

**Testimony of
Abigail Dillen, Coal Program Director
Earthjustice
Before the Subcommittee on Environment and the Economy
Committee on Energy and Commerce
U.S. House of Representatives
Legislative Hearing on “Federal and State Partnership for Environmental
Protection Act of 2013;” the “Reducing Excessive Deadline Obligations Act of
2013;” and the “Federal Facility Accountability Act of 2013.”
May 17, 2013**

Chairman Shimkus and Members of the Subcommittee, thank you for the opportunity to present testimony on the proposed legislation entitled “Reducing Excessive Deadline Obligations Act of 2013.” This bill would amend two sections that now establish deadlines in the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Emergency Response Compensation and Liability Act (CERCLA). My testimony today addresses Section 2 of the bill, which would amend RCRA Section 2002(b), 42 U.S.C. §6912.

I am Abigail Dillen, the director and managing attorney of the coal program at Earthjustice, a national non-profit, public interest law firm dedicated to protecting natural resources and wildlife, and to defending the right of all people to a healthy environment.

RCRA section 2002(b) provides for periodic review of the regulations implementing RCRA and for revisions of those regulations, if the Environmental Protection Agency (“EPA”) concludes that revisions are “necessary.” 42 U.S.C. §6912. This provision strikes a careful balance, ensuring that regulations effectively address evolving waste management issues while leaving EPA broad discretion to manage RCRA programs and determine regulatory priorities. This bill would upset that balance in a misguided effort to derail three parallel lawsuits that were filed to compel an EPA

decision on badly needed regulation of coal ash and other wastes from coal-fired power plants. As EPA acknowledges, regulation of coal ash is already long overdue, but the agency continues to delay issuance of final regulations. This delay is harming the many communities around the country that are contending with water contamination, fugitive ash dust, and the risk of catastrophic collapse of ash impoundments in the absence of effective safeguards. At the same time, ongoing regulatory uncertainty is bad for business according to the coal ash recycling industry. That is why the ash recycling industry and conservation groups are both suing under Section 2002(b) to prompt action by EPA. This bill would deliberately undercut those lawsuits, leaving coal ash unregulated indefinitely. More broadly, it would upset a 37-year-old statutory scheme for updating RCRA that has never proven to be unworkable.

I. THE BILL IMPROPERLY TARGETS A SINGLE COURT CASE

The sponsors of the bill seek, on behalf of the coal industry, to amend RCRA to remove the basis for an ongoing court case that may finally put EPA on a reasonable schedule to establish safeguards for coal ash disposal. The bill's supporters claim that "current law requires EPA to review or promulgate regulations within timeframes that have proven unworkable" and that this provision has "only led to lawsuits for failure to meet these deadlines." <http://energycommerce.house.gov/press-release/subcommittee-unveils-group-bills-modernize-federal-environmental-law-and-increase>. However, in the 37 years since Congress established the periodic review requirement in section 2002(b), a total of three lawsuits have been filed — one by conservation groups represented by Earthjustice and two by the leading companies that market coal ash to make

commercially valuable building products.¹ All three of these lawsuits, which are being heard in a single consolidated case, are relying on RCRA Section 2002(b) to elicit a long overdue decision from EPA on regulation of coal ash. The transparent intent of this bill is to undercut these lawsuits and prevent a federal court from imposing needed deadlines: (1) for coal ash regulations that EPA has acknowledged are needed; and (2) for a decision on the threshold question whether coal ash should be regulated as a hazardous waste under RCRA subtitle C.

The bill purportedly is designed to address logistical concerns raised by the requirement that regulations be reviewed and revised when necessary every three years. However, it is not the case that “[t]he three year deadline has proven to be impracticable” and that “missing the statutory deadline will lead to litigation in which the EPA may be forced to establish unworkable deadlines for the completion of the review/revision process.” <http://docs.house.gov/meetings/IF/IF18/20130517/100845/HHRG-113-IF18-20130517-SD003.pdf>. Given that Section 2002(b) leaves EPA broad discretion in structuring and implementing the required regulatory review and in undertaking any revisions that are necessary — again, a question that is left to the agency’s discretion — there is no reason why the deadline is inherently impracticable and no evidence that it has proven to be impracticable in the past.

¹ *Appalachian Voices, et al. v. Jackson*, Civ. No. 1:12-cv-00523-RBW (D.D.C. filed on April 5, 2012); *Headwaters Resources, Inc. v. Jackson*, No. 1:12-cv-00585-RBW (D.D.C. filed on April 13, 2012); *Boral Material Technologies, Inc. v. Jackson*, No. 1:12-cv-00629-RBW (D.D.C. filed on April 20, 2012) (attached).

Similarly, there is no history of litigation under Section 2002(b) that gives credence to the stated concern that EPA will be subjected to many, if any, additional lawsuits, much less that the Courts in adjudicating such suits will subject the agency to unreasonable schedules. In any deadline enforcement case, the agency has ample opportunity to advocate for a reasonable schedule, and there is no reason to believe that the courts will impose unworkable deadlines over the agency's objection.

Further, EPA is not facing litigation over narrowly missed deadlines. As noted above, the *only* three lawsuits in which parties have ever sought to enforce Section 2002(b) are all going forward together in a single proceeding that concerns the regulation of coal ash, and that proceeding arises out of an extraordinary and egregious history of agency delay. In 2000, following years of study in the 1990s, EPA concluded that the establishment of national standards under the RCRA subtitle D regulations was necessary to "ensure a consistent level of protection of human health and the environment."² But in the 13 years since EPA made that formal finding, EPA has yet to undertake any of the requisite regulatory revisions that are needed to end the unsafe dumping of coal ash.

In response to the legal claims put forward by conservation and industry groups under Section 2002(b), EPA has now acknowledged that "it has an obligation to conclude review, and any necessary revision, of certain regulations within 40 C.F.R. Part 257 pertaining to coal combustion residuals."³ However, the agency has expressly declined to suggest *any* schedule for concluding this review and revision process. Absent the

² U.S. EPA, *Notice of Regulatory Determination on Wastes From the Combustion of Fossil Fuels*, 65 Fed. Reg. 32,214, 32,215 (May 22, 2000)

³ EPA's Combined Opposition to Plaintiffs' Motions for Summary Judgment, and Memorandum in Support of EPA's Cross-Motion for Summary Judgment in Case Nos. 1:12-cv-00585 and 1:12-cv-00629, and for Partial Summary Judgment and Order to Govern Further Proceedings in Case No. 1:12-cv-00523, No. 1:12-cv-00523 (filed October 11, 2012).

reasonable requirements for regulatory review and revision established by Section 2002(b), EPA's delay may well continue indefinitely.

As discussed below in detail, delay poses an unacceptable threat to the environment and perpetuates regulatory uncertainty that is unacceptable to the ash recycling industry. In short, this bill would eliminate a statutory provision that has operated for 37 years without incident in order to exacerbate the problems caused by EPA's inexcusable delay in regulating coal ash.

II. THE PRESSING NEED FOR COAL ASH REGULATION

More than twenty-nine million tons, approximately thirty-nine percent of the toxin-laden coal ash that is disposed annually in the U.S., is placed in surface impoundments, the majority of which (about sixty-two percent) are unlined or inadequately lined.⁴ As of 2012, EPA had identified approximately 1,000 active and retired coal ash surface impoundments and more than 300 active and retired coal ash landfills in the U.S.⁵ About thirty-two percent of active landfills are also unlined, as well as eighty-two percent of the nation's retired coal ash landfills.⁶ The exact number of structural fills (often unlined gravel quarries) and fills in active and abandoned coal mines (always unlined) is not known, but industry reports that 9.1 million tons of coal ash

⁴ U.S. EPA, *Hazardous and Solid Waste Management System; Identification and Listing of Special Wastes; Disposal of Coal Combustion Residuals From Electric Utilities*, 75 Fed. Reg. 35,128, 35,151 (June 21, 2010).

⁵ See U.S. EPA, Information Request Response from Electric Utilities, Database of Survey Responses, Database Results (Apr. 12, 2012), available at <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys/index.htm>; U.S. EPA, Regulatory Impact Analysis for EPA's Proposed RCRA Regulation of Coal Combustion Residues (CCR) Generated by the Electric Utility Industry 63 (Apr. 2010), ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-0003 (filed May 6, 2010); see also U.S. EPA, Response to Freedom of Information Act Request (June 26, 2012) (attached to Lee Decl., Ex. 3).

⁶ See *id.*

were placed in structural fills in 2010,⁷ and EPA has acknowledged that in 2008, 10.5 million tons of coal ash were placed in mines.⁸ According to the U.S. Department of Energy in 1993, there may also be as many as 750 additional “retired” coal ash impoundments and landfills.⁹

Toxic metals pollution from coal ash commonly occurs when leaks, seeps, and other failures in surface impoundments, landfills, mines, and fill projects allow coal ash-contaminated water to drain into groundwater, lakes, rivers and streams, either directly or when these surface water bodies are hydrologically connected to surface water.¹⁰ Toxic pollution also occurs when coal ash is placed directly into contact with groundwater.¹¹ EPA and environmental groups have identified 156 sites in thirty-four states where coal ash has polluted groundwater and/or surface water.¹² In addition, at twenty-nine more

⁷ See American Coal Ash Association, 2010 Coal Combustion Product (CCP) Production & Use Survey Report, *available at* http://acaa.affiniscape.com/associations/8003/files/2010_CCP_Survey_FINAL_102011.pdf (attached to Lee Decl., Ex. 4).

⁸ See 75 Fed. Reg. at 35,151.

⁹ See U.S. Dept. of Energy, Coal Combustion Waste Management Study ES-1 (Feb. 1993), *available at* http://www.fossil.energy.gov/programs/powersystems/pollutioncontrols/coal_waste_report.pdf.

¹⁰ U.S. EPA, Office of Solid Waste and Emergency Response, Office of Resource Conservation and Recovery, Human and Ecological Risk Assessment of Coal Combustion Wastes (draft) 2-7-2-11 (April 2010), ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-0005 (May 6, 2010); Nat’l Research Council of Nat’l Academies, Managing Coal Combustion Residues in Mines 81–104 (2006), *available at* http://books.nap.edu/catalog.php?record_id=11592#toc (attached to Lee Decl., Ex. 1).

¹¹ *Id.*

¹² See 75 Fed. Reg. at 35,234–39 (Table of EPA’s Proven Damage Cases); U.S. EPA, Office of Solid Waste, Coal Combustion Waste Damage Case Assessments (July 9, 2007), *available at* http://graphics8.nytimes.com/packages/pdf/national/07sludge_EPA.pdf (attached to Lee Decl., Ex. 5); Comments of Earthjustice, Environmental Integrity Project, Sierra Club, Natural Resources Defense Council, Southern Alliance for Clean Energy, Southern Environmental Law Center, Physicians for Social Responsibility, ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-6315 (filed Nov. 19, 2010) (“Earthjustice Comments”) (citing Environmental Integrity Project, Earthjustice, Out of Control: Mounting Damages from Coal Ash Waste Sites (Feb. 24, 2010), *available at* earthjustice.org/library/reports/ej-eipreportout-of-control-final.pdf; Environmental Integrity Project, Earthjustice, Sierra Club, In Harm’s Way: Lack of Federal Coal Ash Regulations Endangers Americans and Their Environment (Aug. 26, 2010), *available at* <http://www.earthjustice.org/sites/default/files/files/report-in-harms-way.pdf>); Environmental Integrity Project, Risky Business: Coal Ash Threatens America’s Groundwater Resources at 19 More Sites (Dec. 12, 2011), *available at* <http://www.environmentalintegrity.org/documents/121311EIPThirdDamageReport.pdf> (attached to Lee Decl., Ex. 6).

facilities in sixteen additional states, electric generating utilities have admitted finding coal ash contaminants in groundwater at levels that exceed federal drinking water standards or state groundwater criteria.¹³ In fact, levels of toxic metals such as arsenic in groundwater near coal ash disposal sites have been found to exceed EPA's threshold for hazardous waste.¹⁴ Due to the large volume of coal ash disposed and the frequent absence of liners at impoundments and landfills, it is likely that many more sites have been contaminated, but, since the majority of coal ash disposal sites are not adequately monitored, the release of contaminants may easily go undetected. EPA has estimated that, in 2004, ten percent of coal ash landfills and fifty-eight percent of surface impoundments lacked groundwater monitoring.¹⁵ Where monitoring is in place, dangerous levels of contamination have been found.¹⁶ In fact, EPA has listed four contaminated coal ash disposal sites on the National Priorities List, the Agency's list of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. §§ 9601 *et seq.*).¹⁷

Fundamentally, the widespread release of toxic contaminants from coal ash disposal sites can be attributed to the absence of federal regulations requiring the use of effective pollution controls such as liners, caps, groundwater monitoring systems, leachate collection systems, and engineering standards for structural stability. A number of states require some controls, but basic safeguards are often missing. For example,

¹³ U.S. EPA, Response to Freedom of Information Act (Mar. 15, 2012) (attached to Lee Decl., Ex. 7).

¹⁴ U.S. EPA, Characterization of Coal Combustion Residues from Electric Utilities – Leaching and Characterization Data, EPA-600/R-09/151, viii–xiv (Dec. 2009), ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-0329 (filed May 18, 2010).

¹⁵ See 75 Fed. Reg. at 35,151.

¹⁶ See *id.* at 35,172.

¹⁷ See *id.*; U.S. EPA, Superfund, Glossary, available at <http://www.epa.gov/superfund/programs/reforms/glossary.htm>.

according to EPA, based on data submitted to the agency by the Association of State and Territorial Solid Waste Management Officials (“ASTSWMO”) on a subset of coal ash-generating states, thirty-six percent of the states surveyed do not have minimum liner requirements for coal ash landfills, and sixty-seven percent do not have liner requirements for coal ash surface impoundments.¹⁸ In addition, nineteen percent of the states surveyed do not have minimum groundwater monitoring requirements for landfills and sixty-one percent of the states do not have groundwater monitoring requirements for surface impoundments.¹⁹ Lastly, EPA noted that only thirty-six percent of the states surveyed regulate the structural stability of surface impoundments, and only thirty-one percent of the states require financial assurance for surface impoundments.²⁰ In sum, the majority of coal ash-generating states do not require all landfills and ponds to monitor groundwater to detect toxic releases, to install leachate collection systems to control contaminant migration, to take timely corrective action to remediate contamination, to maintain financial assurance to pay for cleanup and closure, and to regularly inspect coal ash ponds for leaks and structural stability.²¹

A. Health Risks Posed by Exposure to the Toxic Components of Coal Ash

EPA has determined that people living near unlined coal ash surface impoundments have as much as a one in fifty chance of getting cancer from drinking

¹⁸ Association of State and Territorial Solid Waste Management Officials, Letter to Matt Hale, Director, ORCR, US EPA, CCW Phase I Survey Report 2 (Apr. 1, 2009), *available at* http://www.astswmo.org/Files/Policies_and_Publications/Cross-program/Coal_Combustion_Residuals/ASTSWMO_CCW_PhaseI_Survey_Report.pdf; 75 Fed. Reg. at 35,133.

¹⁹ 75 Fed. Reg. at 35,133.

²⁰ *Id.*

²¹ Earthjustice Comments, ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-6315 (filed Nov. 19, 2010); *see also* U.S. EPA, Regulatory Impact Analysis for EPA’s Proposed RCRA Regulation of Coal Combustion Residues (CCR) Generated by the Electric Utility Industry 43–50 (Apr. 30, 2010), ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-0010 (filed May 6, 2010).

water contaminated by arsenic²²—a higher cancer risk than that associated with smoking a pack of cigarettes a day.²³ This risk is 2,000 times greater than what EPA has identified as the target level of protection for human health, an incremental lifetime cancer risk of no greater than one in 100,000.²⁴

In addition to the risks posed by exposure to arsenic, EPA has identified significant risks to human health and ecological receptors from exposure to antimony, boron, cadmium, lead, molybdenum, selenium, and thallium released from unlined or clay-lined surface impoundments and landfills.²⁵ Arsenic is a known human carcinogen that causes cancer of the skin, bladder, and lungs.²⁶ Boron exposure can cause stomach, intestinal, kidney, liver, and brain damage, negative effects on male reproduction, and even death.²⁷ Cadmium exposure can result in diarrhea, stomach pains, severe vomiting, bone fracture, adverse reproductive effects, nerve damage, and immune system damage. 75 Fed. Reg. at 35,169.²⁸ Chromium is a known carcinogen and may also cause irritation and ulcers of the stomach and small intestine, sperm damage, and skin ulcers.²⁹ Lead is a very potent neurotoxicant that can cause developmental delays, hypertension, reduced

²² U.S. EPA, Human Health and Ecological Risk Assessment of Coal Combustion Wastes (draft) (Apr. 2010), ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-0005 (filed May 6, 2010).

²³ Earthjustice Comments, ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-6315 (filed Nov. 19, 2010), Appx. E (Comments of Jeffrey A. Foran, Ph.D. on the Draft U.S. EPA Human Health and Ecological Risk Assessment of Coal Combustion Wastes 2 (Feb. 5, 2008)).

²⁴ See 75 Fed. Reg. at 35,145. U.S. EPA, Human Health and Ecological Risk Assessment of Coal Combustion Wastes (draft) ES-5, ES-8 (Apr. 2010), ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-0005 (filed May 6, 2010).

²⁵ *Id.* at ES-4 to ES-10.

²⁶ 75 Fed. Reg. at 35,168.

²⁷ U.S. EPA, Integrated Risk Information System: Boron and Compounds (CASRN 7440-42-8), <http://www.epa.gov/iris/subst/0410.htm>; International Programme on Chemical Safety, Environmental Health Criteria 204: Boron (1998), <http://www.greenfacts.org/en/boron/1-3/boron-5.htm#0p0>.

²⁸ U.S. EPA, Integrated Risk Information System: Cadmium (CASRN 7440-43-9), <http://www.epa.gov/iris/subst/0141.htm>; Agency for Toxic Substances & Disease Registry, Toxicological Profile for Cadmium, <http://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=48&tid=15>.

²⁹ 75 Fed. Reg. at 35,169; U.S. EPA, Integrated Risk Information System: Chromium (VI) (CASRN 18540-29-9), <http://www.epa.gov/iris/subst/0144.htm>; Agency for Toxic Substances & Disease Registry, Toxicological Profile for Chromium, (CAS ID #: 7440-47-3), <http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=17>.

hearing acuity, impaired hemoglobin synthesis, and male reproductive impairment.³⁰ Mercury is also a neurotoxicant, and exposure can result in developmental abnormalities, reduced IQ, mental retardation, and behavioral problems.³¹ Methylmercury can accumulate to high concentrations in fish and become a major pathway for human exposure to mercury.³² Molybdenum exposure can result in excess fatigue, headaches and joint pains, and chronic ingestion can cause diarrhea, slowed growth, low birth weight, infertility, and lung, kidney, and liver damage.³³ Exposure to high levels of thallium can result in adverse nervous system effects such as numbness of extremities, and ingestion can lead to vomiting, diarrhea, and temporary hair loss, along with adverse effects on the lungs, heart, liver, kidneys, and reproductive system.³⁴

Other metals and compounds present in coal ash pose additional risks to humans and aquatic organisms. Selenium, for example, is a bioaccumulative pollutant that is harmful to freshwater fish and other aquatic life at very low levels.³⁵ Selenium at more elevated levels impedes the growth and survival of juvenile fish, and offspring of adult

³⁰ 75 Fed. Reg. at 35,169. U.S. EPA, Integrated Risk Information System: Lead and compounds (inorganic) (CASRN 7439-92-1), <http://www.epa.gov/iris/subst/0277.htm>; Agency for Toxic Substances & Disease Registry, Toxicological Profile for Lead (CAS ID #: 7439-92-1), <http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=22>.

³¹ U.S. EPA, Integrated Risk Information System: Mercury, elemental (CASRN 7439-97-6), <http://www.epa.gov/iris/subst/0370.htm>; Agency for Toxic Substances & Disease Registry, Toxicological Profile for Mercury (CAS ID #: 7439-97-6), <http://www.atsdr.cdc.gov/substances/toxsubstance.asp?toxid=24>.

³² *Id.*

³³ U.S. EPA, Integrated Risk Information System: Molybdenum (CASRN 7439-98-7), <http://www.epa.gov/iris/subst/0425.htm>.

³⁴ 75 Fed. Reg. at 35,169; U.S. EPA, Integrated Risk Information System: Thallium (I), soluble salts; CASRN Various, <http://www.epa.gov/iris/subst/1012.htm>; Agency for Toxic Substances & Disease Registry (ATSDR), U.S. Dep't of Health & Human Services, ToxFAQs for Thallium (Sept. 1995), <http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=308&tid=49>.

³⁵ 75 Fed. Reg. at 35,172; Nat'l Research Council, Nat'l Academies, *Managing Coal Combustion Residues in Mines 81–104* (2006), available at http://books.nap.edu/catalog.php?record_id=11592#toc (attached to Lee Decl., Ex. 1); see also Rowe C.L., Hopkins W.A., Congdon J.D., *Ecotoxicological Implications of Aquatic Disposal of Coal Combustion Residues in the United States: A Review, Environmental Monitoring and Assessment* 80: 207–276 (2002).

fish that were exposed to excessive selenium suffer skeletal deformities.³⁶ Selenium can decimate fish populations and make the surviving species unsafe to eat.³⁷ In humans, exposure to selenium can cause hair and fingernail loss, numbness in extremities, and problems with circulation.³⁸ EPA has documented widespread ecosystem damage in water bodies by selenium contamination from coal ash dumps, including the killing of nearly all species of fish from one impacted lake, the deformity or death of fish and amphibians in numerous streams and rivers, and the restriction of fishing due to high selenium levels in fish in several reservoirs.³⁹

B. Air Pollution from Improper Disposal of Coal Ash

In addition to the health risks associated with exposure to coal ash constituents that contaminate water supplies, EPA has also determined that the disposal of coal ash in landfills presents a risk of inhalation of particulate matter and that the National Ambient Air Quality Standards (“NAAQS”) for particulate matter can be violated at such landfills.⁴⁰ EPA has concluded that there is a “strong likelihood that dry-handling [of coal ash] would lead to the NAAQS being exceeded absent fugitive dust controls.”⁴¹

Particle pollution, especially fine particles, contains microscopic solids or liquid droplets

³⁶ Lemly, A.D., *Wildlife and the Coal Waste Policy Debate: Proposed Rules for Coal Waste Disposal Ignore Lessons from 45 Years of Wildlife Poisoning*, Environmental Science and Technology (July 27, 2012), available at <http://pubs.acs.org/doi/abs/10.1021/es301467q>; Lemly A.D., *Coal Combustion Waste Is a Deadly Poison to Fish* (Dec. 8, 2009) (prepared for United States Office of Management and Budget Washington, D.C.); Lemly A.D., *Symptoms and implications of selenium toxicity in fish: the Belews Lake case example*, *Aquatic Toxicology* 57 (2002) (attached to Lee Decl., Ex. 8).

³⁷ *Id.*

³⁸ U.S. EPA, *Integrated Risk Information System: Selenium and compounds* (CASRN 7782-49-2); Agency for Toxic Substances & Disease Registry, *Toxicological Profile for Selenium* (CAS ID #: 7782-49-2), available at <http://www.atsdr.cdc.gov/toxprofiles/tp.asp?id=153&tid=28>.

³⁹ See 75 Fed. Reg. at 35,234–39 (Table of EPA’s Proven Damage Cases); U.S. EPA, Office of Solid Waste, *Coal Combustion Waste Damage Case Assessments* (July 9, 2007), available at http://graphics8.nytimes.com/packages/pdf/national/07sludge_EPA.pdf.

⁴⁰ U.S. EPA, *Inhalation of Fugitive Dust: A Screening Assessment of the Risks Posed by Coal Combustion Waste Landfills* (draft) 11 (Sept. 2009), ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-0142 (filed May 13, 2010).

⁴¹ *Id.* 11–12.

that can lodge deep into the lungs and cause serious health problems.⁴² Numerous scientific studies have linked particle pollution exposure to a variety of problems, including decreased lung function, asthma, bronchitis, irregular heartbeat, and premature death in people with heart or lung disease.⁴³

In short, a wealth of data, much of which EPA itself compiled, demonstrates the serious and increasing risks posed by coal ash to air and water quality and consequently to human health and ecosystems that depend on a clean environment. Such data include extensive documentation of damage that has already occurred to water quality near coal ash dump sites across the country.⁴⁴ *See* 75 Fed. Reg. at 35,234–39 (Table of EPA’s Proven Damage Cases).

C. Threats Posed by the Failure of Coal Ash Impoundments

Structural failure of the earthen impoundments that hold back millions of tons of coal ash around the country poses another catastrophic risk to human health and the environment. Data are available for nearly 700 of the nation’s more than 1,000 coal ash impoundments.⁴⁵ Most of these documented ash impoundments are very large (over twenty-five feet high), and over eighty percent of the ponds are more than twenty-six

⁴² U.S. EPA, Fine Particle (PM_{2.5}) Designations, www.epa.gov/pmdesignations/basicinfo.htm (last visited Aug. 8, 2012).

⁴³ *Id.*

⁴⁴ Earthjustice Comments, ORCR Docket ID No. EPA-HQ-RCRA-2009-0640-6315 (filed Nov. 19, 2010) (citing Environmental Integrity Project, Earthjustice, Out of Control: Mounting Damages from Coal Ash Waste Sites (Feb. 24, 2010), *available at* earthjustice.org/library/reports/ej-eipreportout-of-control-final.pdf; Environmental Integrity Project, Earthjustice, Sierra Club, In Harm’s Way: Lack of Federal Coal Ash Regulations Endangers Americans and Their Environment (Aug. 26, 2010), *available at* <http://www.earthjustice.org/sites/default/files/files/report-in-harms-way.pdf>); Environmental Integrity Project, Risky Business: Coal Ash Threatens America’s Groundwater Resources at 19 More Sites (Dec. 12, 2011), *available at* <http://www.environmentalintegrity.org/documents/121311EIPThirdDamageReport.pdf> (attached to Lee Decl., Ex. 6).

⁴⁵ U.S. EPA, Information Request Responses from Electric Utilities, Database of Survey Responses, Database Results (Apr. 12, 2012), *available at* <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys/index.htm>.

years old, with nearly 150 ponds built over forty years ago.⁴⁶ Many of the impoundments were not designed or constructed, much less currently maintained, by professional engineers.⁴⁷ About fifty coal ash impoundments in the U.S. are rated “high hazard” according to the National Inventory of Dams criteria.⁴⁸ Dams assigned the high hazard classification are those where failure or mis-operation is likely to cause loss of human life.⁴⁹ Another 181 coal ash impoundments are rated “significant hazard,” which means that a dam failure or mis-operation is likely to cause economic loss, environmental damage, disruption of lifeline facilities, or other adverse impacts.⁵⁰

Leading up to a catastrophic coal ash spill in Tennessee, between 2002 and 2008, there were four major spills of coal ash from surface impoundments at three plants, including a two million gallon spill at Plant Bowen in Euharlee, Georgia,⁵¹ a release of over 100 million gallons from the Martin’s Creek Power Plant in Martins Creek, Pennsylvania,⁵² and two spills of thirty million gallons each at the Eagle Valley Generating Station in Martinsville, Indiana.⁵³

On December 22, 2008, a six-story high earthen dam impounding approximately nine million tons of coal ash collapsed at the Tennessee Valley Authority (“TVA”)

⁴⁶ *Id.*

⁴⁷ *Id.*

⁴⁸ U.S. EPA, Coal Combustion Residuals Impoundment Assessment Reports, Summary Table for Impoundment Reports (June 27, 2012), *available at* <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys2/index.htm>. However, if state rating criteria are taken into account, the number of high hazard impoundments is much greater. The North Carolina Department of Environment and Natural Resources documents 29 high hazard coal ash impoundments in North Carolina alone.

⁴⁹ 75 Fed. Reg. at 35,130.

⁵⁰ *Id.*; U.S. EPA, Information Request Responses from Electric Utilities, Database of Survey Responses, Database Results (Apr. 12, 2012), *available at* <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys/index.htm>.

⁵¹ *See* 75 Fed. Reg. at 35,237; U.S. EPA, Information Request Responses from Electric Utilities, Database of Survey Responses, Database Results (Apr. 12, 2012), <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys/index.htm>.

⁵² *See* 75 Fed. Reg. at 35,232, 35,238.

⁵³ *Id.*

Kingston Fossil Plant, flooding 300 acres of river and adjacent properties with one billion gallons of toxic sludge.⁵⁴ The torrent of waste damaged numerous houses, carrying one house forty feet downhill with a man trapped inside.⁵⁵ The volume of waste released by the disaster was five times larger than the BP oil spill of 2010 and constitutes the largest waste spill in U.S. history. The disaster destroyed the local community, permanently displaced dozens of families, and required a multi-year cleanup, which is still not complete and is currently estimated to cost more than \$1.2 billion.⁵⁶

Less than two weeks after the Kingston disaster, another major coal ash spill occurred in Stevenson, Alabama at another TVA coal-burning power plant, the Widows Creek Fossil Plant. On January 9, 2009, a discharge pipe dislodged from a holding pond and released approximately 5,000 cubic yards of flue gas desulfurization sludge into Widows Creek, which flows into the Tennessee River.⁵⁷

Yet another major coal ash spill occurred on October 31, 2011, when 25,000 cubic yards of coal ash from a decades-old landfill on a bluff above Lake Michigan collapsed at a We Energies' power plant in Oak Creek, Wisconsin.⁵⁸ The collapse left a debris field 120 yards long and eighty yards wide at the foot of the bluff and resulted in thousands of tons of coal ash fouling Lake Michigan and its shoreline.⁵⁹

Inspections by EPA between 2009 and 2011 of the nation's coal ash ponds confirmed that many more ponds pose a similar danger to human health and the

⁵⁴ 75 Fed. Reg. at 35,232–33.

⁵⁵ Shaila Dewan, *Tennessee Ash Flood Larger Than Initial Estimate*, N.Y. TIMES, Dec. 27, 2008, at A10, available at http://www.nytimes.com/2008/12/27/us/27sludge.html?_r=2 (attached to Lee Decl., Ex. 9).

⁵⁶ Shaila Dewan, *E.P.A.'s Plan to Regulate Coal Ash Draws Criticism*, N.Y. TIMES, May 5, 2010, A13, available at <http://www.nytimes.com/2010/05/05/us/05coal.html> (attached to Lee Decl., Ex. 10).

⁵⁷ See 75 Fed. Reg. at 35,233.

⁵⁸ Wisconsin Dep't of Natural Resources, Summary of Bluff Failure: We Energies Oak Creek Power Plant (Dec. 14, 2011), <http://dnr.wi.gov/topic/Spills/documents/oakcreek/nrbpresentation.pdf>.

⁵⁹ *Id.*

environment.⁶⁰ EPA gave 106 impoundments (approximately twenty-five percent of the 425 ponds inspected) a “poor” rating, indicating that repairs were needed and/or documentation was not available to confirm the structural stability of the impoundments.⁶¹ Almost two-thirds of the poor-rated ponds (sixty-five) were high-hazard or significant-hazard impoundments.⁶²

As all of this information makes clear, overdue regulation of coal ash is needed as soon as possible to address widespread water and air pollution problems as well as the catastrophic risks of ash impoundment failures.

Conclusion

This Congress should not take the extreme step of amending RCRA, which has not been amended in 29 years, to undercut a single court case in which both conservation and industry plaintiffs are seeking regulatory certainty. We oppose this bill as a grossly inappropriate exercise of legislative power that would harm thousands of American communities by delaying regulation of the second largest toxic waste stream in the nation.

This bill is one of several bills that have been proposed to prevent EPA from regulating coal ash. Just a few weeks ago, this subcommittee held a hearing on the “Coal Ash Recycling and Oversight Act of 2013,” a legislative proposal that would prevent EPA from completing its coal ash rulemaking. We vehemently oppose both of these efforts to stop a long overdue rule that is essential to protecting public health and the environment and preventing loss of life and devastation from coal ash dam failures.

⁶⁰ U.S. EPA, Coal Combustion Residuals Impoundment Assessment Reports, Summary Table for Impoundment Reports (June 27, 2012), <http://www.epa.gov/osw/nonhaz/industrial/special/fossil/surveys2/index.htm>.

⁶¹ *Id.*

⁶² *Id.*