least three years.\textsuperscript{139} Lobbyists argue that such costs will be passed down to electricity consumers.\textsuperscript{140} Representative David McKinley from West Virginia led the action to enact H.R. 2273.\textsuperscript{141} He found strong allies in the National Mining Association and Edison Electric Institute.\textsuperscript{142} Both McKinley and his industry allies are seeking to undermine the EPA’s authority to address the serious issue of coal ash entirely.\textsuperscript{143} When special interests convince decisions makers to let them bypass environmental standards, the consequences can be catastrophic.\textsuperscript{144} However, Subtitle C will have a negligible effect on operating costs, which would result in a minuscule increase to the consumer, at most.\textsuperscript{145} Therefore, “[a]ction must be taken regardless of the political muscle of these industries.”\textsuperscript{146}

Opponents to the EPA’s proposed regulations contend that the high costs to the industry will cut thousands of jobs.\textsuperscript{147}

\begin{itemize}
\item \textsuperscript{138} Foster, Jr., supra note 129, at 761; see also Regulatory Accountability Act of 2011: Hearing on H.R. 3010 Before the H. Comm. on the Judiciary, 112th Cong. 10-11 (2011) (statement of Sidney A. Shapiro University Distinguished Chair in Law, Wake Forest School of Law), available at http://judiciary.house.gov/hearings/pdf/Shapiro%202010%2520.pdf (arguing that studies show that regulations generally have no overall impact on the economy and jobs, and in fact sometimes they can actually add jobs).
\item \textsuperscript{139} Foster, Jr., supra note 129, at 761.
\item \textsuperscript{140} Stant & Evans, supra note 32.
\item \textsuperscript{142} Id.
\item \textsuperscript{143} Id.
\item \textsuperscript{144} Kerry Schumann, Coal Ash Spills Should Make Legislators Stop in Their Tracks, CAPITAL TIMES (Nov. 9, 2011), http://host.madison.com/ct/news/opinion/column/article_ef1ef2bd-5b4f-532a-813a-a3ff22a43b4a.html (arguing that the Wisconsin bluff collapse in October 2011 was caused in large part by legislators giving environmental exemptions, and if they do not stop letting polluters bypass critical environmental standards, there will be more coal ash devastation).
\item \textsuperscript{145} Stant & Evans, supra note 32.
\item \textsuperscript{146} Foster, Jr., supra note 129, at 761.
\item \textsuperscript{147} America’s Power, New Analysis Shows Economic Damage Caused by EPA Regulations: TRAIN Act Will Ensure Economic Consequences of EPA Rules of Analyzed (Sept. 22, 2011), http://www.americaspower.org/new-analysis-shows-economic-damage-caused-epa-regulations-train-act-will-ensure-economic (stating that the EPA has failed to fully analyze the economic impact of its proposed regulations and is moving too quickly to adopt an expensive regulation); see also NERA Economic Consulting, Potential Impacts
\end{itemize}
However, the data these opponents cite in support of their argument is limited, filled with errors, and refuted by other data.\textsuperscript{148} Regardless, the bills against the EPA’s proposed regulation protect utility profits and compromise public health.\textsuperscript{149}

One cost that opponents of Subtitle C have given little consideration to is the cost of health care required to treat those negatively affected by coal ash.\textsuperscript{150} The EPA proclaims that children’s exposure to toxic pollution costs the nation over $75 billion annually.\textsuperscript{151}

The EPA additionally asserts that cleaner air would significantly reduce the number of missed work days, bronchitis cases, heart attacks, aggravated asthma, and premature deaths.\textsuperscript{152} Moreover, minority and economically distressed communities usually suffer the greatest risk of health problems from coal ash.\textsuperscript{153} For the opponents afraid of increased costs associated with coal ash, the EPA reports that “for every dollar spent to reduce . . . pollution, Americans get $5-13 billion in health benefits . . . .”\textsuperscript{154} Yet, by limiting the EPA’s coal ash regulatory authority, citizens of all communities are left without representation in Washington to vocalize the hazards they face.\textsuperscript{155}

\textsuperscript{148} Ackerman, supra note 101, at 4-6.


\textsuperscript{151} Id.

\textsuperscript{152} Id.

\textsuperscript{153} Id.

\textsuperscript{154} Id.

\textsuperscript{155} Bill Utterback, Under New Name, Coal Ash Opponents Fight for Their Rights, TIMESONLINE (Oct. 29, 2011), http://www.timesonline.com/news/local_news/under-new-name-coal-ash-opponents-fight-for-their-rights/article_7e6747bb-841-56c1-9fe0-1f1273759cf.html (stating that without the EPA proposed legislation, not only will citizens not have a say in Washington, but it also puts all citizens living near coal ash in harm’s way because the corporations will be released from responsibility for contaminating the environment and risking people’s health).
D. A Voiceless Nation

Environmental justice calls for all individuals to have access and opportunity to environmental protections and benefits.\textsuperscript{156} Without uniform federal regulation, there are inconsistent regulations, which results in environmental injustice.\textsuperscript{157} “The states with the more lax coal ash regulations are the states where coal ash dumps are more likely to disproportionately impact low-income communities...”\textsuperscript{158}

The EPA finally gave all citizens a voice when it welcomed public comments about its proposed regulations over coal ash.\textsuperscript{159} If the EPA is denied the ability to federally regulate coal ash as a hazardous waste, the voice of the citizens who commented that coal ash must be classified as a hazardous waste will be ignored at the expense of their health and their environment.\textsuperscript{160} Accordingly, the importance of public health must supersede any unsupported and illegitimate industry fears.\textsuperscript{161}

V. CONCLUSION

There is simply too much at stake for coal ash to escape proper regulation as a hazardous waste.\textsuperscript{162} Coal ash is a toxic peril.\textsuperscript{163} The chemicals contained within it are associated with a myriad of health problems and environmental risks.\textsuperscript{164} Therefore, the nation cannot turn its back on those who need protection from coal ash, but instead must effectively regulate it under Subtitle C of RCRA so that the environment and public health can be

\begin{itemize}
\item \textsuperscript{156} Foster, Jr., \textit{supra} note 129, at 761.
\item \textsuperscript{157} Evans et al., \textit{supra} note 1, at 10.
\item \textsuperscript{158} \textit{Id.}; see also Foster, Jr., \textit{supra} note 129, at 764 (explaining that the coal ash waste has to end up somewhere, but when a minority, low-income community has to carry a lot of that burden, and their voices are silenced on the matter, there is environmental injustice).
\item \textsuperscript{159} \textit{See Fellow, supra} note 63 (explaining how the EPA has taken its time to carefully consider each comment it received from the public).
\item \textsuperscript{160} \textit{Id.}
\item \textsuperscript{162} \textit{Id.} (stressing that job creation and loss should always be carefully considered when evaluating a pending bill, but it is not the most important consideration, especially when it comes to public health, and the issue of job creation should not be the only basis when deciding on a bill).
\item \textsuperscript{164} Bryant, \textit{supra} note 161.
\end{itemize}
protected from all of coal ash’s hazards.165

“You flip on a light switch. The power does not come from that light switch. That power is generated somewhere else, and it impacts people.”166

165. *Id.* (explaining that the sole purpose of the EPA’s proposed regulation is to protect the public health and the environment); see also Winckler, *supra* note 163 (exclaiming that now is not the time for members of Congress to turn their backs on the hundreds of communities living near coal ash sites just to protect polluters).
