#### ONE HUNDRED NINETEENTH CONGRESS

# Congress of the United States

# House of Representatives COMMITTEE ON ENERGY AND COMMERCE

2125 RAYBURN HOUSE OFFICE BUILDING

WASHINGTON, DC 20515-6115

Majority (202) 225-3641 Minority (202) 225-2927

MEMORANDUM June 24, 2025

TO: Members of the Subcommittee on Environment

FROM: Committee Majority Staff

RE: Hearing titled "A Decade Later: A Review of Congressional Action,

Environmental Protection Agency Rules, and Beneficial Use Opportunities for

Coal Ash."

# I. Introduction

The Subcommittee on Environment will hold a hearing on Thursday, June 26, 2025, at 10:15 a.m. (ET) in 2322 Rayburn House Office Building. The hearing is entitled, "A Decade Later: A Review of Congressional Action, Environmental Protection Agency Rules, and Beneficial Use Opportunities for Coal Ash." The hearing will focus on the regulation of—and beneficial use opportunities for—coal combustion residuals under the Resource Conservation and Recovery Act.

# II. WITNESSES

- Dave Glatt, Director, North Dakota Department of Environmental Quality;
- Michelle Freeark, Executive Director of Regulatory Affairs and Corporate Services, Arizona G&T Cooperatives (on behalf of the National Rural Electric Cooperative Association);
- Tom Adams, Executive Director, American Coal Ash Association; and
- Lisa Evans, Senior Attorney, Earthjustice (Minority Witness).

#### III. BACKGROUND

# A. Coal Combustion Residuals

Coal combustion residuals (commonly referred to as coal ash or CCR) is the byproduct of burning coal in coal-fired power plants. There are four main kinds of CCR:

• Fly ash: fine powder material made mostly of silica;

- <u>Bottom ash</u>: course ash that is heavier than fly ash and collects in the bottom of the coal furnace;
- Boiler slag: molten bottom ash that turns into smooth pellets when cooled with water; and
- <u>Flue gas desulfurization (FGD) material</u>: material leftover from the process of reducing sulfur dioxide emissions.

The American Coal Ash Association reports that 66.7 million tons of coal ash were produced in 2023, down from 114.7 million tons in 2013. Coal ash is stored by power plants onsite and offsite, and disposed of in surface impoundments, landfills, and abandoned mines.

Coal ash is beneficially used in myriad applications including, but not limited to, a substitute for portland cement in concrete, a replacement for mined gypsum in wallboard, and in structural fill and embankments. In 2023, 46 million tons of coal ash was beneficially used—representing 69.4 percent of the CRR generated that year. In comparison, 51.6 million tons were beneficially used in 2013—representing 44.8 percent of the CCR generated that year.

The Federal Highway Administration encourages the use of fly ash in concrete, noting that the use of fly ash increases the durability of concrete used in infrastructure projects, decreases overall energy usage and greenhouse gas emissions compared to manufactured cement, and reduces the overall amount of coal ash that must be otherwise managed or disposed.<sup>2</sup> Coal ash may also be a significant source of rare earth elements.<sup>3</sup>

# B. Regulation of Coal Ash

Subtitle C of the Resource Conservation and Recovery Act of 1976 (RCRA) generally requires the Environmental Protection Agency (EPA) to develop "cradle to grave" standards regulating the generation, transportation, treatment, storage, and disposal of hazardous waste. EPA may authorize states to implement, in lieu of EPA, their own hazardous waste management programs, in full or in part. Almost all states and territories have been authorized by EPA to implement all or part of the Subtitle C program in their jurisdictions. RCRA Subtitle D generally bans open dumping of nonhazardous, solid waste and requires EPA to establish minimal federal standards for the management of municipal and industrial nonhazardous waste. The standards are then implemented and enforced through state programs or, if there is no state program, implemented directed by the facility and enforced through citizen suits.

Coal ash is among the largest categories of industrial waste generated in the United States. In 1980, Congress amended RCRA to exempt several large-volume waste categories, including coal ash, from regulation under Subtitle C until EPA completed a study and determined that regulation of coal ash as hazardous waste was warranted.<sup>4</sup> The amendment is commonly

<sup>&</sup>lt;sup>1</sup> American Coal Ash Association, Coal Combustion Products Production and Use Reports, (last accessed June 24, 2025).

<sup>&</sup>lt;sup>2</sup> "Fly Ash Facts for Highway Engineers," U.S. Federal Highway Administration, (last accessed June 18, 2025).

<sup>&</sup>lt;sup>3</sup> Robert C. Reedy, et al., *Coal ash resources and potential for rare earth element production in the United States*, Volume 11, Article Number 74, International Journal of Coal Science & Technology (Sept. 17, 2024), (last accessed June 20, 2025).

<sup>&</sup>lt;sup>4</sup> 42 U.S.C. §6921(b)(3)(A)(i)-(iii).

referred to as the Bevill amendment, named after the amendment's author, Rep. Thomas Bevill. EPA issued its report to Congress in 1988, finding that the majority of the materials in the four main categories of CCR constitute oxides of silicon, aluminum, iron, and calcium and are not a major concern but that trace amounts of arsenic, barium, cadmium, lead, mercury, and selenium may present risks to human health and the environment. EPA issued its initial Bevill regulatory determination in 1993 that coal ash should not be regulated as a hazardous waste under Subtitle C. EPA issued a determination in 2000 that coal ash should be regulated under Subtitle D.

In 2008, a surface impoundment at the Tennessee Valley Authority's (TVA) Kingston power plant failed, releasing approximately 1 billion gallons of coal ash slurry and flooding 300 acres. TVA entered into an administrative order on consent with EPA under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to address the release of coal ash to the environment. The cleanup took about six years and cost \$1.18 billion.

In 2010, EPA issued a proposed rule to regulate coal ash under RCRA and sought public comment on whether it should reverse the 2000 Bevill determination and regulate CCR as hazardous waste under Subtitle C or keep the Bevill determination and regulate CCR as nonhazardous waste under Subtitle D. In December 2014, EPA issued final regulations to regulate the management and disposal of CCR under Subtitle D.<sup>8</sup> The Energy and Commerce Committee held an oversight hearing on the final rule on January 22, 2015.<sup>9</sup>

The 2014 final rule established minimum standards for the disposal of CCR in new and existing landfills and surface impoundments, including rules governing the location of CCR disposal units, recordkeeping and public disclosure, groundwater monitoring and corrective action, structural stability, closure, and beneficial use. EPA retained the Bevill determination for coal ash that was beneficially used but deferred making a final determination for coal ash that was destined for disposal. Under section 4005 of RCRA, the rule's requirements applied directly to facilities, states were not required to implement them through their waste management programs, and enforcement was available only through the RCRA citizen suit provision. The rule did not apply to landfills that ceased receiving coal ash, facilities that ceased producing electricity prior to the rule's effective date, or to CCR that was beneficially used. EPA estimated the rule would impose costs of \$23.2 billion compared to \$8.7 billion in benefits, over 100 years. The electric utility industry and environmental groups challenged the final rule in the U.S. Court of Appeals for the D.C. Circuit. 10

<sup>&</sup>lt;sup>5</sup> "Report to Congress: Wastes from the Combustion of Coal by Electric Utility Power Plants," U.S. Environmental Protection Agency, (last accessed June 18, 2025).

<sup>&</sup>lt;sup>6</sup> "Final Regulatory Determination on Four Large-Volume Wastes from the Combustion of Coal by Electric Utility Power Plants," U.S. Environmental Protection Agency, 58 Fed. Reg. 42466 (Aug. 9, 1993).

<sup>&</sup>lt;sup>7</sup> "Notice of Regulatory Determination on Wastes from the Combustion of Fossil Fuels," U.S. Environmental Protection Agency, 65 Fed. Reg. 32214 (May 22, 2000).

<sup>&</sup>lt;sup>8</sup> "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities," U.S. Environmental Protection Agency, 80 Fed. Reg. 21302 (Apr. 17, 2015).

<sup>&</sup>lt;sup>9</sup> Hearing on "EPA's 2014 Final Rule: Disposal of Coal Combustion Residuals from Electric Utilities," Energy and Commerce Committee, Subcommittee on Environment and the Economy (Jan. 22, 2015), (last accessed June 20, 2015).

<sup>&</sup>lt;sup>10</sup> See Utility Solid Waste Activities Group, et al., v. Environmental Protection Agency, 901 F.3d 414 (D.C. Cir. 2018) (per curiam).

In 2016, Congress enacted the Water Infrastructure Improvements for the Nation Act (WIIN Act), which included section 2301 to amend RCRA to provide states with authority to regulate the management and disposal of coal ash through EPA-approved state permit programs and to provide EPA authority to operate permit programs in states that did not seek program approval and in Indian country. <sup>11</sup> Under section 2301 of the WIIN Act, EPA is required to approve a state program that allows permits to include technical standards based on site-specific conditions so long as they are as protective as the federal standards.

In July 2018, EPA issued a final rule amending several provisions of the 2014 final rule, including allowing approved states to approve the suspension of groundwater monitoring if a demonstration of "no migration" can be made, alternative groundwater protection standards for certain constituents, and deadline extensions by which CCR units slated for closure would be required to stop accepting coal ash for disposal. <sup>12</sup> In August 2018, the D.C. Circuit issued its opinion on the challenges to the 2014 rule, finding that EPA's treatment of "clay-lined" impoundments and exemption of inactive impoundments was arbitrary and capricious. EPA issued a final rule in August 2020 implementing portions of the D.C. Circuit's opinion and making further changes to the coal ash rules. <sup>13</sup> Additional amendments were finalized in November 2020 establishing procedures to allow facilities to request approval to operate an existing CCR surface impoundment with an alternate liner. <sup>14</sup>

On May 8, 2024, EPA finalized a rule to regulate so-called "legacy" impoundments that were the subject, in part, of the D.C. Circuit's 2018 decision. EPA's "legacy" rule estimates that the requirements would apply to 194 additional surface impoundments that were not originally subject to the 2014 final rule. In the 118<sup>th</sup> Congress, a resolution to disapprove the "legacy" rule was introduced by Rep. Morgan Griffith on May 22, 2024; <sup>16</sup> and a separate resolution was introduced by Rep. Gary Palmer on July 2, 2024. On March 12, 2025, EPA announced that it would be prioritizing reviews of state coal ash permit programs and reviewing the 2024 final rule regulating "legacy" impoundments. <sup>18</sup>

Seven facilities sought EPA approval of alternative liner demonstrations allowed under the November 2020 amended rule. Six of the facilities withdrew their applications and, in January 2025, EPA denied the request from the remaining applicant, the Coronado Generating

<sup>&</sup>lt;sup>11</sup> P.L. 114-322, section 2301 (Dec. 16, 2016).

<sup>&</sup>lt;sup>12</sup> "Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Amendments to the National Minimum Criteria (Phase One, Part One)," U.S. Environmental Protection Agency, 83 Fed. Reg. 36435 (July 30, 2018).

<sup>&</sup>lt;sup>13</sup> "Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; A Holistic Approach to Closure Part A: Deadline to Initiate Closure," U.S. Environmental Protection Agency, 85 Fed. Reg. 53516 (Aug. 28, 2020).

<sup>&</sup>lt;sup>14</sup> "Hazardous and Solid Waste Management System: Disposal of CCR; A Holistic Approach to Closure Part B: Alternative Demonstration for Unlined Surface Impoundments," U.S. Environmental Protection Agency, 85 Fed. Reg. 72506 (Nov. 12, 2020).

<sup>&</sup>lt;sup>15</sup> Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Impoundments," U.S. Environmental Protection Agency, 89 Fed. Reg. 38950 (May 8, 2024). <sup>16</sup> H.J. Res. 152.

<sup>&</sup>lt;sup>17</sup> H.J. Res. 174.

<sup>&</sup>lt;sup>18</sup> EPA Announced Swift Actions on Coal Ash Program (Coal Combustion Residuals), Press release, U.S. Environmental Protection Agency (Mar. 12, 2025); (last accessed June 20, 2025).

Station in Apache County, Arizona. In March 2025, however, EPA granted the Coronado Generating Station an extension of the deadline to cease using its evaporative pond until September 2026 to allow alternative disposal capacity to be constructed and to address grid reliability.

EPA approved Oklahoma's coal ash program in 2018, Georgia's program in 2019, and Texas' program in 2021. EPA denied Alabama's program in 2024. On May 12, 2025, EPA proposed to approve North Dakota's program. A public hearing is scheduled for July 8, 2025, and the public comment period closes on July 15, 2025.

# IV. ISSUES FOR DISCUSSION

- The status of EPA's implementation of section 2301 of the WIIN Act providing authority under RCRA for EPA and states to regulate coal ash through permit programs.
- The role states can play in effectively regulating coal ash and barriers that may inhibit states from seeking EPA approval of state permit programs.
- The impact of EPA's coal ash regulations on the electric utility sector and the general public.
- Environmental benefits of using coal ash and the potential of coal ash to serve as a reliable domestic source of rare earth elements.

# V. STAFF CONTACTS

If you have any questions regarding this hearing, please contact Byron Brown and Christi Harsha of the Committee Staff at (202) 225-3641.