UTILITY SOLID WASTE ACTIVITIES GROUP V. EPA AND THE EPA'S PATH TOWARD REGULATING COAL COMBUSTION RESIDUALS

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I. Introduction

In the aftermath of numerous coal ash disasters, the Environmental Protection Agency (EPA) issued its Final Rule governing the Disposal of Coal Combustion Residuals From Electric Utilities in April 2015, reinforcing coal combustion residuals (CCR) regulations at the state level.² Environmental groups and the utility industry both sought judicial review of the EPA's Final Rule in the District of Columbia Circuit of the United States Court of Appeals.³ Realizing that the Final Rule needed more work, the EPA petitioned the court to hold the proceedings in abeyance and sought a voluntary remand to reconsider the Final Rule.⁴ In *Utility* Solid Waste Activities Group v. EPA, the court denied the abeyance motion but because of the vital issues raised by the petitioners, the court decided to weigh in, vacating portions of the Final Rule and reproving the EPA for failing to address key facets.⁵ This case note will examine the background that prompted the EPA rulemaking. It will then review the arguments raised by the various groups seeking judicial review as well as the EPA at the court. Next, it will provide an analysis of the court's order. Lastly, this note will set forth some potential implications of the court's order as EPA moves forward on remand.6

II. BACKGROUND

A. The Resource Conservation and Recovery Act

In 1976, Congress passed the Resource Conservation and Recovery Act (RCRA) to implement storage and containment procedures and protocols for hazardous and non-hazardous solid waste.⁷ RCRA provides for a two-prong approach to determine if a solid waste is hazardous.⁸ Subtitle C of RCRA regulations provide that if wastes are hazardous there is to be a federal "cradle to grave" regulatory scheme governing storage, treatment, and disposal.⁹ To be considered hazardous, a waste must first be known to be harmful to human health and the

^{1. &}quot;There have already been at least 13 damage cases caused by the disposal of coal ash in sand and gravel pits or former quarries that led to contamination of water sources and/or ecological damages." Final Rule, Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities, 80 Fed. Reg. 21,302, at 21,354 (2015) [hereinafter Final Rule].

^{2.} Final Rule, supra note 1, at 21,303.

^{3.} Utility Solid Waste Activities Grp. v. EPA, 901 F.3d 414, 418 (D.C. Cir. 2018).

^{4.} Id. at 420.

^{5.} Id. at 420, 430.

^{6.} Proposed Rule, 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, 84 Fed. Reg. 65,941 (Dec. 2, 2019) (to be codified at 40 C.F.R. pt. 257).

^{7.} RCRA in Focus: Construction, Demolition, and Renovation, HAZARDOUS WASTE & HAZARDOUS SUBSTANCES COMPLIANCE P 1982 (C.C.H.) 2015 WL 7378399, at 4 (2018).

^{8.} Appalachian Voices v. McCarthy, 989 F.Supp.2d 30, 38 (D.C. Cir. 2013).

^{9.} *Id*.

environment and subject to Subtitle C if it exhibits at least one of four characteristics: ignitability, corrosivity, reactivity, or toxicity. Further, solid waste disposal is regulated via Subtitle D of the Act. 11

A central question for the EPA has always been whether to regulate CCR as hazardous waste under RCRA Subtitle C's "cradle to grave" federal hazardous waste management authority, or to "treat it as nonhazardous solid waste subject to national guidelines" per Subtitle D.¹² RCRA defines solid waste as "any garbage, refuse, sludge . . . and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities."¹³ The statutory language of RCRA which governs waste under Subtitle D is less prescriptive than the language which governs hazardous waste under Subtitle C.¹⁴

Hazardous waste is defined as a solid waste which because of its "physical, chemical, or infectious characteristics may cause . . . an increase in mortality or . . . incapacitating reversible, illness; or pose a . . . hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed." RCRA's intent is to safely manage hazardous waste from its inception to its ultimate disposal, "to protect human health and the environment" from the inherent dangers, all while encouraging conservation. Coal combustion produces a solid waste that is regulated under RCRA because it is a solid waste which presents a significant human and environmental threat.

Furthermore, RCRA directs the EPA to establish "criteria for determining which facilities shall be classified as sanitary landfills and which shall be classified as open dumps. . . ."¹⁸ The criteria should contemplate that a particular facility be classified as a sanitary landfill, as opposed to an open dump, "only if there is no

^{10.} Final Rule, *Identification and Listing of Hazardous Waste*, 79 Fed. Reg. 35,290 (2014) (codified at 40 C.F.R. pt. 261).

^{11.} Appalachian Voices, 989 F.Supp.2d at 38.

^{12.} Utility Solid Waste Activities Grp., 901 F.3d at 423.

^{13. 42} U.S.C. § 6903(27) (2014).

^{14.} Jonathan Adler, *Reforming our Wasteful Hazardous Waste Policy*, N.Y.U. ENVTL. L.J. 724, n.16 (2008); EPA, RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) AND FEDERAL FACILITIES, https://www.epa.gov/enforcement/resource-conservation-and-recovery-act-rcra-and-federal-facilities (referring to RCRA Subtitle C, 42 U.S.C. §§ 6921–6939g, which sets compliance standards for transport, record keeping, treatment, storage, and disposal including provisions for permitting, inspections, and federal enforcement via monitoring and testing; juxtaposing to RCRA Subtitle D, *Id.* §§ 6941–6949a, which covers waste that is "recoverable" in order to "encourage resource conservation," utilizing the development of individual state plans with federal assistance to handle environmentally sound solid waste).

^{15. 42} U.S.C. § 6903(5) (2014).

^{16.} United States v. Southern Union Co., 643 F. Supp. 2d 201, 207 (D.R.I. 2009) (summarizing the objectives of RCRA found in 42 U.S.C.A. § 6902).

^{17.} Citizens Coal Council v. Matt Canestrale Contracting, Inc., 51 F. Supp. 3d 593, 595-96 (W.D. Pa. 2014).

^{18. 42} U.S.C. § 6944(a).

reasonable probability of adverse effects on health or the environment from disposal of solid waste at such facility." States, which are given the task of implementing the regulations via EPA approved state solid waste management plans (SWMP), are prohibited to establish open dumps for hazardous waste. Additionally, states are commanded to require that all solid waste disposal be confined to sanitary landfills or disposed of in an environmentally sound manner.

B. Coal Combustion Residuals

According to the United States Energy Information Administration, as of 2017, coal provides in excess of 1.2 trillion kilowatts of energy, accounting for greater than 30% of electricity generation in the United States.²² In 2012 alone, coal-burning utilities in the United States burned in excess of 800 million tons of coal and produced nearly 110 million tons of coal combustion residuals.²³ The CCR, also known as coal ash, are the byproducts when utilities and power plants burn coal to produce electricity.²⁴ CCR, which includes "fly ash, bottom ash, boiler slag, and flue gas desulfurization materials," is generated from the combustion of coal in order to generate steam to power generators to produce electricity by independent power producers and electric utilities.²⁵ Coal-firing utilities produce millions of tons of CCR making coal ash a leading source of industrial waste in the United States.²⁶ The EPA published a summary from a May 2000 Regulatory Determination of documented cases confirming the danger to humans and the environment from CCR including cases of damage to ground water, surface water, and ecological ruin.²⁷

The EPA recognized that coal ash contains "carcinogens and neurotoxins, including arsenic, boron, cadmium, hexavalent chromium, lead, lithium, mercury, molybdenum, selenium, and thallium." Human risks when exposed to CCR include increased chances of "cancer in the skin, liver, bladder, and lungs," and further include elevated neurologic, psychiatric, and cardiovascular risks non-cancer risks, such as "damage to blood vessels, and anemia." Ecological systems are also at risk with elevated toxicity to plant life as well as fish kills and amphibian deformities in areas where CCR are found.³⁰

- 19. Id.
- 20. 42 U.S.C. §§ 6942, 6944(b).
- 21. 42 U.S.C. § 6943.
- 22. INDEP. STAT. & ANALYSIS U.S. ENERGY INFO. ADMIN., WHAT IS U.S. ELECTRICITY GENERATION BY ENERGY SOURCE? https://www.eia.gov/tools/faqs/faq.php?id=427&t=3.
 - 23. Final Rule, supra note 1, at 21,303.
 - 24. EPA, COAL ASH (COAL COMBUSTION RESIDUALS, OR CCR), https://www.epa.gov/coalash.
 - 25. Final Rule, supra note 1, at 21,303.
 - 26. Id
- 27. Proposed Rule, *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, at 35,137 (2010) [hereinafter Proposed Rule].
 - 28. Utility Solid Waste Activities Grp., 901 F.3d at 421 (citing Final Rule, supra note 1, at 21,449).
 - 29. Id. (citing Final Rule, supra note 1, at 21,451).
 - 30. Id. (citing Proposed Rule, supra note 27, at 35,172).

C. Timeline and Procedural History

Congress enacted RCRA in 1976 as an amendment to the Solid Waste Disposal Act (SWDA).³¹ RCRA gave the EPA the authority to research and study the means to best manage hazardous wastes, including coal ash.³² By 1978, the EPA began classifying CCRs as "special wastes" and required that further study would need to be conducted in order to "determine [CCR's] risk to human health and the environment."³³ Congress agreed more research was necessary, but in 1980 Congress exempted CCRs from being classified under Subtitle C as a hazardous waste by passing the Bevill Amendment.³⁴

The Bevill Amendment provided a temporary exemption which stated that "[f]ly ash waste, bottom ash waste, slag waste, and flue gas emission control waste generated primarily from the combustion of coal or other fossil fuels [are not] . . . hazardous waste."³⁵ The Bevill Amendment freed coal firing electric generation plants from the onerous regulations and costs associated with coal ash being classified as hazardous waste via RCRA's Subtitle C so further study and reporting to Congress could take place.³⁶

Subsequently, the EPA issued a 1993 report placing CCRs into two categories: (1) low volume "fly ash, bottom ash, boiler slag, and flue gas emission control waste," and (2) large volume coal combustion wastes (which were covered by the Bevill Amendment).³⁷ The EPA recommended neither of these two categories be subject to the hazardous waste requirements mandated by RCRA Subtitle C pending further study which was to be completed by 1998.³⁸

Further, in 2000, with Bevill wastes still exempted from Subtitle C, the EPA recommended that CCRs should be subjected to the minimum national standards under RCRA Subtitle D.³⁹ The EPA concluded in its May 2000 Regulatory Determination that "the utility industry had made significant improvements in its waste management practices for new landfills and surface impoundments. . ."⁴⁰ Yet, driven by the catastrophic CCR impoundment failure in Kingston, Tennessee in 2008, the EPA published a notice for proposed rulemaking about coal ash in the Federal Register on June 21, 2010.⁴¹

- 31. Solid Waste Disposal Act, 42 U.S.C.A. §§ 6901-6992(k).
- 32. EPA, SPECIAL WASTES, https://www.epa.gov/hw/special-wastes.
- 33. *Id*.
- 34. *Id*.
- 35. 40 C.F.R. § 261.4(b)(4) (2018).
- 36. Yvette R. Hurt, EDF v. EPA: The Dispute Surrounding the Mining Waste Regulation Under the Bevill Amendment, 6 J. MIN. L. & POL'Y 103, 112-113 (1990).
- 37. Brittany L. Daniels, Caution: Hazards Ahead! How the EPA's Refusal to Classify Coal Ash as Hazardous Waste Fuels Environmental and Public Health Concerns, 27 VILL. ENVIL. L.J. 93, 100 (2016) (citing Final Regulatory Determination on Four Large-Volume Wastes from the Combustion of Coal by Electric Utility Power Plants, 58 Fed. Reg. 42,466, 42,469-70 (1993)).
 - 38. 58 Fed. Reg 42,466, at 42,467.
 - 39. Proposed Rule, supra note 27, at 35,137.
 - 40. Id. at 35,143.
 - 41. Proposed Rule, *supra* note 27, at 35,132; Final Rule, *supra* note 1, at 21,313.

Subsequent to the notice of proposed rulemaking in 2010, the EPA conducted eight formal hearings, where the EPA heard from over 1,300 individual speakers and received over 450,000 comments on the Proposed Rule.⁴² Under the 2010 Proposed Rule, which was an attempt to regulate the disposal of coal ash for the first time, the EPA offered two possible courses of action: (1) reverse the 1993 and 2000 Regulatory Determinations and list CCR wastes under RCRA Subtitle C, or (2) leave the Bevill wastes exemption in place and regulate the wastes under Subtitle D by issuing national minimum criteria and allowing individual states to "use federal financial and technical assistance to develop solid waste management plans in accordance with [the] federal guidelines."⁴³ In 2015, with the issuance of the Final Rule, the EPA adopted the latter, postponing its "final decision on the Bevill Regulatory Determination because of regulatory and technical uncertainties that [could not] be resolved at [that] time."⁴⁴

D. The EPA Final Rule

The EPA's Final Rule mandates that CCR disposal generated by utilities be governed as a solid waste by RCRA's Subtitle D.⁴⁵

Subtitle D of RCRA establishes a framework for federal, state, and local government cooperation in controlling the management of non-hazardous solid waste. The federal role is to establish the overall regulatory direction, by providing minimum nationwide standards that will protect human health and the environment, and to provide technical assistance to states for planning and developing their own environmentally sound waste management practices. The actual planning and any direct implementation of solid waste programs under RCRA Subtitle D, however, remains a state and local function ". . . . EPA has no role in the planning and direct implementation of the minimum national criteria or solid waste programs under RCRA Subtitle D, and has no authority to enforce the criteria. . . . [S]tates are not required to adopt solid waste management programs. . . . ⁴⁶

While states are not required to, many states have solid waste programs already.⁴⁷ The EPA found that if states do not manage exposure to CCR, there will

^{42.} Final Rule, supra note 1, at 21,312.

^{43.} Proposed Rule, *supra* note 27, at 35,128; Environmental Def. Fund v. EPA, 852 F.2d 1309, 1310 (D.C. Cir. 1988).

^{44.} Final Rule, supra note 1, at 21,302.

^{45.} Id

^{46.} *Id.* at 21,310. Oklahoma and Georgia have applied for EPA approval for their CCR permit programs pursuant to WIIN. Oklahoma's program. approved in 2018, has been challenged in court. Waterkeeper All., Inc. v. Wheeler, 330 F.R.D. 1 (D.D.C. 2019). Virginia and Illinois have enacted coal ash legislation in 2019. Va. Code Ann. § 10.1-1402.03 (2019); 415 Ill. Comp. Stat. Ann. 5/3.140 (2019). North Carolina enacted the Coal Ash Management Act (CAMA) in September 2014 following the Dan River spill, amending it in July 2016 to incorporate the Final Rule national minimum criteria and performance standards. N.C. Gen. Stat. § 130A-309.200 (2019). CAMA provided an aggressive schedule for closing all the surface impoundments in North Carolina by 2029 depending on their hazardous classification. *Id.*; 2014 N.C. Ch. 122, 2013 N.C. SB 729.

^{47.} Final Rule, supra note 1, at 21,358.

be significant risks to both humans and the environment.⁴⁸ Further the EPA cautioned that if CCR is classified under Subtitle C, all CCR surface impoundments would have to close.⁴⁹

Coal-burning utilities predominantly dump CCR in one of two ways.⁵⁰ Either they utilize dry landfills, or they create a slurry by mixing it with water to be disposed of in surface impoundments.⁵¹ Some CCR is beneficially used, *e.g.*, to pave roads, and the market for the beneficial use of CCR is growing and may be helpful to ultimately close impoundments.⁵² But presently, most CCR is disposed of in enormous landfills and impoundments, which average 120 acres in size with an average depth of 40 feet, at over 1,145 different locations.⁵³ These landfills and impoundments, by sheer volume, risk contamination not only to undersoil and groundwater sources, but also to lakes, rivers, and streams.⁵⁴ Furthermore, impoundments are at risk for structural failure.⁵⁵

The EPA differentiates between *active impoundments* which are currently receiving CCR, and *inactive impoundments* which are not receiving any more waste. The Final Rule defines an "inactive CCR surface impoundment" as an impoundment that does not receive coal ash after October 19, 2015, but which still contains coal ash and liquids. A particular subgrouping of inactive impoundments which are located at defunct powerplants are referred to as legacy ponds. The EPA exempted legacy ponds under the Final Rule. The EPA imposes regulatory requirements on active CCR impoundments at active facilities, inactive impoundments at active facilities, but not inactive impoundments at inactive facilities. One of the EPA's concerns was that the current owner of the land where the inactive impoundment is located might not be connected with the prior disposal activities.

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48. Id. at 21,359.
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^{49.} *Id*.

^{50.} Id. at 21,303.

^{51.} *Id*.

^{52.} Final Rule, supra note 1, at 21,469.

^{53.} Id

^{54.} Utility Solid Waste Activities Grp., 901 F.3d at 422 (citing Final Rule, supra note 1, at 21,304-21,305, and Proposed Rule, supra note 27, at 35,131). Contamination of groundwater sources is more likely at impoundments that are either "unlined or lack adequate lining between the coal ash and the soil beneath [them]." 901 F.3d at 422. The Final Rule requires that landfills and impoundments, both new and existing, implement groundwater protection and monitoring, including new and improved lining of surface impoundments. Final Rule, supra note 1, at 21,302. Unlined impoundments, and any impoundments which have been implicated as contaminating, must stop receiving CCR wastes, adopt corrective action, and "either retrofit or close." Id.

^{55.} Final Rule, supra note 1, at 21,304.

^{56.} Id. at 21,359.

^{57. 40} C.F.R § 257.53.

^{58.} Utility Solid Waste Activities Grp., 901 F.3d at 432.

^{59.} Final Rule, *supra* note 1, at 21,468 (citing 40 C.F.R. § 257.50(e)).

^{60.} Id. at 21,344.

^{61.} *Id*.

The Final Rule, dated April, 17, 2015, went into effect on October 19 of that same year. ⁶² The Final Rule was challenged directly in the United States Court of Appeals for the District of Columbia Circuit by Industry Petitioners ⁶³ and Environmental Petitioners ⁶⁴ on May 18, 2016, and the case was consolidated in *Utility Solid Waste Activities Group v. EPA*. ⁶⁵ Oral arguments were held on November 20, 2017, and the United States Court of Appeals for the District of Columbia issued its decision on August 21, 2018. ⁶⁶

E. The Water Infrastructure Improvements for the Nation Act

In 2016, after the issuance of the Final Rule, Congress enacted the Water Infrastructure Improvements for the Nation Act (WIIN Act) establishing a federal and state cooperative framework for the enforcement of federal coal ash regulations.⁶⁷

Because the WIIN Act was enacted after the CCR Final Rule was issued, a petition for reconsideration was filed on May 12, 2017, requesting that the EPA be allowed to reconsider those provisions of the rule that could be affected by the

^{62.} Citizens' Suit Petition at 6, Roanoke River Basin Assoc. v. Duke Energy Progress, (No. 1:17-cv-707), 2017 WL 3319303, at *18.

^{63.} Industry petitioners included the Utility Solid Waste Activities Group, AES Puerto Rico, LP, the Edison Electric Institute, the National Rural Electric Cooperative Association, and the American Public Power Association. *Utility Solid Waste Activities Grp.*, 901 F.3d at 425.

^{64.} Environmental petitioners included the Environmental Integrity Project, Sierra Club, and Hoosier Environmental Council. *Utility Solid Waste Activities Grp.*, 901 F.3d at 425.

^{65.} Brief of Industry Intervenor-Respondents at 1, Utility Solid Waste Activities Group v. EPA (May 18, 2016) (No. 15-1219); Proof Brief for Environmental Intervenor-Respondents at 3, Utility Solid Waste Activities Group v. EPA at 2 (May 18, 2016) (No. 15-1219).

^{66.} Utility Solid Waste Activities Grp., 901 F.3d at 414; Although not addressed by the court, the EPA issued orders subsequent to the Final Rule revising alternative performance standards that states may adopt in place of the standards adopted by the minimum criteria where there is evidence that hazardous constituents could not migrate to the uppermost aquifer. Final Rule, Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Amendments to the National Minimum Criteria (Phase One, Part One), 83 Fed. Reg. 36,435 (2018). Initial criteria required for compliance by a CCR unit with certain performance standards must be certified by a professional engineer. 80 Fed. Reg. at 21,304. The amended criteria would now allow a technical certification in lieu of certification by a professional engineer. 83 Fed. Reg. at 36,436. Further, the EPA established groundwater protection standards for particular contaminants for which no Maximum Contaminant Levels (MCL) had previously been established. Id. at 36,435.

^{67.} Utility Solid Waste Activities Grp., 901 F.3d at 426 (citing Water Infrastructure Improvements for the Nation Act, 114 P.L. 322, 130 Stat. 1628 (2016) (codified at 42 U.S.C.A. § 6945)). As an alternative to amending its SWMP, a state can establish its own permit program, or other system that would require prior approval under state law, which would then be submitted to the EPA for approval. Id. The EPA Administrator will approve the program if it complies with the minimum criteria set forth in EPA's regulations or with other criteria that is at least as protective. Id. Once a state permit program is approved, it operates in lieu of EPA's regulations for CCR disposal. Id.; Waterkeeper All., Inc., 330 F.R.D. at 5. Until a CCR unit has obtained a permit, however, it would continue to be subject to EPA's regulations for CCR disposal criteria. Waterkeeper All., Inc., 330 F.R.D. at 5. The WIIN Act goes beyond the SWMP process used for nonhazardous waste. Utility Solid Waste Activities Grp., 901 F.3d at 901 F.3d at 426. A state is identified as a nonparticipating state, if it does not file a permit program for CCR disposal or if the EPA does not approve of the submitted permit program. WIIN Act, 130 Stat. 1628. The EPA will implement its own permit program for the nonparticipating state, but only where Congress provides funding for EPA's permit program. Id. Otherwise, the Final Rule would continue to be self-implementing under RCRA and enforceable through citizen lawsuits. Id.

WIIN Act.⁶⁸ The EPA also requested that the Court hold the entire proceeding in abeyance, but the court declined to exercise its discretion to do so without giving specific reasons.⁶⁹

III. ANALYSIS

A. Arguments

1. Industry Intervenor's Argument: The EPA Does Not Have the Authority to Regulate Legacy Ponds Under RCRA Subtitle D.

According to Industry Petitioners, the EPA did not have the authority to regulate the inactive impoundments known as legacy ponds under RCRA Subtitle D.⁷⁰ The Industry Petitioners argued that the EPA's authority under Subtitle D is only applicable to impoundments where "solid waste is disposed as of the effective date of the [Final] Rule."⁷¹ Thus, since legacy ponds were not used for coal ash disposal before the effective date of the Final Rule – "in some case, decades before the Final Rule was promulgated" - legacy ponds should not be "subject to retroactive regulation," according to Industry Petitioners.⁷² Petitioners assert that the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)⁷³ is the vehicle that Congress intended to correct past disposal issues at legacy impoundments because RCRA is not the tool of choice for the government to address hazardous waste clean-up of CCR.74 Through CERCLA, Congress has imposed a tax on industrial polluters in order to fund a trust through which money will be available for the government to "respond directly to releases, or threatened releases, of hazardous substances that may endanger public health or the environment."⁷⁵ While the EPA, via CERCLA, has cleaned up hazardous waste from over 1,300 abandoned inactive Superfund sites, the EPA has made a policy choice to use RCRA, not CERCLA, to address clean up in the CCR Final Rule.76

^{68.} Utility Solid Waste Activities Group Petition for Rulemaking to Reconsider Provisions of the Coal Combustion Residuals Rule, 80 Fed. Reg. 21,302 (Apr. 17, 2015), and Request to Hold in Abeyance Challenge to Coal Combustion Residual Rule, No. 15-1219 (D.C. Cir.).

^{69.} Utility Solid Waste Activities Grp., 901 F.3d at 426.

^{70.} Brief of Industry Intervenor-Respondents, *supra* note 65, at 3.

^{71.} *Id*.

^{72.} *Id*.

^{73.} Comprehensive Environmental Response, Compensation, and Liability Act §§ 101-175, 42 U.S.C. §§ 9601-75. Enacted by Congress in 1980, CERCLA is sometimes also informally known as the Superfund statute. EPA, SUPERFUND: CERCLA OVERVIEW, https://www.epa.gov/superfund/superfund-cercla-overview.

^{74.} Brief of Industry Intervenor-Respondents, *supra* note 65, at 3-4.

^{75.} SUPERFUND: CERCLA OVERVIEW, supra note 73.

^{76.} EPA, SUPERFUND: NATIONAL PRIORITIES LIST (NPL), https://www.epa.gov/superfund/superfund-national-priorities-list-npl; Final Rule, *supra* note 1, at 21,344.

 Environmental Intervenor's Argument: RCRA Subtitle D Obligates the EPA to Regulate Legacy Ponds to Prevent Harm to Humans and the Environment.

The Environmental Intervenors argued that the crux of their concern was that the Final Rule did not adequately consider the language from RCRA Subtitle D, which "mandates that [the] EPA promulgate criteria for solid waste disposal sites to ensure that there is 'no reasonable probability of adverse effects' to health or the environment." Environmental Petitioners decry the Final Rule's determination on inactive surface impoundments because they still contain "coal ash and liquids," even though they are not currently receiving any new deposits. Without a liner to prevent coal ash from leaking and contaminating groundwater sources, these legacy ponds are a risk to both humans and the environment. Additionally, the Environmental Petitioners assert that the EPA is obligated at a minimum, under RCRA, to supervise legacy ponds.

Congress mandated in RCRA: "Not later than one year after October 21, 1976, . . . the [EPA] shall promulgate regulations containing criteria for determining which facilities shall be classified as sanitary landfills and which shall be classified as open dumps. . . . "81 The statute further states, "[s]uch criteria shall provide that a facility may be classified as a sanitary landfill and not an open dump only if there is no reasonable probability of adverse effects on health or the environment from disposal of solid waste at such facility." The statute does not allow the EPA to wait until CCR impoundments fail or until contamination *is occurring*. Environmental Intervenors asserted that the EPA is waiting to regulate impoundments until the contamination *is occurring*, instead of taking a proactive role to prevent sure harm. 84

3. EPA's Argument: The EPA Acted with Full Statutory Authority with Regard to Coal Ash in Inactive Impoundments.

The EPA's argument relied on the Congressional authorization in RCRA for the EPA to establish solid waste management guidelines with the "authority to regulate inactive impoundments." The EPA has authority to apply rules to inactive impoundments and to define a legacy pond as either a "sanitary landfill" or an

^{77.} Proof Brief for Environmental Intervenor-Respondents, *supra* note 65, at 2 (citing 42 U.S.C. § 6944(a)).

^{78.} *Id.* at 2-3.

^{79.} *Id.* at 3.

^{80.} Id. (citing 42 U.S.C. § 6944(a)).

^{81. 42} U.S.C. § 6944(a).

^{82.} Id

^{83.} Proof Brief for Environmental Intervenor-Respondents, supra note 65, at 4 (citing 42 U.S.C. § 6944(a)).

^{84.} Id.

^{85.} Brief of Respondent Environmental Protection Agency at 3, Utility Solid Waste Activities Group v. EPA at 19 (Sept. 6, 2016) (No. 15-1219) (relying on authority found at 42 U.S.C. \S 6907).

"open dump." The essence of the EPA argument is that industrial and environmental parties are quibbling about the Final Rule as being "overly restrictive or not restrictive enough, and/or providing too little or too much time for compliance," but that the "EPA made well-reasoned judgments based on the data available."

The Final Rule provides for a comprehensive record keeping and public notice regime. The enforcement of the Final Rule rests with the states. The EPA calls for the Final Rule to be upheld, noting that the Final Rule "represent[s] a rational application of [the] EPA's authority and responsibility to regulate CCR in a manner that will protect public health and the environment." In short, the EPA asked the United States Court of Appeals for the District of Columbia for deference.

B. Industry Petitioners' Argument That the EPA Only Has Authority Over Active Impoundments Fails

In the *per curiam* decision, the United States Court of Appeals for the District of Columbia addressed the key question of whether the EPA's Final Rule exceeded EPA authority under RCRA in regulating inactive impoundments. PCRA authorizes the EPA to define "which facilities shall be classified as sanitary landfills and which shall be classified as open dumps [.]" Additionally, RCRA classifies sanitary landfills as permissible, and open dumps as impermissible. The court determined that the EPA is authorized under RCRA to regulate both.

Given the broad authority of the EPA, the Industry Petitioners focused their argument on the particular phrase *is disposed of*, located in the "open dump" definition of RCRA.⁹⁶ The Industry Petitioners contended "that the site must actively receive new waste to come within the statutory definition of a regulable waste disposal dump . . . [arguing] that the words used to define 'disposal'—'discharge, deposit, injection, dumping, spilling, leaking, or placing'—all require present and ongoing activity."⁹⁷

Relying on the plain text of RCRA, the court put a spotlight on the definition of "open dump," which is "any facility where solid waste *is disposed of.*" The court commented, "[w]hile 'is' retains its active present tense, the 'disposal' takes

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    Id. at 21.
    Id. at 14.
    Final Rule, supra note 1, at 21,308.
    Brief of Respondent Environmental Protection Agency, supra note 85, at 14.
    Id. at 14.
    Id. at 14.
    Utility Solid Waste Activities Grp., 901 F.3d at 450.
    Id. at 439 (quoting 42 U.S.C. § 6944).
    Id.
    Id.; 42 U.S.C. § 6903(14).
    Utility Solid Waste Activities Grp., 901 F.3d at 439.
    Id. at 440 (quoting 42 U.S.C. § 6903(14)) (emphasis in original).
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the form of the past participle ('disposed') . . . [and in] this way, the disposal itself can exist (it 'is'), even if the act of disposal took place at some prior time." Even if this definition was ambiguous, which the court found that it was not, 100 Chevron deference would control because the interpretation of the statute is rational and fair with regard to the EPA's reasonable interpretation of the phrase *is disposed of*. Waste at inactive impoundments *is disposed of* in exactly the same way that it *is disposed of* at active sites. Furthermore, "waste previously dumped is still currently 'placed' or 'deposited' there," and a coal ash impoundment maintains its "regulated status whether or not anyone adds to the pile." Coal ash disposal "is not a discrete act." If it were a discrete act then when a power facility deposits CCR into an impoundment "the *disposal* would end."

The court read the words *is disposed of* as a whole adjectival phrase, not to be broken up into individual parts. ¹⁰⁶ Analogizing to garbage disposals, the court commented that the place where trash *is disposed of* is the place where trash is left. ¹⁰⁷ The site's status is not dependent on whether or not more rubbish is later placed there, because a rubbish heap is a rubbish heap until the rubbish is gone. ¹⁰⁸ All parties acknowledged that inactive impoundments present the possibility of serious "adverse environmental and health effects." ¹⁰⁹ In fact, the EPA, in the Final Rule, presents a compelling argument "that inactive sites often pose even greater health risks given their age and accompanying deterioration." ¹¹⁰ Further, the EPA explained in the Final Rule that older inactive impoundments, like the one that failed and resulted in the Dan River disaster, provided the impetus to pursue the Final Rule from its inception. ¹¹¹

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101. Utility Solid Waste Activities Grp., 901 F.3d at 439-40, 442, 450.102. Id. at 454.
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^{99.} *Id.* at 440.

^{100.} One of the judges on the panel, while agreeing with the Court's ultimate decision, disagreed with the notion that the statutory text is clear on its face. Instead, Judge Henderson drafted a concurring opinion, explaining that the statute is ambiguous, but deferring to EPA's "reasonable" interpretation that it can regulate inactive units. *Utility Solid Waste Activities Grp.*, 901 F.3d at 450-53 (Henderson, J., concurring) (citing Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc., 467 U.S. 837 (1984) which held, "[w]ith regard to judicial review of an agency's construction of the statute which it administers, if Congress has not directly spoken to the precise question at issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute.").

^{103.} Id. at 440.

^{103.} *Id.* at 440.

^{104.} *Id.* at 441.

^{105.} *Id*.

^{106.} Utility Solid Waste Activities Grp., 901 F.3d at 441.

^{107.} Id.

^{108.} Id.

^{109.} Id. at 442.

^{110.} *Id.* (citing Final Rule, *supra* note 1, at 21,343).

^{111.} Utility Solid Waste Activities Grp., 901 F.3d at 433 (citing Final Rule, supra note 1, at 21,393-94).

C. The Court Agrees with Environmental Petitioners That Portions of the Final Rule Are Unreasoned, Arbitrary, and Capricious

1. Unlined Impoundments Were Not Addressed in the Final Rule in Accordance with RCRA.

Given that the EPA found that putting CCR "in unlined surface impoundments and landfills presents the greatest risks to human health and the environment," the Environmental Petitioners challenged the EPA's Final Rule where the EPA allowed unlined surface impoundments to continue operation until such time as groundwater contamination resulted. According to the Final Rule, new surface impoundments are to be lined, but existing impoundments are allowed to operate until leakage is detected. Only after a leak is detected will the operator of an unlined impoundment be forced to retrofit with a liner or close the impoundment, a process that the EPA allows to take from five to up to fifteen years. The Environmental Petitioners asserted that permission to continue to operate is not only arbitrary and capricious but also contrary to RCRA.

The EPA, along with Industry Intervenors, espoused the idea that unlined impoundments that are not leaking are not dangerous. Yet, a majority of impoundments are unlined, and nearly a third of unlined impoundments do leak. The court found unconvincing the EPA's argument that impoundments are not a problem simply because they are not currently leaking, because the EPA's internal data belie that conclusion.

The court found that the "Final Rule's approach of relying on leak detection followed by closure is arbitrary and contrary to RCRA" because the Final Rule fails to address the environmental and health concerns that are documented in the administrative record. Monitoring for leakages is only required semiannually, thus leakages can conceivably go undetected for several months. Thus, the court found that "the EPA has not shown that harmful leaks will be promptly detected;

^{112.} Id. at 426-27 (citing Final Rule, supra note 1, at 21,451).

^{113.} Id. at 427 (citing 40 C.F.R. § 257.101(a)).

^{114.} Id. (citing 40 C.F.R. § 257.102(f)).

^{115.} Id.

^{116.} Utility Solid Waste Activities Grp., 901 F.3d at 426-27.

^{117.} Id. at 427.

^{118.} *Id.* (citing Final Rule, *supra* note 1, at 21,449-50). According to EPA statistics, 504 of the 735 existing active impoundments, roughly 65%, are completely unlined. *Id.* at 427-28. Unlined units show significantly higher risks of harmful leakage including the 157 units "where the EPA confirmed that coal residuals have already caused damage to human health and the environment." *Id.* at 428. The EPA has reported that unlined impoundments have a "36.2 to 57 percent chance of leakage at a harmfully contaminating level" throughout their use, and, further, "the threat of contamination from unlined units exceeds the EPA's [own] cancer risk criteria and thus 'generally will be considered to pose a substantial present or potential hazard to human health and the environment." *Id.* at 427.

^{119.} Utility Solid Waste Activities Grp., 901 F.3d at 429.

^{120.} Id

that, once detected, they will be promptly stopped; or that contamination, once it occurs, can be remedied."¹²¹

Unlined impoundments which leak prove to be worse in terms of damage caused than lined impoundments, because they allow sludge to "flow through the unit and into the environment unrestrained." The D.C. Circuit Court found:

The Rule addresses neither the risks to public health and to the environment before leakage is detected, nor the harms from continued leakage during the years before leakage is ultimately halted by retrofit or closure. In defending the Rule as compliant with RCRA, the EPA did not even consider harms during the retrofit or closure process. . . . An agency's failure to consider an important aspect of the problem is one of the hallmarks of arbitrary and capricious reasoning. 123

Further, the court observed that the Final Rule provided only for groundwater monitoring even though the EPA determined that surface water contamination was principally responsible for environmental and ecological damage. CCR contamination to surface water has shown risks of "[e]levated selenium levels in migratory birds, wetland vegetative damage, fish kills, amphibian deformities, . . . [and] plant toxicity,' and to humans through the possible consumption of contaminated fish." Since RCRA requires "the EPA to set minimum criteria for sanitary landfills that prevent harm to either 'health *or* the environment,'" the court found that the EPA addressed only the "first half of the statutory requirement" when the EPA provided for only groundwater monitoring for levels of contamination "keyed to human health," and thus acted arbitrarily. 126

2. Clay-Lined Impoundments Were Not Addressed in the Final Rule in Accordance with RCRA.

Additionally, the EPA treated "clay-lined units as if they were lined," and the court likewise rejected those portions of the Final Rule due to the same lack of support. Clay-lined units are to be monitored for groundwater leakage with monitoring indexed to human risks only, and not surface water monitoring for environmental concerns. It leaking, the operator is given the option of repair, retrofit, or closure of the unit. Purthermore, if a clay-lined impoundment is located one mile from a groundwater, drinking water source, per EPA statistics it will contaminate the source 9.1% of the time and would increase in percentage with nearer

^{121.} Id.

^{122.} *Id.* (citing Final Rule, *supra* note 1, at 21,371).

^{123.} *Id.* at 429-30 (citing Final Rule, *supra* note 1, at 21,403-06 and Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 44 (1983)).

^{124.} Utility Solid Waste Activities Grp., 901 F.3d at 430.

^{125.} Id. (citing Proposed Rule, supra note 27, at 35,172 and Final Rule, supra note 1, at 21,444).

^{126.} *Id.* (citing 42 U.S.C. § 6944(a)) (emphasis in original).

^{127.} Id. at 430-32.

^{128.} Id. at 431-32.

^{129.} Utility Solid Waste Activities Grp., 901 F.3d at 432.

proximity. ¹³⁰ The EPA found that leakages "from clay-lined units . . . present cancer and non-cancer risks that exceed the EPA's risk criteria." ¹³¹ Here, too, the Final Rule allows the operator months to contemplate and explore a repair option "even before the five-to-fifteen year retrofit-or-close clock starts to run." ¹³² The court rejected and found arbitrary the EPA's rationale for clay-lined impoundments for the identical reasons that the court vacated the Final Rule for unlined surface impoundments. ¹³³

3. Legacy Ponds Are a Unique Danger, and the Way the EPA Addressed Them in the Final Rule is Arbitrary and Capricious.

Exempting "inactive impoundments at inactive facilities" in the Final Rule, the EPA spared legacy ponds from preventative regulation applied to other inactive impoundments. The EPA decided to wait until an imminent harm was detected to try to stop or stem the damage. Environmental Petitioners contend that since legacy ponds possess the same shortcomings as every other inactive impoundment, the EPA has not clearly provided a rational reason for the disparate treatment, and the court agreed. The impoundment is a facilities in the Final Rule, the EPA has not clearly provided a rational reason for the disparate treatment, and the court agreed.

While not disputing the dangers of legacy ponds, the EPA attempted to claim that finding and identifying responsible parties for legacy ponds justified its reactive approach. The court rejected the EPA's claim finding it contradictory to the agency's prior record and noting the Final Rule did not place enough attention on substantial risks to human health or the environmental dangers presented by legacy ponds. The court continued:

...legacy ponds present a unique confluence of risks: They pose the same substantial threats to human health and the environment as the riskiest Coal Residuals disposal methods, compounded by diminished preventative and remediation oversight due to the absence of an onsite owner and daily monitoring. Notably, this very Rule was prompted by a catastrophic legacy pond failure that resulted in a "massive" spill of 39,000 tons of coal ash and 27 million gallons of wastewater into North Carolina's Dan River. 139

The EPA decided to take a hands-off approach, choosing to wait to respond until after an *imminent* leak is detected or reported, or otherwise to attempt a post-leak clean-up under the superfund statute, CERCLA.¹⁴⁰

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130. Id. at 431.

131. Id.

132. Id.

133. Id. at 432.

134. Utility Solid Waste Activities Grp., 901 F.3d at 432 (citing 40 C.F.R. § 257.50(e)).

135. Id. (citing 42 U.S.C. § 6973).

136. Id.

137. Id.

138. Id. at 432.

139. Utility Solid Waste Activities Grp., 901 F.3d at 432-33 (citing Final Rule, supra note 1, at 21,343-44, 21,39-94).
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140. *Id.* at 433 (citing Final Rule, *supra* note 1, at 21,312 n.2).

Specifically, the court objected to "EPA's rationale for allowing legacy ponds, in effect, one free leak" coupled with the EPA's "supposed inability to identify the owners of legacy ponds." The court reiterated that there is "no gain-saying the dangers" of legacy ponds; finding they are a significant menace to human health as well as the environment because of the threat of "catastrophic failure for many years to come." 142

The Final Rule outlines many legacy pond failures in the years leading up to the Rule's promulgation, including "a pipe break at a legacy pond at the Widows Creek plant in Alabama [which] caused 6.1 million gallons of toxic slurry to deluge local waterways," a failure at a legacy pond in Gambrills, Maryland, which caused "heavy metal contamination of local drinking water," plus "the preamble to the Rule itself [which] specifically point[ed] to the catastrophic spill at the Dan River legacy pond in North Carolina." The court declared that simply hoping there will be warnings of imminent dangers at unmonitored legacy pond sites or waiting to clean up spills after the fact does not address the problem, nor does it fulfill the EPA's mandate to ensure "no reasonable probability of adverse effects" will befall human well-being or the environment. 144

The court further found that the EPA's "difficulty in locating the owners . . . [of] legacy ponds does not hold water." The EPA has been collecting data for years, maintaining a database to identify "legacy ponds and their owners with specificity." In fact, "the owners and operators of the Dan River, Widows Creek, and Gambrills, Maryland disasters were all known." The Regulatory Impact Analysis for EPA's proposed RCRA regulation of coal combustion residuals states "more than thirty . . . owners and operators of recently, or soon to be, retired power plants where more than 100 legacy ponds are located" with a Stateby-State list detailing legacy ponds with "the utility responsible for each one." 148

The court stated that the EPA "has the authority to regulate inactive units, . . . is regulating inactive units at active facilities, [acknowledges that] the risks posed by legacy ponds are at least as severe as the other inactive impoundment dangers . . . " and, finally that "there is no logical basis for distinguishing between units that present the same risks." The administrative record "belies the EPA's stated reason for its reactive, rather than preventative approach," therefore the

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141. Id.
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^{142.} Id.

^{143.} *Id.* at 433. (citing Proposed Rule, *supra* note 27, at 35,147; Final Rule, *supra* note 1, at 21,393-94).

^{144.} Utility Solid Waste Activities Grp., 901 F.3d at 433 (citing 42 U.S.C. § 6944(a)).

^{145.} Id.

^{146.} Id. at 434.

^{147.} Id. at 433.

^{148.} *Id.* at 434 (citing EPA, REGULATORY IMPACT ANALYSIS FOR EPA'S PROPOSED RCRA REGULATION OF COAL COMBUSTION RESIDUES, INFORMATION REQUEST RESPONSES FROM ELECTRIC UTILITIES (Apr. 30, 2010), https://archive.epa.gov/epawaste/nonhaz/industrial/special/fossil/web/xlsx/survey_database_041212. xlsx).

^{149.} Utility Solid Waste Activities Grp., 901 F.3d at 434 (citing Final Rule, supra note 1, at 21,343).

court was clear in its finding that the Final Rule's "legacy ponds exemption is unreasoned, arbitrary, and capricious." ¹⁵⁰

4. The EPA Requested a Voluntary Remand for the Final Rule.

In addition to the EPA's request to hold the case in abeyance as a result of further developments in Congress and at the EPA with respect to the WIIN Act (which request was denied), 151 the EPA also requested remand to address related issues. The Court granted the motion to remand in part. ¹⁵² Specifically, the Court granted remand of (1) the regulation of CCR that is stored in piles on-site and destined for beneficial use; and (2) the 12,400 ton threshold in the fourth beneficial use criterion. ¹⁵³ In doing so, the Court noted that EPA explained it is reconsidering these provisions and submitted a timeline to the Court, and that the WIIN Act changes support the EPA's request to reconsider these provisions. 154 Notably, the Court stated that, under the WIIN Act, "more precise risk-based standards are both feasible and enforceable under individualized permitting programs and [EPA's] directing monitoring provisions."155 The Court also acknowledged that EPA had been allocated funds in the Appropriations Act of 2018 to implement a CCR permit program under the WIIN Act, and accordingly, "with its recently acquired funding, the EPA is to 'implement a permit program' in non-participating states."156

D. Future Rulemaking

Because the court denied EPA's motion to remand those provisions of the Final Rule which pertained to inactive surface impoundments, landfills at active plants, and legacy ponds, the EPA is currently reissuing Notices of Proposed Rulemaking to address these issues, and revisiting the problems of unlined and claylined impoundments. In November 2018, the EPA announced their intent to modify the Final Rule on CCR disposal as remanded by the court. The EPA proposes the amendment of "performance standards in the CCR rule through several rulemaking efforts to offer additional flexibility to state permitting authorities with an approved program." Moreover, the EPA's Office of Land and Emergency Management announced that they would be submitting a proposed rule to

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150. Id. at 434.
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^{151.} Id. at 449.

^{152.} Id.

^{153.} Id. at 449.

^{154.} Utility Solid Waste Activities Grp., 901 F.3d at 437.

^{155.} Id.

^{156.} Id. at 454 n.7.

^{157.} Elizabeth H. Temkin, CERCLA Enforcement Recent Key Developments and Perspectives, 6 ROCKY MT. MIN. L. FOUND.,*5-22 (Dec. 6-7, 2018).

^{158.} Proposed Rule, Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residues from Electric Utilities: Amendments to the National Minimum Criteria (Phase 2), 83 Fed. Reg. 57,941 (2018).

^{159.} Introduction to the Unified Agenda of Federal Regulatory and Deregulatory Actions—Fall 2018, 83 Fed. Reg. 57,934 (2018).

amend the CCR Disposal Rule as a "Phase Two" revision. ¹⁶⁰ The EPA is reviewing all of the matters brought up in litigation and introducing regulations for a federally approved nationwide CCR permit program. ¹⁶¹

In partial response to the *Utility Solid Waste Activities Group v. EPA* decision, in August 2019, the EPA proposed a rule to address stakeholder input. ¹⁶² The EPA's proposal includes a revision to the beneficial use criteria from a mass-based threshold of amounts of CCR in excess of 12,400 tons to a location-based criteria accounting for factors such as distance from aquifers, wetlands, flood plains, or seismic zones. ¹⁶³ The proposal also includes a revision to groundwater monitoring with new corrective action requirements to allow "members of the public, as well as the states and EPA, to easily see and understand the groundwater monitoring data." ¹⁶⁴ Further, the August 2019 Proposed Rule sets out to redefine a *storage pile* as "a temporary accumulation of unencapsulated CCR on land," whether it is on- or off-site. ¹⁶⁵ Additionally, the EPA is seeking to distinguish between activities that are truly disposal of unencapsulated CCR and those which are not, plus set a uniform set of requirements for CCR destined for disposal or beneficial use. ¹⁶⁶

In December 2019, the EPA proposed another rule which specifically addresses the 2018 D.C. Circuit Court decision on remand. It includes a change in classification of clay-lined impoundments from "lined" to "unlined." Additionally, the EPA is seeking to establish August 31, 2020, as the expedited closure date for non-compliant sites to replace the previous deadline of October 31, 2020. In February 2020, the EPA issued a proposed rule for the establishment of federal permitting to regulate CCR in both Indian country and nonparticipating states in conjunction with the WIIN Act. The public comment period closes on April 20,

^{160.} Id. at 57,941.

^{161.} Id

^{162.} Proposed Rule, Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Enhancing Public Access to Information; Reconsideration of Beneficial Use Criteria and Piles, 84 Fed. Reg. 40,353 (2019) (to be codified at 40 C.F.R. pt. 257).

^{163.} *Id.* at 40,356; 40,358-59.

^{164.} Id. at 40,365-366.

^{165.} *Id.* at 40,362.

^{166.} Id.

^{167. 84} Fed. Reg. at 65,941.

^{168.} *Id.* at 65,941-42. Some 67,216 comments were received by the end of the comment period in January 2020. Industry actors' comments focus on timing to initiate closure, while environmentalists advocate for strengthening safeguards and pollution limits. Envtl. Prot. Agency, *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*, REGULATIONS.GOV, https://www.regulations.gov/docket?D=EPA-HQ-OLEM-2019-0172 (last visited Mar. 12, 2020). At this time, the EPA has made no formal pronouncement about the timing of its' next steps regarding the proposed rule. *Id.*

^{169.} Proposed Rule, *Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Federal CCR Permit Program*, 85 Fed. Reg. 9,940 (2020) (to be codified at 40 C.F.R. pts. 22, 124, & 257).

2020.¹⁷⁰ The EPA is also pursuing a streamlined Federal CCR Permit Program with a virtual public hearing scheduled for April 15, 2020.¹⁷¹

E. Beneficial Use.

RCRA provisions contain a priority of conservation and resource recovery as an objective, which is based on the congressional observation that "millions of tons of recoverable material which could be used are needlessly buried each year." However, activities that are deemed disposal are regulated while those waste management activities that relate to recycling and resource use are not regulated. Consequently, EPA has also developed criteria to distinguish exempt beneficial uses from disposal. 174

The Final Rule adopts a definition of beneficial use that consists of a four-prong qualifying test that incorporates RCRA's conservation objective while imposing checks on unencapsulated uses to protect against disguised disposal. It maximizes opportunities for CCR uses as an alternative to disposal by allowing unencapsulated uses with some environmental protections.

The beneficial use of CCR . . . when performed correctly, can offer significant environmental benefits, including greenhouse gas (GHG) reduction, energy conservation, reduction in land disposal (along with the corresponding avoidance of potential CCR disposal impacts), and reduction in the need to mine and process virgin materials and the associated environmental impacts. ¹⁷⁷

To qualify as a beneficial use and thus be exempt from subtitle D regulation, unencapsulated CCR uses must meet all of definition's four conditions, while encapsulated uses must meet only the first three:¹⁷⁸

(1) The CCR must provide a functional benefit; (2) The CCR must substitute for the use of a virgin material, conserving natural resources that would otherwise need to be obtained through practices, such as extraction; (3) The use of the CCR must meet relevant product specifications, regulatory standards or design standards when available, and when such standards are not available, the CCR is not used in excess quantities; and (4) When unencapsulated use of CCR involving placement on the land of 12,400 tons or more in non-roadway applications, the user must demonstrate and keep records, and provide such documentation upon request, that environmental releases

^{170.} Id

^{171.} ENVIL. PROT. AGENCY, VIRTUAL PUBLIC HEARING ON THE PROPOSAL: FEDERAL CCR PERMIT PROGRAM, https://www.epa.gov/coalash/forms/virtual-public-hearing-proposal-federal-ccr-permit-program.

^{172. 42} U.S.C. § 6901(c)(1), (c)(3).

^{173.} While EPA had postponed answering the question of whether CCR should be regulated under subtitle C or D in its 2000 Regulatory Determination, it did determine that CCR used for beneficial purposes would be exempt from regulation as hazardous waste under §3001(b)(3)(A) of RCRA; In electing subtitle D in the Final Rule, EPA affirmed its decision to exempt CCR uses that meets the Final Rule's definition of beneficial use from any disposal requirements.

^{174. 84} Fed. Reg. at 40,355-56; John Ward, *What Lies Ahead for Beneficial Use of Coal Combustion Products*, ASH AT WORK, Issue 2 at 27 (2018), https://www.acaa-usa.org/Portals/9/Files/PDFs/ASH02-2018.pdf_

^{175.} Final Rule, *supra* note 1, at 21,349-51.

^{176.} *Id.* at 21,351-54.

^{177.} Id. at 21,329.

^{178.} Id. at 21,349.

to groundwater, surface water, soil and air are comparable to or lower than those from analogous products made without CCR, or that environmental releases to groundwater, surface water, soil and air will be at or below relevant regulatory and health-based benchmarks for human and ecological receptors during use. ¹⁷⁹

In the August 2019 proposed rule, the EPA revised this fourth prong of CCR beneficial use definition by replacing the mass-based numerical threshold of 12,400 tons that triggers the environmental demonstration that an unencapsulated use is required to conduct, with specific location-based criteria based on the location restrictions EPA imposed on CCR landfills and impoundments in its Final Rule. ¹⁸⁰ A location-based criteria would include placement within (i) a specified distance from the uppermost aquifer, (ii) a wetland, (iii) an unstable area, (iv) a flood plain, (iv) a specified distance from a fault area, and (v) a seismic zone. ¹⁸¹ EPA invited comments on a trigger that would be a combination of land-based and mass-based numerical criteria. ¹⁸²

Some states have existing beneficial use programs which incorporate similar criteria as the EPA, but after the Final Rule issued, Virginia effectively outlawed unencapsulated uses of CCR generated within the State. ¹⁸³ In March 2019, its General Assembly enacted SB1355, which mandated removal of all CCR from CCR units within the Chesapeake Bay watershed. ¹⁸⁴ The excavated CCR must be either beneficially reused in a recycling process for an *encapsulated beneficial use* or disposed in a permitted landfill with a composite liner and leachate collection system. It defines "encapsulated beneficial use" consistent with the Final Rule's definition where CCR is bound "into a solid matrix and minimizes its mobilization into the surrounding environment." Consequently, CCR excavated from a CCR unit in Virginia can no longer be used as unencapsulated structural fill.

IX. CONCLUSION

The United States Court of Appeals for the D.C. Circuit issued a ruling finding that the EPA's Final Rule for coal ash does not protect communities or the environment enough to comport with RCRA. To comply with the court's ruling, the EPA must increase protections with regard to CCR which may lead to most, if not all, coal ash impoundments' closure. The EPA is ordered to fulfill their statutory mandate to protect "the public and the environment." Legacy ponds, also, must be addressed. The recent Proposed Rules set out to meet these

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179. 40 C.F.R. § 257.53.
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^{180. 84} Fed. Reg. at 40,353; See also 40 C.F.R. §257.60.

^{181. 84} Fed. Reg. at 40,358-59.

^{182.} Id. at 40,353.

^{183. 2019} Va. Acts 650.

^{184.} Id.

^{185.} Lisa Evans, *Huge Win for Communities Threatened by Toxic Coal Pollution*, EARTHJUSTICE (Aug. 29, 2018), https://earthjustice.org/from-the-experts/2018-august/coal-ash-victory.

^{186.} Id

^{187.} Temkin, supra note 157, at *5-22.

^{188.} Evans, supra note 185.

challenges, but it remains to be seen whether the EPA will be vindicated with its next CCR Final Rule.

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