ORAL ARGUMENT NOT YET SCHEDULED

Case No. 24-1200
(consolidated with Nos. 24-1267, 24-1269, 24-1274, 24-1275, 24-1276)

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

CITY UTILITIES OF SPRINGFIELD, MISSOURI, *et al.*,
Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,
Respondents.

On Petition for Review of Final Agency Action of the United States Environmental Protection Agency

JOINT OPENING BRIEF OF ELECTRIC GENERATOR PETITIONERS

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CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

In accordance with D.C. Circuit Rule 28(a)(1), Petitioners City Utilities of Springfield, Missouri, by and through the Board of Public Utilities, East Kentucky Power Cooperative, Inc., Utility Solid Waste Activities Group, National Rural Electric Cooperative Association, American Public Power Association, AEP Generation Resources, Inc., Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company, Public Service Company of Oklahoma, Southwestern Electric Power Company, Wheeling Power Company, Coleto Creek Power, LLC, Dynegy Midwest Generation, LLC, Electric Energy, Inc., Illinois Power Generating Company, Illinois Power Resources Generating, LLC, Kincaid Generation, L.L.C., Luminant Generation Company LLC, Miami Fort Power Company LLC, Zimmer Power Company LLC, Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Duke Energy Indiana, LLC, Lower Colorado River Authority, Talen Energy Supply, LLC, and Electric Generators for Sensible CCR Regulation state as follows:

I. Parties and *Amici*

a. Petitioners:

Petitioner in Case No. 24-1200 is City Utilities of Springfield, Missouri, by and through the Board of Public Utilities.

Petitioner in Case No. 24-1267 is East Kentucky Power Cooperative, Inc.

Petitioners in Case No. 24-1269 are Utility Solid Waste Activities Group,[1] National Rural Electric Cooperative Association, and American Public Power Association.

Petitioners in Case No. 24-1274 are State of Texas, State of North Dakota, State of Wyoming, State of Alabama, State of Indiana, State of Iowa, Commonwealth of Kentucky, State of Louisiana, State of Mississippi, State of Missouri, State of Montana, State of Nebraska, State of Oklahoma, State of South Carolina, State of Utah, Commonwealth of Virginia, and State of West Virginia.

Petitioners in Case No. 24-1275 are AEP Generation Resources, Inc., Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company, Public Service Company of Oklahoma, Southwestern Electric Power Company, Wheeling Power Company, Coleto Creek Power, LLC, Dynegy Midwest Generation, LLC, Electric Energy, Inc., Illinois Power Generating Company, Illinois Power Resources Generating, LLC, Kincaid Generation, L.L.C., Luminant Generation Company LLC, Miami Fort Power Company LLC, Zimmer Power Company LLC, Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Duke Energy Indiana, LLC, Lower Colorado River Authority, and Talen Energy Supply, LLC.

[1] USWAG members Tennessee Valley Authority and Constellation Energy Generation, LLC are not participating in this litigation.

Petitioner in Case No. 24-1276 is Electric Generators for Sensible CCR Regulation.

b. Intervenors and *Amici Curiae*:

Respondent-Intervenors are Altamaha Riverkeeper, Chattahoochee Riverkeeper, Clean Power Lake County, Coosa River Basin Initiative, Hoosier Environmental Council, Just Transition Northwest Indiana, Sierra Club, and Waterkeeper Alliance.

There are currently no *amici curiae* in these consolidated cases.

c. Respondents:

Respondents are the United States Environmental Protection Agency (EPA) and Lee M. Zeldin, EPA Administrator.

II. Rules Under Review

Petitioners challenge EPA's final action entitled "Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments," 89 Fed. Reg. 38,950 (May 8, 2024).

III. Related Cases

Six consolidated cases (Case Nos. 24-1200, 24-1267, 24-1269, 24-1274, 24-1275, and 24-1276) seek review of the agency action challenged here. Petitioners are unaware of any other related cases.

CORPORATE DISCLOSURE STATEMENTS

Pursuant to Federal Rule of Appellate Procedure 26.1 and D.C. Circuit Rule 26.1, East Kentucky Power Cooperative, Inc., Utility Solid Waste Activities Group, National Rural Electric Cooperative Association, American Public Power Association, AEP Generation Resources, Inc., Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company, Public Service Company of Oklahoma, Southwestern Electric Power Company, Wheeling Power Company, Coleto Creek Power, LLC, Dynegy Midwest Generation, LLC, Electric Energy, Inc., Illinois Power Generating Company, Illinois Power Resources Generating, LLC, Kincaid Generation, L.L.C., Luminant Generation Company LLC, Miami Fort Power Company LLC, Zimmer Power Company LLC, Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, Duke Energy Indiana, LLC, Talen Energy Supply, LLC, and Electric Generators for Sensible CCR Regulation submit the following corporate disclosure statements. As governmental entities, City Utilities of Springfield, Missouri, by and through the Board of Public Utilities, and Lower Colorado River Authority are not subject to the requirements of Federal Rule of Appellate Procedure 26.1 and D.C. Circuit Rule 26.1.

City Utilities of Springfield, Missouri is a municipal corporation. As a governmental entity, City Utilities of Springfield is not subject to the requirements of Federal Rule of Appellate Procedure 26.1 and D.C. Circuit Rule 26.1.

East Kentucky Power Cooperative, Inc. ("East Kentucky") is a corporation organized under the laws of the Commonwealth of Kentucky, and its corporate headquarters are located at 4775 Lexington Road, Winchester, Kentucky 40391. East Kentucky is owned by 16 rural electric cooperatives: Big Sandy Rural Electric Cooperative, Blue Grass Energy Cooperative, Clark Energy Cooperative, Cumberland Valley Electric, Farmers Rural Electric Cooperative, Fleming-Mason Energy Cooperative, Grayson Rural Electric Cooperative, Inter-County Energy, Jackson Energy Cooperative, Licking Valley Rural Electric Cooperative, Nolin Rural Electric Cooperative, Owen Rural Electric Cooperative, Salt River Electric Cooperative, Shelby Energy Cooperative, South Kentucky Rural Electric Cooperative, and Taylor County Rural Electric Cooperative. No publicly held corporation owns 10% or more of East Kentucky's stock.

Utility Solid Waste Activities Group ("USWAG") is an association of approximately one hundred and thirty utilities, utility operating companies, and trade associations representing electric companies, utilities, and cooperatives. USWAG represents its members in rulemakings and administrative proceedings before the Environmental Protection Agency under the Resource Conservation and Recovery

Act, 42 U.S.C. § 6901 et seq., and in litigation arising from such proceedings that affect its members. USWAG has no parent company. USWAG does not have any outstanding securities in the hands of the public, and no publicly held company has a ten percent or greater ownership interest in USWAG.

National Rural Electric Cooperative Association ("NRECA") is the national association for nearly 900 not-for-profit rural electric cooperatives and public power districts that provide electric service to roughly one in eight Americans, covering 56% of the Nation's landmass. Rural electric cooperatives serve millions of businesses, homes, schools, farms, irrigation systems, and other establishments in 2,500 of the nation's over 3,100 counties, including 92% of the Nation's persistent poverty counties. America's electric cooperatives are owned by the people they serve, and they comprise a unique sector of the electric industry. Electric cooperatives are focused on providing affordable, reliable, and safe electric power in an environmentally responsible manner. NRECA is not a publicly held corporation, and NRECA has no parent corporation. No publicly held company has 10% or greater ownership interest in NRECA.

American Public Power Association ("APPA") is the national association of publicly owned electric utilities. APPA has no outstanding shares or debt securities in the hands of the public. APPA has no parent company. No publicly held company has a ten percent (10%) or greater ownership in APPA.

AEP Generation Resources, Inc. is a wholly owned subsidiary of AEP Energy Supply, LLC, which is a wholly owned subsidiary of American Electric Power Company, Inc. (AEP). AEP is publicly traded. There are no publicly traded corporations that own more than 10% of AEP's stock.

Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company, Public Service Company of Oklahoma, Southwestern Electric Power Company, and **Wheeling Power Company** are each wholly owned subsidiaries of AEP. AEP is publicly traded. There are no publicly traded corporations that own more than 10% of AEP's stock.

Coleto Creek Power, LLC and **Luminant Generation Company LLC** are each wholly owned subsidiaries of Vistra Asset Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Operations Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Intermediate Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Corp., a publicly held corporation incorporated under the laws of Delaware. Vistra Corp. is publicly traded on the NYSE under the symbol "VST." To the respective company's knowledge, except for The Vanguard Group, Inc., together with its affiliates and managed entities, there are no publicly traded corporations that own more than 10% of Vistra Corp.'s stock.

Dynegy Midwest Generation, LLC is a wholly owned subsidiary of Dynegy Coal HoldCo, LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Operations Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Intermediate Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Corp., a publicly held corporation incorporated under the laws of Delaware. Vistra Corp. is publicly traded on the NYSE under the symbol "VST." To the company's knowledge, except for The Vanguard Group, Inc., together with its affiliates and managed entities, there are no publicly traded corporations that own more than 10% of Vistra Corp.'s stock.

Electric Energy, Inc. is a subsidiary of Illinois Power Generating Company, an Illinois corporation, which owns 80% of Electric Energy, Inc.'s common stock. Illinois Power Generating Company in turn is a wholly owned subsidiary of Illinois Power Resources, LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of IPH, LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Operations Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Intermediate Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Corp., a publicly held corporation incorporated under the laws of Delaware. Vistra Corp. is publicly traded on the

NYSE under the symbol "VST." To the company's knowledge, except for The Vanguard Group, Inc., together with its affiliates and managed entities, there are no publicly traded corporations that own more than 10% of Vistra Corp.'s stock.

The remaining 20% of Electric Energy, Inc.'s common stock is owned by Kentucky Utilities Company (Kentucky Utilities). Kentucky Utilities is a wholly owned subsidiary of LG&E and KU Energy LLC (LKE), a holding company, which in turn is an indirect, wholly owned subsidiary of PPL Corporation. To the company's knowledge, other than PPL Corporation, no publicly held company owns 10% or more of any LKE membership interest or Kentucky Utilities' shareholding interests. PPL Corporation is a publicly traded corporation under the symbol "PPL." To the company's knowledge, except for The Vanguard Group, Inc., together with its respective affiliates and managed entities, no publicly held company has a 10% or greater ownership interest in PPL Corporation.

Miami Fort Power Company LLC and **Zimmer Power Company LLC** are each wholly owned subsidiaries of Luminant Coal Generation LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Luminant Commercial Asset Management LLC, an Ohio limited liability company, which in turn is a wholly owned subsidiary of Vistra Operations Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Intermediate Company LLC, a Delaware limited liability company, which in turn is

a wholly owned subsidiary of Vistra Corp., a publicly held corporation incorporated under the laws of Delaware. Vistra Corp. is publicly traded on the NYSE under the symbol "VST." To the respective company's knowledge, except for The Vanguard Group, Inc., together with its affiliates and managed entities, there are no publicly traded corporations that own more than 10% of Vistra Corp.'s stock.

Illinois Power Generating Company and **Illinois Power Resources Generating, LLC** are each wholly owned subsidiaries of Illinois Power Resources, LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of IPH, LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Operations Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Intermediate Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Corp., a publicly held corporation incorporated under the laws of Delaware. Vistra Corp. is publicly traded on the NYSE under the symbol "VST." To the respective company's knowledge, except for The Vanguard Group, Inc., together with its affiliates and managed entities, there are no publicly traded corporations that own more than 10% of Vistra Corp.'s stock.

Kincaid Generation, L.L.C. is a wholly owned subsidiary of Dynegy Resources Generating HoldCo, LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of EquiPower Resources Corp., a Delaware

corporation, which in turn is a wholly owned subsidiary of Vistra Operations Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Intermediate Company LLC, a Delaware limited liability company, which in turn is a wholly owned subsidiary of Vistra Corp., a publicly held corporation incorporated under the laws of Delaware. Vistra Corp. is publicly traded on the NYSE under the symbol "VST." To the company's knowledge, except for The Vanguard Group, Inc., together with its affiliates and managed entities, there are no publicly traded corporations that own more than 10% of Vistra Corp.'s stock.

Duke Energy Carolinas, LLC and **Duke Energy Progress, LLC** are each wholly owned subsidiaries of Duke Energy Corporation. **Duke Energy Indiana, LLC** is a wholly owned subsidiary of Duke Energy Indiana Holdco, LLC, which is a subsidiary in which Duke Energy Corporation is the majority owner. Duke Energy Corporation is the only publicly held company owning more than 10% of Duke Energy Indiana Holdco, LLC. Duke Energy Corporation is publicly traded, and no publicly held company owns more than 10% of Duke Energy Corporation's stock.

As a governmental entity, the **Lower Colorado River Authority** is not subject to the requirements of Federal Rule of Appellate Procedure 26.1 and D.C. Circuit Rule 26.1.

Talen Energy Supply, LLC is a power generation company that owns power plant units affected by EPA's final action subject to this Petition for Review. Talen

Energy Supply, LLC is a wholly owned subsidiary of Talen Energy Corporation. Talen Energy Corporation is a publicly traded corporation. No publicly held company owns more than 10% of Talen Energy Corporation's stock.

The Electric Generators for Sensible CCR Regulation is an *ad hoc* coalition of electric generating companies that have joined together for the purpose of filing this petition for review. The members of the ad hoc coalition own facilities that are subject to the final rule at issue in this case. The members of the *ad hoc* coalition are AEP Generation Resources, Inc.; Buckeye Power, Inc.; Ohio Power Company; and the Ohio Valley Electric Corporation, and its wholly owned subsidiary the Indiana-Kentucky Electric Corporation. Electric Generators for Sensible CCR Regulation has no parent corporation, and no publicly held corporation has a 10% or greater ownership in it.

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65 Fed. Reg. 32,214 (May 22, 2000) 5

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85 Fed. Reg. 9,940 (Feb. 20, 2020) 12

88 Fed. Reg. 31,982 (May 18, 2023) 11, 12, 13, 15, 36, 42, 46, 47

88 Fed. Reg. 77,941 (Nov. 14, 2023).....15

89 Fed. Reg. 38,950 (May 8, 2024) 12, 13, 14, 19, 20, 22, 23, 29, 31, 32, 33, 39, 41, 42, 45, 46, 48

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Comments of the Lower Colorado River Authority on Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments; Notice of Data Availability, EPA-HQ-OLEM-2020-0107-0965 (Dec. 11, 2023) ("LCRA Comments").....41

Comments of the Luminant Companies on EPA's Proposed Rule Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments, EPA-HQ-OLEM-2020-0107-0341 (July 17, 2023) ("Luminant Comments").....42

Comments of Talen Energy Corporation on Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments; Notice of Data Availability, EPA-HQ-OLEM-2020-0107-0959 (Dec. 11, 2023) ("Talen Comments") 41

Comments of The Utility Solid Waste Activities Group on Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments, EPA-HQ-OLEM-2020-0107-0242 (July 17, 2023) ("USWAG Comments").....43

EPA, *Human and Ecological Risk Assessment of Coal Combustion Residuals*, EPA-HQ-RCRA-2009-0640-11993 (Dec. 2014) ("2014 Risk Assessment").....7

EPA, *Memorandum: Compilation of News Articles on Potential Future Land Uses at Electric Utilities*, EPA-HQ-OLEM-2020-0107-0999 (Mar. 13, 2024) ("Compilation of News Articles") 39

EPA, *Prepublication Copy Notice: Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments*, Docket EPA-HQ-OLEM-2020-0107 (Apr. 24, 2024) ("Final Rule Prepublication Copy") 47, 48

EPA, *Regulatory Impact Analysis*, EPA-HQ-RCRA-2009-0640-12034 (Dec. 2014) ("2014 RIA").....8, 9, 29

EPA, *Regulatory Impact Analysis*, EPA-HQ-OLEM-2020-0107-1067 (Apr. 2024) ("2024 RIA") 28, 30

EPA, *Risk Assessment of Coal Combustion Residuals: Legacy Impoundments and CCR Management Units*, EPA-HQ-OLEM-2020-0107-1065 (Apr. 2024) ("2024 Risk Assessment") 13, 15, 16, 30, 38, 39, 40

EPA, *Universe of CCR Management Units*, EPA-HQ-OLEM-2020-0107-1032 (Apr. 18, 2024) ("Universe of CCR Management Units").....39

EPA, Volume IV: Response to Comments, Economics, EPA-HQ-OLEM-2020-0107-1039 (Apr. 2024) ("RTC, Vol. 4").....30

Memorandum from Barry N. Breen, Principal Deputy Assistant Administrator, *Corrections to the Final Rule: Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments (Tier 3; SAN 7814; RIN 2050-AH14),* EPA-HQ-OLEM-2020-0107-1073 (Apr. 30, 2024) ("Post-Signature Change Memorandum").....48

S.2150, 94th Cong. §3(a)(3) (1975), *reprinted in* Committee on Environment and Public Works, 102d Cong., *A Legislative History of the Solid Waste Disposal Act, as Amended* (June 1991).....26

S. Rep. No. 94-988 (1976), *reprinted in* Committee on Environment and Public Works, 102d Cong., *A Legislative History of the Solid Waste Disposal Act, as Amended* (June 1991).....21, 25

GLOSSARY

APA	Administrative Procedure Act
CCR	Coal combustion residuals
CCRMU	CCR management unit
EPA	U.S. Environmental Protection Agency
RCRA	Resource Conservation and Recovery Act of 1976, 42 U.S.C. §6901 *et seq*.
RIA	Regulatory Impact Analysis
RTC	Response to Comments
The 2015 Rule	Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities, 80 Fed. Reg. 21,302 (Apr. 17, 2015)
The Rule	Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments, 89 Fed. Reg. 38,950 (May 8, 2024)
USWAG	Utility Solid Waste Activities Group
WIIN Act	Water Infrastructure Improvements for the Nation Act, Pub. L. No. 114-322, 130 Stat. 1628 (2016), codified at 42 U.S.C. §6945(d)

JURISDICTIONAL STATEMENT

This Court has jurisdiction under 42 U.S.C. §6976(a)(1).

STATEMENT OF ISSUES

1. Whether the CCR management unit provisions of the Rule exceed EPA's statutory authority.

2. Whether the Rule's regulation of the beneficial use of CCR exceeds EPA's statutory authority or is arbitrary and capricious.

3. Whether the legacy impoundment provisions of the Rule exceed EPA's statutory authority as applied to former impoundments that did not contain CCR as of the Rule's effective date.

4. Whether the CCR management unit provisions of the Rule are arbitrary and capricious because they are not supported by an adequate risk assessment.

5. Whether the Rule is unlawfully retroactive.

6. Whether definitions in the Rule were promulgated without following statutory procedures or are arbitrary and capricious.

STATUTES AND REGULATIONS

Relevant authorities are included in the addendum.

STATEMENT OF THE CASE

This case concerns the regulation of coal combustion residuals—known as "CCR"—at power plants nationwide. CCR is a nonhazardous byproduct of generating electricity from coal. CCR is handled by power plant operators in several ways. CCR is beneficially *used* as a replacement for virgin material in construction and land applications. It is *disposed* of in landfills and surface impoundments. And,

as a precursor to both, it is *managed* in various ways—*e.g.*, collected, separated, stored, transported, transferred, and processed.

In the regulations at issue here, EPA, for the first time, seeks to extend its regulatory authority beyond the *disposal* of CCR to both the *management* and *use* of CCR, as well as to areas where CCR *was* but no longer *is* disposed. In this way, the regulations contravene the statutory scheme purposely crafted by Congress to limit EPA's authority to CCR disposal, require EPA to promote the beneficial use of CCR, and grant to the States the authority to regulate solid waste management practices.

I. Statutory Background

The Solid Waste Disposal Act, 42 U.S.C. §§6901-6992k ("the Act") delineates EPA's authority to regulate solid waste. In 1976, Congress amended the Act through the Resource Conservation and Recovery Act ("RCRA") to "reduce the amount of waste"; "provide for proper and economical solid waste disposal practices"; and promote "the recovery and conservation" of "usable materials from solid waste." *Id.* §6901(a)(4), (c)(2)-(3).

RCRA bifurcates the regulation of solid waste between hazardous and nonhazardous solid waste. Under RCRA Subtitle C, Congress gave "EPA very broad authority to regulate the disposal of hazardous waste." *In re Consol. Land Disposal Regul. Litig.*, 938 F.2d 1386, 1388 (D.C. Cir. 1991). RCRA Subtitle C creates a federal "'cradle-to-grave' regulatory system," *Shell Oil Co. v. EPA*, 950

F.2d 741, 754 (D.C. Cir. 1991), under which "EPA directly regulates all stages of production and disposition of hazardous wastes." *USWAG v. EPA*, 901 F.3d 414, 423 (D.C. Cir. 2018). Thus, EPA's authority extends to "promulgat[ing] regulations establishing … standards" for the generation, transportation, treatment, storage, and disposal of hazardous wastes. 42 U.S.C. §§6922-6924.

In contrast, regulation of nonhazardous waste is "primarily the function of State, regional, and local agencies." 42 U.S.C. §6901(a)(4). Unlike EPA's comprehensive authority over hazardous waste, RCRA Subtitle D "envisions that states are primarily responsible for regulating disposal of nonhazardous wastes." *USWAG*, 901 F.3d at 423.

Solid Waste Management versus Disposal. For nonhazardous waste regulated under Subtitle D, RCRA further distinguishes between the broader category of "solid waste management" and solid waste "disposal," a subset of solid waste management. Congress gave States the primary authority to regulate the broader category of "solid waste management practices" and gave EPA authority to regulate only a subset of those practices—"disposal." Thus, only when it is disposed of does CCR become subject to direct federal regulation.

"Solid waste management" is "the systematic administration of activities which provide for the collection, source separation, storage, transportation, transfer, processing, treatment, and disposal of solid waste." 42 U.S.C. §6903(28).

"Disposal" is thus one specific type of "solid waste management," *id.*, and is separately defined, *see id.* §6903(3). The terms "use" and "using" are neither "solid waste management" nor "disposal." *See id*. §6903(3), (28).

As to the broader category of "solid waste management," States have the authority "to define those solid waste management practices which constitute the [prohibited] open dumping of solid waste." *Id*. §6907(a)(3). EPA's role in that process is to "develop and publish *suggested guidelines* for solid waste management" "*to be used by the States* to define those solid waste management practices" that are prohibited. *Id*. §6907(a) (emphases added).

States implement this authority through State solid waste management plans that, among other things, "prohibit the establishment of new open dumps within the State"; "require[] that all solid waste [be] utilized for resource recovery or … disposed of in sanitary landfills"; and "provide for the closing or upgrading of all existing open dumps within the State." *Id*. §§6943(a)(2)-(3). EPA's role is to "approve or disapprove the plan"; "review approved plans from time to time"; and "withdraw [its] approval" if it "determines that revision or corrections are necessary to bring such plan into compliance" with these statutory requirements. *Id*. §6947(a).

As to the narrower activity of *disposal*, EPA has direct authority to "*promulgate regulations* containing criteria for determining which facilities shall be classified as sanitary landfills and which shall be classified as open dumps" only

based on the "reasonable probability of adverse effects on health or the environment *from disposal* of solid waste at [a] facility." *Id*. §6944(a) (emphases added).

Beneficial Use of CCR. The Act further distinguishes between the *disposal* of CCR and the *use* of CCR. In the 1980 Bevill Amendments to the Act, Congress found that "solid waste contains valuable … material resources which can be recovered and used thereby conserving increasingly scarce and expensive … virgin materials," *id*. §6941a(2), and it required EPA to conduct "a detailed and comprehensive study … of the disposal and utilization of [CCR]," *id*. §6982(n). Congress required EPA to consider, among other things, "current and potential utilization of such material," "alternatives to current disposal methods," and "the costs of such alternatives." *Id*. Using this study, EPA was required to determine whether CCR should be regulated as a hazardous waste. *See id*. §6921(b)(3).

In its "Bevill Determinations" in 1993 and 2000, EPA concluded that regulation of CCR as a hazardous waste was unwarranted. 58 Fed. Reg. 42,466 (Aug. 9, 1993); 65 Fed. Reg. 32,214 (May 22, 2000). EPA affirmed these determinations in 2015 and further determined the beneficial use of CCR does not warrant federal solid-waste regulation at all—as either a hazardous or a nonhazardous waste—in light of the "significant environmental benefits, including greenhouse gas (GHG) reduction, energy conservation, reduction in land disposal

… and reduction in the need to mine and process virgin materials and the associated environmental impacts." 80 Fed. Reg. 21,302, 21,327-29 (Apr. 17, 2015).

II. Regulatory Background

A. EPA's First Disposal Criteria

EPA promulgated the first RCRA regulations for nonhazardous solid wastes, including CCR, in 1979. 44 Fed. Reg. 53,438 (Sept. 13, 1979) (codified as amended at 40 C.F.R. Part 257, Subpart A). EPA explained that 42 U.S.C. §6907(a)(3) and §6944(a) "embody different implementation schemes" and that "[t]he State solid waste management plan is the centerpiece of the Subtitle D program." *Id*. at 53,438-39. Accordingly, EPA's regulations were limited to "disposal facilities and practices." *Id*. at 53,438; *see also* 40 C.F.R. §257.2 (defining "facility" with reference to "the land *used for the disposal of solid waste*" and "practice" as "the act of *disposal* of solid waste") (emphases added)).

B. The 2015 Rule: Criteria for CCR Disposal

In 2015, EPA promulgated nonhazardous waste criteria applicable specifically to CCR disposal. 80 Fed. Reg. at 21,303 (promulgating 40 C.F.R. Part 257, Subpart D) (the "2015 Rule"). The regulations address the CCR disposal practices that EPA found posed "risks … to human health and the environment"—specifically, disposal in "existing and new CCR landfills and existing and new CCR surface impoundments," which the 2015 Rule defines as "CCR units." *Id.* at 21,302-

03. The 2015 Rule did not regulate units with a "de minimis" amount of CCR because they presented no risk. *Id*. at 21,357.

The 2015 Rule operated prospectively, and its applicability was based on a unit's status as of the rule's effective date, October 19, 2015. Thus, the 2015 Rule did *not* apply to any CCR units that closed prior to October 19, 2015 (the effective date of the rule) in accordance with then-existing requirements. *Id*. at 21,343. As EPA explained, the 2015 Rule did not "require 'closed' surface impoundments to 'reclose,'" acknowledging the "literally hundreds of previously closed … surface impoundments—many of which were properly closed decades ago under state solid waste programs, have changed owners, and now have structures built on top of them." *Id*.

EPA found that previously closed CCR impoundments did not present an unreasonable risk because closing the unit removes the ponded water that creates the pressure (the "hydraulic head") that causes the "leaching of contaminants" into groundwater. *Id*. at 21,328. As EPA explained: "The removal of free liquids and capping during closure reduces the hydraulic head and the rate of contaminant migration. After closure is complete, infiltration through the impoundments is driven only by percolation of incident precipitation through the cap." JA__[2014 Risk Assessment at K-1]. Accordingly, the 2015 Rule did "not impose any requirements on any CCR surface impoundments that have in fact 'closed' before

the rule's effective date—*i.e.*, those that no longer contain water and can no longer impound liquid" and are "capped or otherwise maintained." 80 Fed. Reg. at 21,343.

For CCR units that were not closed prior to the effective date of the 2015 Rule, the applicability of the criteria depended on the risk profile of each type of unit. All operating CCR units were regulated. "Inactive CCR landfills"—those "that ha[d] ceased receiving CCR prior to October 19, 2015" but were not necessarily closed—were excluded from coverage. 40 C.F.R. §257.50(d) (2015). "Inactive CCR surface impoundments" were included if located at a facility actively generating electricity. *Id*. §257.50(c). But an "inactive CCR surface impoundment" was excluded if located at a facility "that ha[d] ceased producing electricity prior to October 19, 2015," *id*. §257.50(e)—these are commonly called "legacy impoundments."

C. The 2015 Rule: Exclusion of On-Site Beneficial Use

The 2015 Rule excluded beneficial uses of CCR from regulation. *Id*. §257.50(g) ("This subpart does not apply to practices that meet the definition of a beneficial use of CCR."); *see also id*. §257.53 (defining "beneficial use" and excluding "beneficial use" and "storage" from "disposal"). When it provided the exclusion, EPA documented the beneficial use of over 48 million tons of CCR annually from power plants, 6.7 million tons of which occurred *on-site* at power plants, as shown below. *See* JA__[2014 RIA at 2-21, Ex. 2-J] (highlighting added).

Exhibit 2-J
Annual CCR Disposition Quantity for NAICS 22 Electric Utility Plants
(thousands of short tons unless noted otherwise)

CCR Category	Disposal			Beneficial Use					Total Quantity	Ash Type Sub-totals
	On-site Landfill	On-site Impoundments (Ponds)	Off-site Disposal (Landfill)	Sold	Used On-site	Used Off-site	Stored On-site	Stored Off-site		
1. Bottom (bed) ash from FBC units	895.7	158.7	197.1	278.1	0.9	1,228.1	34.6	0.0	2,793.2	20,974.7 (17.4%)
2. Bottom ash from standard boiler units	5,408.4	2,981.1	1,577.5	3,685.3	1,389.5	565.1	1,150.1	1.4	16,758.4	
3. Bottom Ash* (plants < 100 MW only)	181.7	160.9	1,080.4	-	-	-	-	-	1,423.1	
4. Fly ash from FBC units	2,286.7	18.4	360.2	353.2	0.0	1,877.9	63.1	0.0	4,959.5	61,637.2 (51.2%)
5. Fly ash from standard boiler/PCD units	15,893.7	5,793.8	4,199.2	14,599.4	2,854.6	2,152.2	2,023.3	53.2	47,569.4	
6. Fly ash from units with dry FGD	1,821.6	669.3	1,078.1	335.8	473.8	408.5	80.3	0.0	4,867.4	
7. Fly Ash* (plants < 100 MW only)	541.6	479.6	3,219.7	-	-	-	-	-	4,240.9	
8. FGD Gypsum	7,397.1	3,766.2	2,587.3	9,149.1	1,073.3	2,717.3	1,012.7	0.0	27,703.0	37,344.5 (31.0%)
9. Other FGD byproducts	7,063.1	435.5	513.7	523.2	886.8	117.3	101.2	0.7	9,641.5	
10. Other	164.1	274.7	2.6	19.9	0.0	0.0	2.3	0.0	463.6	
Totals (millions short tons)	**41.7**	**14.7**	**14.8**	**28.9**	**6.7**	**9.1**	**4.5**	**0.1**	**120.4**	
Percentages =	34.6%	12.2%	12.3%	24.0%	5.5%	7.5%	3.7%	0.0%	100%	
Disposal and beneficial use sub-totals	**71.2 million (59%)**			**48.1 million (39%)**						

*These categories represent CCR disposition quantities for plants with generation capacity less than 100 MW. Tonnages for these categories are disposed at potentially active on-site units at plants reporting burning coal-based fuel. These tonnages are calculated from coal burned or nameplate capacity and percent ash content of coal (see **Exhibit 2-K**). See **Appendix A** for specific sources for individual plants.

By exempting beneficial use, EPA intended "not … to inhibit or eliminate the measurable environmental and economic benefits derived from the use of this valuable material given the current lack of evidence affirmatively demonstrating an environmental or health risk." 80 Fed. Reg. at 21,330. EPA projected that the exclusion would allow "beneficial use for fill applications" "to increase significantly." JA__[2014 RIA at 5-27, Ex. 5-K].

The 2015 Rule includes criteria "used to distinguish between legitimate beneficial uses of CCR and the disposal of CCR." 80 Fed. Reg. at 21,347. None of those criteria distinguish between on-site and off-site uses. *See* 40 C.F.R. §257.53 (2015). To qualify as a beneficial use, the use must: 1) "provide a functional benefit;" 2) "substitute for the use of a virgin material;" and 3) "meet relevant product specifications." *Id.* These criteria were drawn from EPA's description of beneficial uses in its May 2000 Bevill Determination. *See* 80 Fed. Reg. at 21,347.

"Unencapsulated uses" that "involve the direct placement of CCR on the land"—including "large scale fill operations" like "structural fill necessary to construct a stable base for a building"— qualify as beneficial use. *Id*. at 21,348, 21,351-52. If the placement is more than 12,400 tons, the user must demonstrate that any releases from such placement are "comparable to or lower than those from analogous products made without CCR" or that the releases otherwise meet regulatory benchmarks. 40 C.F.R. §257.53 (2015). But "[a]pplication of unencapsulated CCR to the land in volumes less than the 12,400 tons will not require an affirmative demonstration to be considered a beneficial use." 80 Fed. Reg. at 21,352.

The 2015 Rule "d[id] not affect past beneficial uses (*i.e.*, uses completed before the effective date of the rule [October 19, 2015]." *Id*. at 21,302.

III. The *USWAG* Decision

This Court reviewed portions of the 2015 Rule in *USWAG*. As relevant here, the Court held EPA's blanket exclusion of "legacy impoundments" was arbitrary and capricious because it found that EPA's record showed that legacy impoundments presented the same risk as open impoundments at active facilities. *USWAG*, 901 F.3d at 434. The Court set aside the exclusion for legacy impoundments. *Id*. at 449.

No party in *USWAG* challenged EPA's decision to exclude beneficial use, previously closed units, and inactive landfills from the new disposal requirements.

IV. The WIIN Act

Congress amended the Act in 2016 in the Water Infrastructure Improvements for the Nation Act of 2016 (the "WIIN Act"), Pub. Law 114-322, §2301, 130 Stat. 1628, 1736-40 (2016). The WIIN Act "incorporated the 2015 [Subpart D] regulations into the statute." 88 Fed. Reg. 31,982, 31,985 (May 18, 2022); *see also USWAG*, 901 F.3d at 426 (discussing "the [WIIN] Act's express incorporation of the EPA regulations published at 40 C.F.R. Part 257").

The WIIN Act's primary focus was to delegate to each State the authority to establish a site-specific permitting program for "coal combustion residuals units" to "operate in lieu of" EPA's regulations. 42 U.S.C. §6945(d)(1)(A). Under the new provisions, a State may submit to EPA "evidence of a permit program or other system of prior approval and conditions under State law for regulation by the State of coal combustion residuals units." *Id.* EPA "shall approve" the State's program if it "requires each coal combustion residuals unit located in the State to achieve compliance with" "the applicable criteria for coal combustion residuals units under part 257 of title 40, Code of Federal Regulations (or successor regulations promulgated pursuant to sections 6907(a)(3) and 6944(a))" or is "at least as protective" as those regulations. *Id.* §6945(d)(1)(B)-(C).

To date, EPA has approved three State programs (Georgia, Oklahoma, and Texas), 88 Fed. Reg. at 32,028, and disapproved one (Alabama), 89 Fed. Reg. 48,774 (June 7, 2024). EPA proposed a federal permit program in 2020, 85 Fed. Reg. 9,940 (Feb. 20, 2020), but has not issued a final rule.

V. The Rule

EPA published the Rule on May 8, 2024. 89 Fed. Reg. 38,950 (May 8, 2024). The Rule: 1) purports to respond to the *USWAG* remand regarding legacy impoundments; and 2) creates and regulates a new category called "CCR management units." *Id*. at 38,950-51.

A. Legacy Impoundments

The Rule defines a "legacy CCR surface impoundment" based on its status as of the effective date *of the 2015 Rule*—that is, an impoundment that "contained both CCR and liquids on or after October 19, 2015, and that is located at an inactive [power plant]." 40 C.F.R. §257.53. Thus, an area is regulated even if the unit was closed by removal of all CCR between October 19, 2015, and November 8, 2024. *See* 89 Fed. Reg. at 38,984-85. EPA conceded such closures were not subject to federal closure standards when the closures were completed. 88 Fed. Reg. at 31,988. Nevertheless, the Rule requires facilities to demonstrate that these *prior* closures "met the [federal] criteria in §257.102(c)"—*i.e.*, criteria that did not apply at the time the closures were completed. 89 Fed. Reg. at 38,985. This demonstration requires,

at a minimum, that the facility install an extensive groundwater monitoring system that meets the Rule's specifications. 40 C.F.R. §257.100.

B. CCR Management Units

"In addition to the revisions … to address the *USWAG* decision," the Rule "add[s] a new category" of regulated activity, which EPA calls a "CCR management unit." 89 Fed. Reg. at 38,956, 39,035. A CCR management unit is "*any* area of land on which *any* noncontainerized accumulation of CCR [1] is received, [2] is placed, or [3] is otherwise managed, that is not a regulated CCR unit." 40 C.F.R. §257.53 (emphases added).

The CCR management unit category is "broad," encompassing "other solid waste management areas of CCR" beyond CCR disposal units. 88 Fed. Reg. at 32,013, 32,018. These other areas could include, for example, "structural fill sites" and "haul roads made of CCR." *Id*. at 32,018. EPA confirmed that these "other solid waste management areas of CCR" were "not a CCR unit" as defined under the 2015 Rule, *id*. at 32,013, 32,034, and include "place[ment] on the land … intended for a purpose other than disposal," JA__[2024 Risk Assessment at 2-6]; *see also* 89 Fed. Reg. at 38,970 (CCR management units include CCR placed "for purposes other than disposal").

The definition of CCR management unit "includes inactive CCR landfills and CCR units that closed prior to October 19, 2015"—*i.e.*, areas excluded from the 2015

Rule. 40 C.F.R. §257.53. The Rule defines "closed prior to October 19, 2015" to mean "the CCR landfill or surface impoundment *completed* closure of the unit *in accordance with state law* prior to October 19, 2015." *Id*. (emphases added).

The Rule relies on 42 U.S.C. §6907(a) and §6944(a) as statutory authority to regulate CCR management units. EPA "interpret[ed]" these provisions as "delegat[ing] broad authority to EPA to establish regulations governing the management of solid waste." 89 Fed. Reg. at 38,952-53. EPA claimed 42 U.S.C. §6907(a) "expands EPA's authority" to "issue regulations" "establish[ing] requirements" for "any of the activities identified as 'solid waste management' in [42 U.S.C. §6903(28)]." *Id*.

C. Deferral Provisions

EPA acknowledged the Rule's retroactive effects, conceding that "facilities may have closed legacy impoundments and treated CCR [management units] in compliance with State law requirements, or otherwise made business decisions premised on the absence of Federal regulation." *Id*. at 38,985.

EPA claimed to address these "secondary retroactive effects in upsetting parties' expectations" by "allowing for deferrals of additional closure measures" in two circumstances. *Id.* First, where a CCR management unit or legacy impoundment was previously closed "under substantially equivalent regulatory authority" to Subpart D, the facility "need not demonstrate compliance with the [new

federal closure] performance standards." 40 C.F.R. §257.101(g). To obtain this "deferral," however, the facility must meet six "standards"—one of which is demonstrating compliance with the same federal performance standards that are supposedly "deferred." *See id.* §257.101(g)(4)(ii). Second, where a CCR management unit is located "under critical infrastructure" (for example, as fill supporting plant structures), the facility "need not initiate closure until the infrastructure is no longer needed." *Id.* §257.101(h). Under both "deferral" provisions, only the closure obligation is "deferred" not the other requirements of the Rule (such as groundwater monitoring).

VI. EPA's Post-Proposal "Risk Assessment"

EPA proposed the Rule without conducting a risk assessment. *See* 88 Fed. Reg. at 32,010. Commenters challenged the omission, and EPA later published a "Risk Assessment of Coal Combustion Residuals: Legacy Impoundments and CCR Management Units." *See* 88 Fed. Reg. 77,941 (Nov. 14, 2023); *see also* JA__[2024 Risk Assessment].

In the post-proposal Risk Assessment, EPA modeled only a subset of the new CCR management unit category, "CCRMU fills"—*i.e.*, CCR "placed for purposes other than disposal." JA__[2024 Risk Assessment at 1-3, 4-1]. Conceding it had "little available information" about the location, size, or dimensions of "CCRMU fills present onsite at facilities," EPA "assumed" a worst-case for its modeling—

"that the [power plant] site will be redeveloped in the future for residential use" and that "groundwater is used as a source of drinking water by future residents." JA__[*Id*. at 4-1, 4-2].

SUMMARY OF THE ARGUMENT

The Rule is unlawful for multiple reasons, and it should be set aside. The Rule radically expands the scope of EPA's regulatory authority over solid waste well beyond the limits expressly set by Congress. In creating the new CCR management unit category, the Rule runs roughshod over the statute's clear division of authority between the States and EPA, under which States are delegated authority to regulate all solid waste *management* and EPA is limited to regulating *disposal*. And in regulating legacy impoundments where CCR no longer exists, the Rule contravenes the plain language of the statute, as already interpreted by this Court in *USWAG*. As to both, by applying new federal standards to closures completed years ago—and in some cases decades ago—the Rule is unlawfully retroactive and fails to account for Petitioners' reasonable reliance interests and substantial investment in those prior lawful closures.

The Rule also unlawfully attempts to regulate the beneficial use of CCR simply because it may have taken place on-site at a power plant. In doing so, the Rule further exceeds EPA's limited authority under RCRA Subtitle D to regulate disposal and contravenes Congress's intent in the Act to prioritize the beneficial use

of CCR for a myriad of policy reasons, including its environmental advantages and cost savings. The 2015 Rule expressly exempted beneficial use from federal regulations—both on- and off-site. In reversing that approach, EPA failed to consider the statutory factors enumerated in the Act and ignores the reliance interests created by the long-standing exclusion of beneficial use from federal regulation.

Nor does any demonstrated risk justify the Rule. EPA proposed the new requirements before it conducted any risk assessment at all. And when it later sought to fill that gap, it modeled only one limited type of CCR activity—the use of CCR as construction fill—and it did so using a worst-case assumption that bears no relation to the real world and has no support in the record. And EPA has never modeled the previously closed units that are now swept into the CCR management unit category.

Finally, in its haste to issue the Rule, EPA violated basic procedural safeguards. Definitions in the Rule differ substantively from the proposal, with no explanation of the changes at all. In one case—the definition of "liquids"—the Rule as published in the Federal Register is substantively different not only from the proposal, but from the version signed by the Administrator just two weeks before it was published. These last-minute behind-the-scenes revisions—unexplained in the record—violate the APA and must be set aside.

STANDING

As demonstrated by the record and declarations in the Standing Addendum, Petitioners have standing because they (and, in the case of Petitioners that are associations, their members) are "the object of" the Rule. *West Virginia v. EPA*, 597 U.S. 697, 719 (2022).

STANDARD OF REVIEW

Judicial review of regulations promulgated under the Act is conducted under the Administrative Procedure Act ("APA"). 42 U.S.C. §6976(a).

ARGUMENT

I. The CCR Management Unit Provisions of the Rule Exceed EPA's Statutory Authority

The Rule's CCR management unit provisions exceed EPA's limited statutory authority under RCRA Subtitle D to regulate only the *disposal* of nonhazardous solid waste. Non-disposal activities—like the storage or transfer of solid waste, both forms of management—do not fall within EPA's regulatory jurisdiction. And yet the Rule regulates precisely such activities under the CCR management unit provisions, which govern "*any* area of land on which *any* noncontainerized accumulation of CCR is received, is placed, *or is otherwise managed*," 40 C.F.R. §257.53 (emphases added)—a "broad" scope EPA concedes reaches "other solid waste management areas of CCR" beyond disposal, 89 Fed. Reg. at 39,035, 39,044.

"Courts must exercise their independent judgment in deciding whether an agency has acted within its statutory authority, as the APA requires." *Loper Bright Enters. v. Raimondo*, 603 U.S. 369, 412 (2024). Here, under the "best reading" of the statute, using "all relevant interpretative tools," *id.* at 400, EPA is limited to promulgating binding regulations for the *disposal* of CCR and may not do so for CCR *management* generally.

Statutory Text. EPA bases the Rule on its claim that "RCRA sections 1008(a)(3) and 4004(a) delegate broad authority to EPA to establish regulations governing the management of solid waste." 89 Fed. Reg. at 38,952. "But the statute

itself refutes this." *City of Chicago v. Env't Def. Fund*, 511 U.S. 328, 336 (1994). Not only is EPA's authority expressly limited to "disposal," 42 U.S.C. §§6903(14), 6944(a), States expressly retain the authority to regulate the management of solid waste, *id*. §6907(a)(3). Thus, contrary to EPA's claim, RCRA sections 1008(a)(3) and 4004(a) do not confer "combined authority" on EPA to regulate solid waste management, 89 Fed. Reg. at 38,953; instead, they *divide* authority between EPA and the States—with EPA having authority over only disposal and States having authority over all types of solid waste management activities.

Under RCRA Subtitle D's statutory division, States determine which solid waste *management* practices are permitted under RCRA, and EPA determines which *disposal* practices are permitted. The terms "disposal" and "solid waste management" are "specific terms" in RCRA's "carefully constructed text." *See City of Chicago*, 511 U.S. at 336-37. For the broader category of management, the statute limits EPA to "develop[ing] and publish[ing] *suggested* guidelines for solid waste management" "*to be used by the States* to define those solid waste management practices which constitute the open dumping of solid waste." 42 U.S.C. §6907(a) (emphases added). In contrast, EPA's task is to "promulgate regulations" that define when "disposal" is a "sanitary landfill" and when it is an "open dump." *Id*. §6944(a).

Thus, "Congress use[d] explicit language in one part of a statute to cover a particular situation and then use[d] different language in another part of the same

statute," indicating "that the two provisions do not mean the same thing." *Persinger v. Islamic Republic of Iran*, 729 F.2d 835, 843 (D.C. Cir. 1984). Congress could have instead used the words "regulation" and "promulgate" in 42 U.S.C. §6907(a)(3) to indicate that EPA was delegated the authority to directly regulate all "solid waste management" by owners and operators. But it did not, choosing instead to only authorize EPA to develop "suggested guidelines" "to be used by the States to define" what solid waste management practices are permitted. 42 U.S.C. §6907(a)(3); *see also Waterkeeper All., Inc. v. Wheeler*, 613 F. Supp. 3d 86, 95 (D.D.C. 2020) (RCRA "distinguishes between 'guidelines' and 'regulations.'"), *vacated and remanded sub nom. Waterkeeper All., Inc. v. Regan*, 41 F.4th 654 (D.C. Cir. 2022).

Alternatively, Congress could have used the phrase "solid waste management" in 42 U.S.C. §6944(a) but instead chose to limit EPA's authority to the narrower category of "disposal of solid waste." EPA's attempt to regulate any areas where CCR "is received" and "is otherwise managed" as "CCR management units," 40 C.F.R. §257.53, goes beyond "disposal" and therefore plainly oversteps the statutory limitation on EPA's power to promulgate legislative rules. *See City of Chicago*, 511 U.S. at 336 & n.2 (distinguishing RCRA's "specific terms" "disposal" and "otherwise managing" and explaining the latter means "just about every … waste-related activity *except* generation"); JA__[S. Rep. No. 94-988, at 26 (1976)]

("The term ["disposal"] is purposefully contrasted to the terms 'storage' and 'solid waste management.'").

Because the "[r]egulation of land and water use lie[] at the core of traditional state authority," Congress must provide "exceedingly clear language if it wishes to significantly alter the balance between federal and state power and the power of the Government over private property." *Sackett v. EPA*, 598 U.S. 651, 679 (2023) (quoting *United States Forest Serv. v. Cowpasture River Pres. Ass'n*, 590 U.S. 604, 621-22 (2020) (cleaned up)). There is no such language in Subtitle D authorizing EPA to directly regulate CCR management by owners and operators. Instead, the statute says that "*States* [are to] to define those solid waste management practices which constitute the open dumping of solid waste." 42 U.S.C. §6907(a)(3) (emphasis added). EPA's direct regulatory approach in the Rule for CCR management would by-pass the States' delegated role entirely. EPA's "overly broad interpretation of [RCRA's] reach would impinge on this [State] authority," *Sackett*, 598 U.S. at 680, and is thus impermissible.

Contrary to EPA's contention, nothing in the WIIN Act "expand[s]" EPA's authority to promulgate legislative rules beyond CCR "disposal." 89 Fed. Reg. at 38,952-53. The WIIN Act expressly does not disturb the original line of demarcation between "disposal" and "solid waste management." *See* 42 U.S.C. §6945(d)(7) (WIIN Act does not "affect[] any authority … in effect on the day before [the date

of enactment].”). And there is nothing in the statutory text to even suggest that Congress intended to give EPA additional authority to regulate CCR *management*. The focus of the WIIN Act, instead, was to empower States to adopt State regulatory programs that would supplant EPA’s authority over CCR disposal, *see id.* §6945(d)(1), and, for States that do not, to require EPA to adopt a federal permitting program with “more precise risk-based standards” for disposal *in lieu of* the “one-size-fits-all national standard” in the Rule, *see USWAG*, 901 F.3d at 437.

EPA would find expanded authority to regulate CCR management units in a *parenthetical* reference to “successor regulations” in the WIIN Act. 89 Fed. Reg. at 38,952-53. But Congress “does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes.” *Whitman v. Am. Trucking Ass’ns*, 531 U.S. 457, 468 (2001).

Instead, the reference to “successor regulations” is plainly to *disposal* regulations like the 2015 Rule, not *ultra vires* regulations for CCR management. When the WIIN Act “express[ly] incorporate[ed] the EPA regulations published at 40 C.F.R. Part 257” into the statute, *USWAG*, 901 F.3d at 426, the regulations applied only to CCR disposal units—*i.e.*, landfills and impoundments. Thus, the phrase “successor regulations” in the WIIN Act means the same type of units and the same scope as the 2015 Rule—namely, regulations “specifically addressed to

'coal combustion residuals units,' i.e., coal ash *disposal* units." *Waterkeeper*, 41 F.4th at 657 (emphasis added). Additional regulations for CCR *management* are not that.

Indeed, this Court's *Waterkeeper* decision forecloses EPA's reading of the WIIN Act. There, the Court found the phrase "successor regulations" in the WIIN Act means "successor regulations promulgated under EPA's authority *to regulate coal ash disposal practices*." *Id.* at 661 (emphasis added). The Court contrasted such "successor regulations" for disposal with "a future [RCRA] regulation promulgated under EPA's public-participation provision authority" in 42 U.S.C. §6974(b)(1), *id.*, which authorizes EPA to "develop and publish minimum guidelines for public participation." That holding applies with equal force here. "[S]uggested guidelines" "to be used by the States to define … solid waste management practices" under 42 U.S.C. §6907(a) are also not "successor regulations promulgated under EPA's authority to regulate coal ash disposal practices." *Waterkeeper*, 41 F.4th at 661. The WIIN Act, as already interpreted by this Court, confirms Congress's intent to limit EPA's law-making authority to CCR "disposal."

Statutory Context. RCRA as a whole confirms that, under Subtitle D, EPA is limited to promulgating regulations for the disposal of CCR, not for the broader category of solid waste management. When Congress wanted to confer authority on EPA to regulate activities other than disposal, it did so explicitly, as it did in RCRA

Subtitle C for hazardous waste. *See*, *e.g.*, 42 U.S.C. §6922 (EPA "shall promulgate regulations" for the generation of hazardous waste); §6923 (same for transportation); §6924 (same for treatment, storage, and disposal). This broad scope of direct federal regulation is consistent with RCRA's "more stringent," "cradle-to-grave" requirements for hazardous waste. *Cal. Cmtys. Against Toxics v. EPA*, 928 F.3d 1041, 1053 (D.C. Cir. 2019). But for nonhazardous solid waste, RCRA limits EPA's direct regulation to "disposal," leaving "solid waste management" generally to the States. *Compare* 42 U.S.C. §6944(a), *with id.* §6907(a)(3); *see also City of Chicago*, 511 U.S. at 331 ("Nonhazardous wastes are regulated much more loosely under Subtitle D" than hazardous waste under Subtitle C).

Legislative History. Congress was "purposeful[]" in limiting EPA's statutory authority in RCRA. JA__[S. Rep. No. 94-988, at 26]. Congress intended the "suggested guidelines" in 42 U.S.C. §6907(a) to be used for "informational purposes only." JA__[S. Rep. No. 94-988, at 11]. That provision was "not intended to convey any power [to EPA] to require compliance with the section [6907(a)] guidelines or otherwise dictate the content of State or areawide solid waste management plans." *Id.*

Indeed, Congress considered and rejected the very approach that EPA advanced in the Rule. The initial version of the legislation would have adopted the direct federal regulatory approach espoused by EPA in the Rule: "Such suggested

guidelines [by EPA] shall—… (3) define those solid waste management practices which constitute the open dumping of solid waste and are to be prohibited under section 211 of [42 U.S.C. §6945].” JA__[S. 2150, 94th Cong. §3(a)(3) (1975)]. The final legislation enacted by Congress, however, rejected that approach and directs that EPA’s guidelines only “provide minimum criteria *to be used by the States to define* those solid waste management practices which constitute the open dumping of solid waste,” 42 U.S.C. §6907(a)(3) (emphasis added), consistent with the Senate Report explaining EPA’s limited role.

The fact “that Congress considered and rejected” the approach advanced by EPA in the Rule “provides unusually clear indication that Congress did not intend” to adopt EPA’s approach. *Thompson v. Thompson*, 484 U.S. 174, 183-85 (1988) (cleaned up). “Where Congress has so explicitly and deliberately considered, and then rejected, a more expansive requirement than that ultimately enacted,” as Congress did here, “it is not for the agency to exceed the statutory limits under the guise of ‘interpretation.’” *Gen. Motors Corp. v. Ruckelshaus*, 742 F.2d 1561, 1578 (D.C. Cir. 1984) (Bazelon, J., dissenting).

Prior Agency Interpretations. To the extent the Court would “seek aid” from EPA’s views, it should look to EPA’s “interpretations issued contemporaneous with the statute at issue,” *Loper Bright*, 603 U.S. at 394, not EPA’s interpretation in the Rule. Following RCRA’s passage, EPA implemented its authority by

promulgating binding regulations that "determin[ed] what solid waste *disposal* facilities and practices pose a reasonable probability of adverse effects on health or the environment." 44 Fed. Reg. at 53,438 (emphasis added). Those criteria were appropriately limited to the "disposal" of "solid waste." *Id*. at 53,440; *see also* 40 C.F.R. §257.2 (regulating "land used for the disposal of solid waste" and "the act of disposal of solid waste").

Consistent with that contemporaneous view, EPA explained again in 2010 that "[i]n contrast to subtitle C, RCRA subtitle D requirements relate only to the disposal of the solid waste, and EPA does not have the authority to establish requirements governing the generation, transportation, storage, or treatment of such wastes prior to disposal." 75 Fed. Reg. 35,128, 35,136 (June 21, 2010). These prior consistent interpretations by EPA are "especially useful in determining the statute's meaning," *Loper Bright*, 603 U.S. at 394, and confirm EPA's statutory authority is limited to promulgating national regulations for the disposal of CCR, not for CCR management in general.

II. The Rule's Regulation of Beneficial Use is Unlawful

The CCR management unit provisions of the Rule are further unlawful because they attempt to regulate beneficial *uses* of CCR on-site at power plants, a reversal from past practice and the 2015 Rule. The Rule's definition of CCR management unit—"any area of land on which any noncontainerized accumulation

of CCR … is placed," 40 C.F.R. §257.53—includes the on-site uses that EPA *exempted* from the 2015 Rule—"the placement of unencapsulated CCR on the land," 80 Fed. Reg. at 21,327. Indeed, in issuing the Rule, EPA conceded that the existing exclusion for "beneficial use" promulgated in 2015 "may apply to some CCR accumulations that are [now] considered CCR [management units] under the [Rule]." JA__[2024 RIA at 4-10]. Thus, lawful beneficial uses undertaken decades ago—even prior to the 2015 Rule—are now, according to EPA, considered CCR management units subject to the same requirements as disposal of CCR.

For multiple reasons, regulating on-site beneficial uses as CCR management units—and subjecting such uses to the monitoring, corrective action, closure, and other federal requirements that apply to disposal units—is unlawful.

A. The Rule's Regulation of Beneficial Use Exceeds EPA's Statutory Authority

EPA does not have statutory authority to regulate the beneficial *use* of CCR. The beneficial use of CCR is not disposal. As EPA itself explained in 2015: "[T]he statute distinguishes between ['disposal' or 'solid waste management'] activities and 'use;' several activities are listed in the definitions of 'disposal' and 'solid waste management' and 'use' is not among them." 80 Fed. Reg. at 21,348 (citing 42 U.S.C. §6903(3), (28)). And because beneficial use is also not management, *id*., EPA's claim in the Rule that 42 U.S.C. §6907 "expands" EPA's authority to

"management," 89 Fed. Reg. at 38,952, does not help the agency's case as to beneficial use.

Again, EPA's authority under Subtitle D is to "promulgate regulations" for the "disposal of solid waste." 42 U.S.C. §6944(a). "[D]isposal and utilization" are two different things under RCRA, and "utilization" is an "*alternative*[]" to "disposal," not a subset of it. *See id*. §6982(n) (emphasis added).

In response to comments, EPA claimed "the activities covered under the definition of a CCR [management unit] [are] disposal rather than beneficial use" because they are a "CCR pile" "on-site of a utility" that is already regulated by the 2015 Rule. 89 Fed. Reg. at 39,050. But that claim is directly contrary to the plain text of the 2015 Rule, which exempts *all* beneficial uses without regard to location. 40 C.F.R. §257.50(g) (2015). The definition of "beneficial use" in the 2015 Rule does not include any locational requirement, *id*. §257.53, and EPA itself documented that the beneficial use exemption in the 2015 Rule applied to at least 6.7 million tons of "on-site" "beneficial use" at power plants. JA__[2014 RIA at 2-21, Ex. 2-J]. Nothing in the definition of "CCR pile" nullifies these other provisions.

EPA's assertion that CCR management units are CCR piles and not beneficial use is also contrary to EPA's other statements in the Rule. For one, it contradicts EPA's explanation elsewhere in the Rule that the existing exclusion for "beneficial use" "may apply to some CCR accumulations that are considered CCR [management

units] under the [Rule]." JA__[2024 RIA at 4-10]. For another, it contradicts EPA's description of a CCR management unit as the placement of CCR "intended for a purpose *other than disposal*" such as "subsurface fills or similar uses," which EPA *distinguished* from "piles" and other "forms of disposal." JA__[2024 Risk Assessment at 2-6] (emphasis added).

Because EPA does not have the statutory authority to regulate beneficial *uses* of CCR—whether they occur on- or off-site of a power plant—and because the Rule undeniably attempts to regulate such uses for the first time, the Rule is unlawful.

B. The Rule's Regulation of Beneficial Use is Arbitrary and Capricious

Even if EPA had the statutory authority to regulate the beneficial use of CCR, it did so in an arbitrary and capricious manner.

1. EPA Did Not Consider All Relevant Factors when Deciding to Regulate Beneficial Use

When EPA decided in 2015 that beneficial use of CCR does *not* warrant federal regulation, it did so based on *all* of the factors in 42 U.S.C. §6982(n), including the costs of applying disposal requirements to beneficial uses and the savings from beneficially using CCR in lieu of virgin material. *See* 80 Fed. Reg. at 21,329. But here, in reversing course, EPA did "not consider[] cost in developing any provision of this final rule," JA__[RTC, Vol. 4 at 7], and it chose to "forgo[] a formal analysis of benefits from the reuse of legacy ash," JA__[2024 RIA at 5-46].

That choice was arbitrary and capricious. "Not only must an agency's decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational." *Allentown Mack Sales & Ser., Inc. v. NLRB*, 522 U.S. 359, 374 (1998). "[A]gency action is lawful only if it rests 'on a consideration of the relevant factors.'" *Michigan v. EPA*, 576 U.S. 743, 750 (2015) (quoting *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983)).

Here, Congress specified the relevant factors EPA must consider in regulating CCR "utilization," including, among other things, "the current and potential utilization of [CCR]"; "alternatives to current disposal methods"; "the costs of … alternatives" to disposal; and "the impact of those alternatives on the use of coal and other natural resources." 42 U.S.C. §6982(n). Thus, not only does RCRA provide "a textual commitment of authority to the EPA to consider costs" when evaluating the beneficial use of CCR, *Am. Trucking*, 531 U.S. at 468, "Congress expressly *required* the EPA to consider" costs and other specific factors with respect to beneficial use, *USWAG*, 901 F.3d at 449 (emphasis added); *see also Michigan*, 576 U.S. at 753 ("This directive [from Congress] to study cost is a further indication of the relevance of cost to the decision to regulate.").

In the Rule, EPA relied on 42 U.S.C. §6982(n) as justification for considering the agency's preferred and only factor—"documented cases" of harm. *See* 89 Fed.

Reg. at 39,035-37 (citing factors in 42 U.S.C. §6982(n)(3)-(4) as grounds for CCR management unit provisions). But it disregarded the other statutory factors in that same subsection of the statute, making its decision arbitrary and capricious. *See State Farm*, 463 U.S. at 43. Even where the statute "leaves agencies with flexibility, an agency may not 'entirely fail to consider an important aspect of the problem' when deciding whether regulation is appropriate," as EPA did here. *Michigan*, 576 U.S. at 752 (quoting *State Farm*, 463 U.S. at 43) (cleaned up). And because it did not address all of the statutory factors, EPA did not provide a reasonable explanation for its change in position from the 2015 Rule and thus acted unlawfully in that way, too. *See Am. Wild Horse Pres. Campaign v. Perdue*, 873 F.3d 914, 923 (D.C. Cir. 2017) ("A central principle of administrative law is that" when an agency changes its "past practices and official policies [it] must at a minimum acknowledge the change and offer a reasoned explanation for it.").

2. EPA Failed to Consider Reliance Interests with Respect to Prior Beneficial Uses

EPA also failed to consider Petitioners' reasonable reliance on the longstanding exclusion of the beneficial use of CCR from federal solid waste regulation. "In explaining its changed position, an agency must also be cognizant that longstanding policies may have 'engendered serious reliance interests that must be taken into account.'" *Encino Motorcars, LLC v. Navarro*, 579 U.S. 211, 221-22 (2016) (internal citation omitted). An agency must "assess whether there [are]

reliance interests, determine whether they [are] significant, and weigh any such interests against competing policy concerns." *DHS v. Regents of Univ. of Cal.*, 591 U.S. 1, 33 (2020). "It [is] arbitrary or capricious to ignore such matters." *See FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009).

Here, EPA refused to acknowledge any reliance interests at all, claiming that "on-site [CCR use] is not beneficial use." 89 Fed. Reg. at 39,050. But again, that claim contradicts (1) the plain text of the 2015 Rule; (2) EPA's acknowledgement in 2015 that at least 6.7 million tons of CCR beneficially used "on-site" were excluded from federal regulation; and (3) its explanation in the Rule that the new CCR management unit provisions would apply to at least some prior beneficial uses of CCR. *See supra* at 29-30. EPA's "failure even to acknowledge" Petitioners' reliance interests on the beneficial use exemption makes EPA's decision arbitrary and capricious. *Am. Wild Horse*, 873 F.3d at 927.

3. EPA Failed to Provide a Reasoned Basis for the Disparate Treatment of On- and Off-site Beneficial Uses

EPA's regulation of on-site beneficial uses as CCR management units is also arbitrary and capricious because it treats CCR beneficially used on-site differently than CCR used off-site in the exact same way without any legitimate justification. EPA has repeatedly found that the beneficial use of CCR does not present a risk warranting regulation. *See supra* at 5-6. In doing so, EPA considered the myriad ways in which CCR is beneficially used, including on-site, *supra* at 9—but never

has it differentiated between beneficial uses conducted on-site at power plants and beneficial uses conducted off-site. Yet the Rule does exactly that, with no record support. EPA's "failure to provide a reasoned explanation" for its differential treatment of the exact same CCR uses on-site "is simply fatal here under hornbook administrative law." *Shays v. Fed. Election Comm'n*, 424 F. Supp. 2d 100, 116 (D.D.C. 2006). As this Court has explained, "[i]n determining whether an agency has provided a reasoned explanation for … treating similar situations differently, the court looks only to the reasons given by the agency." *ANR Pipeline Co. v. FERC*, 71 F.3d 897, 901 (D.C. Cir. 1995). Because EPA provided no reasoned explanation for treating the same on- and off-site beneficial uses differently, the Rule is arbitrary and capricious.

III. The Rule Exceeds EPA's Statutory Authority by Regulating Legacy Impoundments that Do Not Contain CCR

The legacy impoundment provisions of the Rule also exceed EPA's limited statutory authority to regulate disposal. As to legacy impoundments, the problem stems from the fact that the Rule defines a legacy impoundment as any surface impoundment that contained both CCR and liquids as of *October 19, 2015*, as opposed to sites that *currently* contain CCR and liquids. *See* 40 C.F.R. §257.53. This means that sites like the former impoundments at Petitioner East Kentucky Power Cooperative's ("EKPC") Dale Station—which were closed by removal of all CCR years ago, but after October 2015—are regulated even though no CCR is

disposed of at such sites. By extending the definition of legacy impoundment to include such sites, EPA has acted outside its statutory authority; it simply cannot regulate sites where solid waste no longer exists.

This Court carefully considered RCRA's scope in *USWAG* and held that the phrase "is disposed of" covers all sites that contain solid waste, including sites that no longer actively receive it. Stated more plainly, *USWAG* held "[a] garbage dump is a garbage dump *until the deposited garbage is gone*." 901 F.3d at 441 (emphasis added). The Rule plows through this limit on RCRA's scope by regulating sites where the deposited garbage is long gone.

The former impoundments at EKPC's Dale Station are a perfect example. EKPC removed the deposited "garbage" (here, CCR) from the former impoundments at the Station nearly a decade ago. JA__[EKPC Comments at 4-5]; SA-184 to SA-185, SA-192 to SA-196. With no CCR, those former impoundments are not sites where solid waste "is disposed of." RCRA therefore gives EPA no authority over them.

This Court's *USWAG* decision is not the only authority that compels this result. So does RCRA's text. Start with verb tense. A site free of solid waste is not a place where solid waste "*is* disposed of." 42 U.S.C. §6903(14) (emphasis added). Just as the present tense "is" drove the analysis in *USWAG*, so too must it here. *See* 901 F.3d at 440. The present tense communicates that a site cannot fall within

RCRA's purview unless solid waste "is still *currently* 'placed' or 'deposited' there." *Id.* (emphasis added) (quoting 42 U.S.C. §6903(3), (14)). In other words, "[a] site where garbage 'is disposed of' is the place where garbage is dumped and left." *Id.* at 441. But once "the deposited garbage is gone," *id.*, no longer "is" it disposed of there.

Nor does the record demonstrate that *closed* legacy impoundments pose a "reasonable probability of adverse effects on health or the environment from disposal of solid waste." 42 U.S.C. §6944(a). Neither the 2024 nor the 2014 Risk Assessment provides any such basis. To the contrary, those Risk Assessments were premised on operating impoundments that *still contain* CCR, liquids, and a hydraulic head. *Supra* at 7-8; 88 Fed. Reg. at 32,010. Indeed, EPA specifically found that even CCR units where some de minimis amount of CCR remained did not present a risk that warranted regulation. 80 Fed. Reg. at 21,357. Thus, these assessments cannot establish EPA's authority over former impoundments that do not have a "hydraulic head," let alone those that no longer contain CCR. And in the absence of any evidence that there is a "reasonable probability of adverse effects on health or the environment" from former impoundments that no longer contain CCR, EPA has no statutory authority to regulate such sites under Subtitle D. 42 U.S.C. §6944(a).

Consider also the objectives Congress articulated when it enacted RCRA. Most relevant here, Congress intended to "prohibit[] *future* open dumping on the

land and requir[e] the conversion of *existing* open dumps to facilities which do not pose a danger to the environment or to health." *Id.* §6902(a)(3) (emphases added). Congress plainly intended RCRA to be a forward-looking statute that addresses present and future solid waste, not solid waste that existed in the past but has since been removed. *Cf. Meghrig v. KFC Western, Inc.*, 516 U.S. 479, 484-86 (1996) (holding RCRA does not provide a remedy for past cleanup costs).

At bottom, adopting EPA's view of the scope of its rulemaking authority under RCRA would work a "fundamental revision of the statute, changing it from one sort of scheme of … regulation"—*i.e.*, one that permits regulation of solid waste that "is disposed of"—"into an entirely different kind" that invites regulation of *any* area where solid waste *once was* disposed of. *West Virginia*, 597 U.S. at 728 (quoting *MCI Telecomms. Corp. v. Am. Tel. & Tel. Co.*, 512 U.S. 218, 231 (1994)) (cleaned up). Congress chose not to write RCRA in such a manner, and EPA must respect that choice. *Cf. Loper Bright*, 603 U.S. at 412-13.

Finally, Petitioner East Kentucky Power Cooperative, solely on its individual behalf, contends that the regulation of legacy impoundments that no longer contain CCR is beyond the federal government's power under the Commerce Clause of the United States Constitution. As applied to such impoundments, the Rule regulates inactivity, which the Commerce Clause cannot reach. *See NFIB v. Sebelius*, 567 U.S. 519, 550-57 (2012) (Roberts, C.J., op.). Even setting that aside, such

impoundments do not involve the kind of activity that the Supreme Court has found to "substantially affect" interstate commerce. *See Gonzales v. Raich*, 545 U.S. 1, 23-26 (2005); *United States v. Morrison*, 529 U.S. 598, 610 (2000); *United States v. Lopez*, 514 U.S. 549, 559-61 (1995). The only way to avoid this constitutional infirmity is to read RCRA to disallow the regulation of such impoundments. *See Jennings v. Rodriguez*, 583 U.S. 281, 286 (2018).

IV. EPA's *Post Hoc* Risk Assessment Does Not Reflect Reasoned Decision-making

Under the Act, EPA's disposal regulations must be predicated on the "*reasonable probability* of adverse effects on health or the environment." 42 U.S.C. §6944(a) (emphasis added). Although neither RCRA nor this Court's precedent define "reasonable probability" for purposes of 42 U.S.C. §6944(a), the term is generally understood to mean "more than a 'mere possibility' [but not] proof of certain harm." *United States v. AT&T Inc.*, 916 F.3d 1029, 1032 (D.C. Cir. 2019). Under any formulation of the phrase, EPA's purported risk assessment for CCR management units—conducted *after* the agency had already proposed the Rule—does not meet the statutory standard and does not reflect reasoned decision-making.

For its post-proposal assessment, EPA performed groundwater modeling of only one type of CCR management unit—CCR fills on-site at a power plant. JA__[2024 Risk Assessment at 4-1]. In performing that modeling, EPA unreasonably "assumed that the [power plant] site will be redeveloped in the future

for residential use" and modeled "exposures that may result if contaminated groundwater is used as a source of drinking water by future residents." *Id*. Despite acknowledging "existing State and local requirements for institutional controls that would limit residential exposure [*e.g.*, through deed restrictions]"—and thus invalidate EPA's worst-case assumption—EPA performed its risk assessment "in the absence of institutional controls." 89 Fed. Reg. at 38,961.

EPA's worst-case assumption is arbitrary and capricious. EPA cited a compilation of "22 individual news articles where the potential for future residential development at electric utilities is discussed." *See* JA__[Compilation of News Articles at 1]; *see also* 89 Fed. Reg. at 38,960 (referencing news articles). But *none* of EPA's "examples" of "residential redevelopment at electric utilities" includes any site that EPA identified in the Rule as potentially containing a CCR management unit. *Compare* JA__[Universe of CCR Management Units], *with* JA__[Compilation of News Articles]. Thus, it is simply not true, as EPA claims, that "there are numerous examples in the record of instances in which *these kinds of sites* have been redeveloped for residential use." 89 Fed. Reg. at 38,960 (emphasis added). There are no facts in the record to show that it is reasonably probable that *the kinds of sites that contain CCR management units* will be redeveloped as residential communities and present the types of risks that EPA used to justify its new regulation.

EPA's speculation that residential redevelopment "seems possible" (JA__[2024 Risk Assessment at 2-7]) does not "pass muster under the APA" or RCRA's protectiveness standard. *Edison Elec. Inst. v. EPA*, 2 F.3d 438, 446 (D.C. Cir. 1993) (vacating EPA RCRA modeling because EPA failed to provide "factual support for its conclusion that [the modeled] management scenario is plausible"). While "EPA has undoubted power to use predictive models," it may do so "only so long as it explains the assumptions" and "provides a complete analytic defense should the model be challenged." *Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1054 (D.C. Cir. 2001) (cleaned up). An internet search of news articles—with no independent verification or analysis—does not meet this standard. This Court will "reverse the agency's application of [a] generic … model as arbitrary and capricious" if there is "no rational relationship between the model and the known behavior … to which it is applied." *Chem. Mfrs. Ass'n v. EPA*, 28 F.3d 1259, 1265 (D.C. Cir. 1994) (vacating EPA action given the "poor fit between the agency's model and … reality"). Here, because EPA's worst-case assumption of residential use does not fit reality, EPA has failed to engage in "*reasoned* decisionmaking." *Appalachian Power*, 249 F.3d at 1055.

EPA's residential-use assumption is also contrary to the agency's prior findings in its Bevill Determination for CCR. In 1993, when EPA evaluated "the current and potential utilization of [CCR]" as required by 42 U.S.C. §6982(n), it

found that "[h]uman populations generally are not directly exposed to groundwater in the vicinity of coal-fired utility waste management sites; public drinking water intakes are usually at least several kilometers from the sites." 58 Fed. Reg. at 42,468. Because EPA unreasonably refused to examine the full slate of Bevill factors in the Rule, *see supra* at 30-32, the agency did not develop a record to refute its prior finding.

EPA claimed it was appropriate to model CCR fills "in the absence of institutional controls" that "limit residential exposure" because it was evaluating "appropriate national requirements such as a national requirement for deed restrictions at all sites at which CCR [management unit] fills will remain in place." 89 Fed. Reg. at 38,961. But—despite commenters' pleas—EPA failed to consider deed restrictions on future development or groundwater use as a viable and less onerous alternative to re-closure that would directly address the potential for residential exposure. *See, e.g.*, JA__[LCRA Comments at 12-13]; JA__[Talen Comments at 4-5]. Such an approach would have been consistent with the existing requirement to record deed notations for closed units. *See* 40 C.F.R. §257.102(i) (2015). Yet EPA failed to consider deed restrictions as an available remedy despite having justified its worst-case modeling on that basis. "An agency's failure to 'consider significant alternatives to the course [it] ultimately cho[se],' is a telltale sign that its decision-making process cannot 'be regarded as rational.'" *TikTok Inc.*

v. Trump, 507 F.Supp.3d 92, 111 (D.D.C. 2020) (quoting *Allied Local & Reg'l Mfrs. Caucus v. EPA*, 215 F.3d 61, 80 (D.C. Cir. 2000) (alteration in original); *Yakima Valley Cablevision, Inc. v. FCC*, 794 F.2d 737, 746 n.36 (D.C. Cir. 1986) ("[T]he failure of an agency to consider obvious alternatives has led uniformly to reversal."). Here, because EPA "failed to consider an obvious alternative identified in [EPA's Rule] itself," the Rule is arbitrary and capricious. *See TikTok*, 507 F.Supp.3d at 112.

Critically, beyond CCR fills, EPA conceded it did "not directly model risks associated with disposal units that had previously closed." 88 Fed. Reg. at 32,010. Instead, EPA said it "expected" that units *closed* in accordance with State law before the 2015 Rule would present risk "similar to the levels and kinds of risks" that EPA modeled for *operating* units. *Id*. But there are obvious reasons why units closed under State supervision would be distinguishable from operating units, as EPA itself previously found. *Supra* at 7-8. And when EPA was presented with actual monitoring data showing previously closed units *do not* present similar risks as operating units, *see* JA__[Luminant Comments at 14-18], it refused to consider the data, citing "model constraints." 89 Fed. Reg. at 38,957-58, 38,970. With no modeling and no actual data, EPA's decision to regulate previously closed units as CCR management units or legacy impoundments was neither "reasonable" nor "reasonably explained." *Ohio v. EPA*, 603 U.S. 279, 292 (2024).

EPA's failure to conduct the necessary risk assessment for previously closed units and closed legacy impoundments further prevented the agency from considering "more precise risk-based standards" "authorized by the WIIN Act" instead of the "one-size-fits-all national standard" used in "the self-implementing [2015] Rule." *USWAG*, 901 F.3d at 437. The result of EPA's failure are categorical requirements for *nonhazardous* CCR that are more stringent than necessary—and in fact more stringent than requirements for *hazardous* solid waste. *See* JA__[USWAG Comments at 47-52]. EPA's failure to assess the use of tailored site-specific standards authorized by the WIIN Act "is a telltale sign" that the Rule is arbitrary and capricious. *TikTok Inc.*, 507 F. Supp. 3d at 111.

V. The Rule is Unlawfully Retroactive

The CCR management unit and legacy impoundment provisions of the Rule are unlawfully retroactive. "A rule operates retroactively when it 'would impair rights a party possessed when he acted, increase a party's liability for past conduct, or impose new duties with respect to transactions already completed.'" *Bd. of Cnty. Cmm'rs of Weld Cnty., Colorado v. EPA*, 72 F.4th 284, 292 (D.C. Cir. 2023) (quoting *Landgraf v. USI Film Prods.*, 511 U.S. 244, 280 (1994)).

Here, the Rule operates retroactively because it applies new closure standards, definitions, and other requirements to CCR landfills and impoundments that lawfully *completed* closure years before the Rule became effective. With regard to CCR

management units, the Rule would require re-closure of units lawfully closed "*in accordance* with state law" nearly a decade or more ago. 40 C.F.R. §257.53 (definition of "closed prior to October 19, 2015"). For legacy impoundments, the Rule sets a triggering event—presence of CCR and liquids (as newly defined) in an impoundment—that likewise predates the Rule by nearly a decade. *See supra* at 12. Thus, the Rule reflects "[t]he typical form of unfairness that retroactivity may wreak … by radically undermining the value of costs that parties incurred in reasonable reliance on continuation of the status quo[.]" *Treasure State Res. Indus. Ass'n v. EPA*, 805 F.3d 300, 305 (D.C. Cir. 2015).

EPA does not have the "express statutory authorization" to impose *ex post facto* requirements on these pre-Rule closures, and thus the Rule is unlawfully retroactive as a categorical matter. *See Weld Cnty.*, 72 F.4th at 292-93 (citing *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 219 (1988) (Scalia, J., concurring)). Because there were no EPA closure criteria in place at the time of these pre-Rule closures, RCRA required that they meet State-promulgated solid waste requirements. *See* 42 U.S.C. §§6943(a)(2)-(3) (authorizing State law to "provide for the closing or upgrading of all existing open dumps within the State."). If EPA had concerns with those existing State requirements, the statute allows EPA to review them and require revision going forward. *Id*. §6947(a)(2)(C). But nothing in the statute authorizes EPA to sit by idly while these units are closed, at great expense,

and then years later reach back and require those closures to be re-done. Because that is what EPA did here, the Rule is unlawful. *See Weld Cnty.*, 72 F.4th at 292-93.

Further, an agency's "decision whether to make a new [rule] prospective or retroactive is 'an important aspect of the problem' that must be considered" by the agency, and "courts, in turn, must critically examine retroactive rulemaking [under the APA's arbitrary and capricious standard] to ensure that the agency has appropriately balanced the competing considerations." *Yakima Valley,* 794 F.2d at 745-46 (quoting *State Farm*, 463 U.S. at 43).

Here, EPA claimed to have ameliorated the "secondary retroactive effects" of the Rule by "allowing for deferrals of additional closure measure[s]" where the owner can demonstrate the completed closure was conducted under "substantially equivalent regulatory authority." 89 Fed. Reg. at 38,985; 40 C.F.R. §257.101(g). But this so-called "deferral" is illusory. To qualify, the owner must comply with the same federal performance standards that did not apply and are supposedly "deferred"—for example, having removed free liquids *prior* to installing the final cover system. 40 C.F.R. §257.101(g)(4)(ii). That is no relief at all. Worse, the relief is obtained through a "permit application" that the owner will submit at some unspecified time in the future under a non-existent permitting program. *See id.* §257.101(g)(6). According to EPA, "[w]hen it comes time," 89 Fed. Reg. at 39,075, the owner may submit the application to an unidentified "subsequent permitting

authority," *id*. at 38,986. But when that time "may come" is unknown because the Rule does not establish any such permitting program and because EPA has not separately established the federal permitting program required by the WIIN Act (and has approved only three State programs). EPA's offer of relief from upcoming deadlines and requirements is thus an empty promise and not "a product of rational analysis." *Yakima Valley*, 794 F.2d at 746. Because the Rule does *not*, in fact, address Petitioners' "reasonable reliance[] and settled expectations" in closures that were completed prior to the effective date of the Rule, the Rule is arbitrary and capricious. *See Landgraf*, 511 U.S. at 270.

VI. New Definitions in the Rule are Unlawful

A final regulation must be the "logical outgrowth" of the proposed rule, *USWAG*, 901 F.3d at 442, *and* the agency must "explain th[e] difference between the final rule, on the one hand, and its preamble and the proposed rule, on the other." *Gen. Elec. Co. v. Dep't of Commerce*, 128 F.3d 767, 775 (D.C. Cir. 1997). Three key definitions in the Rule—"CCR landfill," "closed prior to October 19, 2015," and "liquids"—fail to meet these requirements.

"CCR landfill." The 2015 Rule defines "CCR landfill" as "an area of land or an excavation that *receives* CCR and which is not a surface impoundment." 40 C.F.R. §257.53 (2015) (emphasis added). The proposal contained the same language. *See* 88 Fed. Reg. at 32,034. Yet the Rule rewrites the definition of "CCR

landfill" as "an area of land or an excavation that *contains* CCR and which is not a surface impoundment." 40 C.F.R. § 257.53 (emphasis added). EPA provided no explanation for this change.

"Closed prior to October 19, 2015." The Rule defines "closed prior to October 19, 2015" to mean "the CCR landfill or surface impoundment completed closure of the unit in accordance with state law prior to October 19, 2015." *Id*. The proposed rule did not include a definition for this phrase, but instead proposed to define "closed" to mean the owner "has completed closure of the CCR unit … in accordance with §257.102"—*i.e.*, federal law. 88 Fed. Reg. at 32,034. There is no explanation of the change in the Rule.

"Liquids." The proposed rule did not contain regulatory text to define "liquid," but the preamble of the proposed rule explained that EPA considered "liquid" to include "groundwater that has migrated into the impoundment *due to the construction of the unit*." *Id*. at 31,992 (emphasis added). Like the preamble, the final rule signed by the Administrator on April 24, 2024, defined "liquids" to include "groundwater that has migrated into the impoundment *due to the construction of the unit*." JA__[Final Rule Prepublication Copy at 557] (emphasis added).

But the Rule ultimately published in the Federal Register on May 8, 2024, contains a *different* definition of "liquids" that deletes this limiting language and adds expanding language, as shown below:

> *Liquids* … encompasses all of the various types of liquids that may be present in a CCR unit, including water that was sluiced into an impoundment along with CCR, precipitation, surface water, ~~**and**~~ groundwater**, and any other form of water** that has migrated into the impoundment ~~**due to the construction of the unit**~~, which may be found as free water or standing water ponded above CCR or porewater intermingled with CCR.

Compare id., *with* 89 Fed. Reg. at 39,100. No party commented that EPA should revise the definition in the proposal in this way, and there is no explanation of the post-proposal, post-signature change in the Rule. The docket includes a "Post Signature Change Memorandum" dated April 30, 2024, that purports to address "[i]nadvertent errors [that] were made in the process of preparing the signature package for the final rule," but the memo does not identify or explain the change to the definition of "liquids." *See* JA__[Post-Signature Change Memorandum at 1].

Thus, in each case, there is an unexpected *and* unexplained discrepancy between the proposal and the final outcome, meaning that EPA failed *both* to provide adequate opportunity for comment *and* to "explain th[e] difference between the final rule, on the one hand, and its preamble and the proposed rule, on the other," *Gen. Elec. Co.*, 128 F.3d at 775. For "liquids," the problem is most egregious—the Administrator signed one version of the definition, which adopted the definition from the proposal, but the agency published a different one, with no explanation. All three definitions should be vacated.

CONCLUSION

The Rule should be vacated.

Dated: January 31, 2025

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

The undersigned counsel states that this document complies the Court's Order of December 19, 2024, because it contains 10,991 words, as counted by Microsoft Word, excluding the parts excluded by Fed. R. App. P. 32(f) and D.C. Circuit Rule 32(e)(1), and, together with the State Petitioners' Opening Brief, the briefs do not exceed 18,000 words in the aggregate. This document also complies with typeface and type-style requirements of Fed. R. App. P. 32(a)(5) & (6) because it has been prepared in a proportionally spaced typeface in 14-point Times New Roman font.

Dated: January 31, 2025

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CERTIFICATE OF SERVICE

I certify that on this 31st day of January, 2025, a copy of the foregoing document was served electronically through the Court's CM/ECF system on all registered counsel.

Dated: January 31, 2025

s/ P. Stephen Gidiere III
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ORAL ARGUMENT NOT YET SCHEDULED

Case No. 24-1200
(consolidated with Nos. 24-1267, 24-1269, 24-1274, 24-1275, 24-1276)

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

CITY UTILITIES OF SPRINGFIELD, MISSOURI, *et al.*,
Petitioners,

v.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,
Respondents.

On Petition for Review of Final Agency Action of the United States Environmental Protection Agency

ELECTRIC GENERATOR PETITIONERS' STANDING ADDENDUM

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IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

AEP GENERATION RESOURCES, INC., APPALACHIAN POWER COMPANY, INDIANA MICHIGAN POWER COMPANY, KENTUCKY POWER COMPANY, OHIO POWER COMPANY, PUBLIC SERVICE COMPANY OF OKLAHOMA, SOUTHWESTERN ELECTRIC POWER COMPANY, WHEELING POWER COMPANY, COLETO CREEK POWER, LLC, DYNEGY MIDWEST GENERATION, LLC, ELECTRIC ENERGY, INC., ILLINOIS POWER GENERATING COMPANY, ILLINOIS POWER RESOURCES GENERATING, LLC, KINCAID GENERATION, L.L.C., LUMINANT GENERATION COMPANY LLC, MIAMI FORT POWER COMPANY LLC, ZIMMER POWER COMPANY LLC, DUKE ENERGY CAROLINAS, LLC, DUKE ENERGY PROGRESS, LLC, DUKE ENERGY INDIANA, LLC, THE LOWER COLORADO RIVER AUTHORITY, and TALEN ENERGY SUPPLY, LLC,		
Petitioners,		
v.		
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, United States Environmental Protection Agency,		**Case No. 24-1275**
Respondents.		

STANDING DECLARATION OF JESSICA L. BEDNARCIK

1. My name is Jessica L. Bednarcik, and I am senior vice president responsible for environmental regulatory compliance at the electric generating units operated by Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, and Duke Energy Indiana, LLC (collectively, "Operating Companies"). The Operating Companies are petitioners in this case, and I am submitting this Declaration in support of the Operating Companies' statement regarding standing in this case.

2. My responsibilities for the Operating Companies include strategic planning, compliance assurance, and environmental and safety program implementation for the Operating Companies' fleet of electric generating units. Specifically, I am responsible for improving the environmental performance at their sites and providing the tools to keep their employees and contractors safe. Based on these responsibilities, I have knowledge regarding the regulations and requirements imposed on coal combustion residuals ("CCR") units by the U.S. Environmental Protection Agency ("EPA") and respective state environmental agencies.

3. The Operating Companies own, operate, and/or previously operated coal-fired power plants in Indiana, North Carolina, and South Carolina that, when generating electricity, resulted in the production of various types of CCR. For decades, the CCR byproduct at these power plants was handled in a variety of ways, including being sold to third parties (for example, to be used as an ingredient in cement or for

other beneficial uses); beneficially used on-site as a substitute for virgin material; or, as a last resort, disposed of in accordance with applicable state and federal laws.

4. In April 2015, EPA issued regulations that contained criteria for "existing and new CCR landfills and existing and new CCR surface impoundments." 80 Fed. Reg. 21,302 (Apr. 17, 2015) (the "2015 Regulations"). Under the new criteria (contained in 40 C.F.R. part 257 subpart D), "CCR units" became subject to specific location restrictions, design and operating criteria, groundwater monitoring and corrective action, closure requirements and post-closure care, and recordkeeping, notification, and internet posting requirements. *Id*. The Operating Companies' power plants contained many CCR units (*i.e.*, CCR landfills and CCR surface impoundments that had not already been closed), which became subject to the 2015 Regulations and that have complied with the new requirements since the regulations became effective.

5. The 2015 Regulations operate prospectively only, and applicability of the new requirements is based on a unit's status as of the effective date of the rule, October 19, 2015. That is, the 2015 Regulations did not apply to any "CCR units that closed prior to October 19, 2015" (the effective date of the rule) in accordance with then-existing requirements. 88 Fed. Reg. at 32,034. As EPA explained in the preamble to the 2015 Regulations, EPA did not intend to "require 'closed' surface impoundments to 'reclose'" nor that the "literally hundreds of previously closed . . . surface impoundments—many of which were properly closed decades ago under

state solid waste programs, have changed owners, and now have structures built on top of them—would be considered active CCR units." 80 Fed. Reg. at 21,343. As discussed below, prior to October 19, 2015, the Operating Companies had previously closed multiple CCR landfills and surface impoundments in accordance with state and federal requirements at the time, at substantial effort and expense.

6. In addition, CCR outside of landfills and surface impoundments was not regulated by the 2015 Regulations but remained subject to state solid waste requirements and EPA's general solid waste criteria in 40 C.F.R. part 257, subpart A.

7. On May 8, 2024, EPA published a final rule that establishes new regulatory requirements for inactive CCR surface impoundments at inactive facilities (called "legacy CCR surface impoundments") and a new category of CCR areas that EPA calls "CCR management units." 89 Fed. Reg. 38,950 (May 8, 2024) (the "Legacy Rule"). Under the Legacy Rule, EPA defines a "legacy CCR surface impoundment" as "a CCR surface impoundment that no longer received CCR but contained both CCR and liquids on or after October 19, 2015, and that is located at an inactive electric utility or independent power producer." *Id.* at 39,100 (revising 40 C.F.R. § 257.53). A "CCR management unit" is "any area of land on which any noncontainerized accumulation of CCR is received, is placed, or is otherwise

managed, that is not a regulated CCR unit." *Id.* at 39,100 (revising 40 C.F.R. § 257.53).

8. The new Legacy Rule provides that a "CCR management unit" "includes inactive CCR landfills and CCR units that closed prior to October 19, 2015[.]" *Id.* The Legacy Rule further defines "closed prior to October 19, 2015" to mean "the CCR landfill or surface impoundment completed closure of the unit in accordance with State law prior to October 19, 2015." *Id*.

9. When EPA first proposed the Legacy Rule in May 2023, the Operating Companies, through their parent, Duke Energy Corporation ("Duke Energy"), submitted data and information to EPA, which showed that the units at their plants described below had been closed as sanitary landfills in accordance with state solid waste programs prior to October 19, 2015, and pose no reasonable probability of risk to human health and the environment. *See* https://www.regulations.gov/comment/EPA-HQ-OLEM-2020-0107-0374.

10. Subsequently, in December 2023, Duke Energy submitted additional data and information to EPA in response to its Notice of Data Availability Pertaining to the Proposed Rulemaking on the Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments, 88 Fed. Reg. 77,941 (Nov. 14, 2023) ("NODA"). In its NODA comments, Duke Energy explained that on December 31, 2019, two of its affiliates, Duke Energy Carolinas and Duke Energy Progress,

entered into a Settlement Agreement with then-Secretary Michael Regan on behalf of the North Carolina Department of Environmental Quality ("NCDEQ") and several community groups, including various riverkeepers and Sierra Club, represented by Southern Environmental Law Center, under which the parties to that agreement consented to the entry of a Consent Order entered by North Carolina superior court on February 5, 2020 ("Consent Order") under which Duke Energy Carolinas and Duke Energy Progress agreed to, *inter alia*, close the CCR surface impoundments by removal of CCR at seven coal ash sites in North Carolina, including at the Belews Creek Steam Station ("Belews Creek"), Marshall Steam Station ("Marshall"), and Roxboro Steam Electric Plant ("Roxboro"). *See* https://www.regulations.gov/comment/EPA-HQ-OLEM-2020-0107-0931.

11. Under the Consent Order, NCDEQ and the community groups expressly agreed that, in exchange for Duke Energy Carolinas and Duke Energy Progress's agreement to excavate and remove all coal ash from the existing CCR surface impoundments at Belews Creek, Marshall, and Roxboro, any ash located underneath the landfills—each of which would be covered with a geosynthetic liner—need not be removed. Critically, those portions of former surface impoundments underlying the landfills were closed prior to obtaining solid waste permits from the North Carolina Department of Environment and Natural Resources—NCDEQ's predecessor agency—to construct the new landfills.

12. Under the Consent Order, NCDEQ and the other parties stipulated and agreed that for these three facilities (as well as the other four facilities subject thereto), Duke Energy Carolinas and Duke Energy Progress's compliance with the actions required under the Consent Order, including its surface impoundment and landfill closure requirements, NCDEQ-approved groundwater corrective action plans, National Pollutant Discharge Elimination System permits, and special orders by consent entered into with NCDEQ, "and through [NC]DEQ's administration of the statutes, rules and regulations that it implements," have resolved or will resolve the remaining alleged groundwater and surface water issues associated with the impoundment sources.

13. The Settlement Agreement was negotiated with the understanding that the actions Duke Energy Carolinas and Duke Energy Progress were obligated to take thereunder complied with applicable state and federal requirements, including the 2015 Regulations, and at no point, despite the Settlement Agreement being executed by then-Secretary Regan and the other parties on December 31, 2019, and being widely publicized in the national media immediately thereafter, either before entry of the Consent Order by a North Carolina superior court judge on February 5, 2020, or anytime thereafter, did EPA adversely comment on or otherwise attempt to alter in any way the terms thereof despite the existence of CCR below the water table at all three facilities.

14. The Pine Hall Road Landfill at Belews Creek was closed in 2008 in accordance with North Carolina solid waste landfill regulations by installing an engineered cover system, including geosynthetics and soil cover, over the 52.7-acre above-grade portion of the landfill and a soil cover on the 14.5-acre section over the ash basin finger. The Pine Hall Road Landfill, as well as the area of former surface impoundment underlying this structure would apparently fall within the Legacy Rule's definition of "CCR management unit."

15. With respect to groundwater monitoring and corrective action at Belews Creek, groundwater site assessment began in 2014, and an updated corrective action plan was submitted to NCDEQ on December 31, 2019. The updated corrective action plan includes a robust groundwater corrective action program with a combination of extraction wells and infiltration wells and was approved by NCDEQ on July 8, 2021. The corrective action program was implemented in phases, with the first phase coming online in August 2021 and operation of the full system commencing in September 2023.

16. The PV Structural Fill and 1804 Phase II Landfill at Marshall were built partially over ash basin fingers. The PV Structural Fill footprint covers two different ash basin fingers, north and south, and the 1804 Phase II Landfill has an ash basin finger underlying the landfill in two areas, also north and south. The 1804 Phase II Landfill was closed in 2001, and the PV Structural Fill was closed in 2013; both

closures were in accordance with North Carolina solid waste landfill regulations. The PV Structural Fill and 1804 Phase II Landfill as well as the areas of former surface impoundment underlying these two structures would apparently meet the Legacy Rule's definition of "CCR management unit." As part of the Consent Order, Duke Energy Carolinas agreed to install a geosynthetic cap over the PV Structural Fill and 1804 Phase II landfill by December 31, 2024.

17. With respect to groundwater monitoring and corrective action at Marshall, groundwater site assessment began in 2014, and an updated corrective action plan was submitted to NCDEQ on December 31, 2019. The updated corrective action plan includes a robust groundwater corrective action program with a combination of extraction wells and infiltration wells and was approved by NCDEQ on August 7, 2021. The corrective action program was implemented in phases, with the first phase coming online in August 2021 and operation of the full system commencing in July 2023.

18. The active Industrial Landfill at Roxboro is constructed partially on top of and adjacent to the East Ash Basin at Roxboro. The Industrial Landfill will be closed in accordance with North Carolina solid waste landfill regulations, including installation of a synthetic final cover system consisting of geosynthetic layers overlain by approximately two feet of protective soil and vegetative layers or a synthetic turf cap. This engineered final cover system will far exceed the CCR

landfill closure requirements of the 2015 Regulations, as amended. The area of former surface impoundment underlying this structure would apparently meet the Legacy Rule's definition of "CCR management unit."

19. With respect to groundwater monitoring and corrective action at Roxboro, groundwater site assessment began in 2014, and an updated corrective action plan was submitted to NCDEQ on December 31, 2019. The updated corrective action plan includes a robust groundwater corrective action program with extraction wells and was approved by NCDEQ on April 27, 2021. The corrective action program was implemented in phases, with the first phase coming online in August 2021 and operation of the full system commencing in January 2023.

20. Prior to constructing the landfills at Belews Creek, Marshall, and Roxboro in the 1980s and 1990s, the underlying areas of former surface impoundment were closed pursuant to North Carolina's requirements governing the siting, design, and construction of sanitary landfills. Despite this prior closure in accordance with state law and the ongoing groundwater monitoring and corrective action measures being undertaken to protect human health and the environment, these units would apparently be subject to the Legacy Rule as "CCR management units" and may be required to re-close, thereby requiring closure (or re-closure in the case of Marshall and Belews Creek) of the overlying landfill as well as closure of the underlying former surface impoundments. Closure by removal, engineering controls, or a

combination thereof in order to meet the performance standards in the Legacy Rule are estimated to increase closure costs by approximately $800 million over the more than $937 million Duke Energy Carolinas and Duke Energy Progress have already expended for basin closure, including nearly $79 million for activities that have already been completed and which were exclusively executed to support the Consent Order.

21. As of the end of August 2024, DEC Energy Carolinas and Duke Energy Progress have excavated across their Carolinas fleet 54,582,247 tons of the 123,583,488 tons, or 44%, of the ash that was identified for excavation by state statute, federal rules, and judicial orders, including the 2015 Regulations and Consent Order.

22. Further, in Indiana, the approximately 119-acre Ash Disposal Area 1 at the Cayuga Generating Station was previously closed in accordance with state law. Activities associated with the closure of Ash Disposal Area 1 commenced in 2011 when Duke Energy Indiana submitted a plan for in-place closure of the unit, which the Indiana Department of Environmental Management ("IDEM") approved in 2012. IDEM's approval is publicly available, and a copy is attached as Exhibit 1. Pursuant to 329 IAC 10-3-1(9), closure approval was "based on management practices that are protective of human health and the environment," including closure in a manner that "controls post-closure escape of waste, waste constituents, leachate,

contaminated precipitation, or waste decomposition products to the ground or surface waters or the atmosphere." 329 IAC 10-30-1. The IDEM-approved closure plan also includes the requirement for groundwater corrective action to address groundwater quality. Consistent with IDEM's approval, Duke Energy Indiana completed closure of Ash Disposal Area 1 in 2022 through installation of a composite final cover system, which includes, from bottom to top: a 50-mil linear low-density polyethylene MicroDrain® geomembrane liner; an 8-ounce per square yard geotextile; and a 36-inch protective soil cover. Despite Duke Energy Indiana's prior closure of Ash Disposal Area 1 in accordance with state law, it will now also apparently be subject to regulation as a "CCR management unit" under EPA's Legacy Rule, which has the potential to impose additional closure costs of approximately $230 million to dewater ash, design and install an engineering control, and re-close areas disturbed by engineering control installation.

23. Ash Pond B at the Gallagher Generating Station in Indiana is another example of an impoundment that was closed in accordance with state law prior to October 19, 2015, but would now be subject to regulation as a CCR management unit. In March 2006, Duke Energy Indiana's predecessor-in-interest submitted a permit application to IDEM for construction of the 49-acre Restricted Waste Site Landfill, which made clear that "the proposed landfill will be located on top [of] the existing ash pond (after the ash pond is closed)." In other words, the new landfill would be

"developed within the footprint of former Ash Pond B." A Letter of Clarification sent to IDEM that following June expressly informed the state agency that "the upper 5 ft of the existing ash pond will be dewatered prior to the application of the structural fill that will serve as the subgrade for the composite liner." Based on the information in the permit application and Letter of Clarification, in March 2007, IDEM issued a solid waste facility permit in accordance with Indiana's solid waste regulations authorizing Duke Energy Indiana to construct and operate the Restricted Waste Site Landfill over former Ash Pond B wherein the bottom liner and leachate collection system of the landfill would serve as the cover to the former ash pond preventing groundwater contact with the developed cells. In August 2016, Duke Energy Indiana submitted an application for a minor permit modification from IDEM to allow for use of a composite final cover system to comply with the 2015 Regulations. In its application, Duke Energy Indiana made clear that, if approved by IDEM, a composite final cover system meeting the requirements of 40 C.F.R. part 257's closure requirements would be placed "within the landfill solid waste boundary" and over "former Ash Pond B." IDEM approved the minor modification in November 2016, thereby authorizing closure of the remaining area of former Ash Pond B over which the landfill was not constructed (approximately 12.9 acres) in addition to closure of the Restricted Waste Site Landfill. IDEM's approval is publicly available, and a copy is attached as Exhibit 2. The IDEM-approved closure

plan also includes the requirement for groundwater corrective action to address groundwater quality. Nonetheless, under the Legacy Rule, Ash Pond B is apparently subject to new regulation as a "CCR management unit" and potentially the obligation to "re-close," thereby imposing additional closure costs of approximately $21 million associated with the installation of engineering controls.

24. Gibson Generating Station is another example of an Indiana facility that includes impoundments that were closed in accordance with state law prior to October 19, 2015, but each of which are now apparently subject to regulation as a "CCR management unit" under the Legacy Rule. In 1997, Duke Energy Indiana's predecessor-in-interest first submitted a permit application to IDEM for construction of a proposed horizontal and vertical expansion of the station's Fixated Scrubber Sludge landfill "over a former portion of a bottom ash fill in the adjacent ash pond." In 2001, IDEM approved the permit application allowing for a 49-acre expansion of the existing landfill "over an existing ash pond for a total area of approximately 135 acres" and requiring, as necessary, implementation of a groundwater corrective action program pursuant to state law. IDEM's approval is publicly available, and a copy is attached as Exhibit 3. Despite Duke Energy Indiana's prior closure of the underlying ash pond in accordance with state law, it will now also apparently be subject to regulation as a "CCR management unit" under EPA's Legacy Rule, which has the potential to impose additional closure costs of approximately $220 million

to dewater ash, design and install an engineering control, and re-close areas disturbed by engineering control installation.

25. A second example of an impoundment at the Gibson Generating Station that was closed in accordance with state law but is now apparently subject to regulation as a "CCR management unit" under the Legacy Rule is the South Ash Fill Area. In 2016, Duke Energy Indiana submitted a closure and post-closure plan application to IDEM, which included the South Ash Fill Area—a former surface impoundment that ceased receiving CCR and was drained prior to October 19, 2015. Based on IDEM's conceptual agreement with Duke Energy Indiana's plans, Duke Energy Indiana initiated in-place closure of the unit in 2016 "in accordance with IDEM's Surface Impoundment Closure Guidance document, as amended by recent guidance obtained from IDEM's Office of Land Quality." In 2021, IDEM approved Duke Energy Indiana's closure of the South Ash Fill Area in accordance with the state's CCR surface impoundment closure requirements, which incorporate portion of 40 C.F.R. part 257, subpart D. IDEM's approval is publicly available, and a copy is attached as Exhibit 4. The IDEM-approved closure plan also includes the requirement for groundwater corrective action to address groundwater quality. Nonetheless, under the Legacy Rule, the South Ash Fill Area is apparently subject to new regulation as a CCR management unit" and potentially the obligation to "re-close," thereby imposing additional closure costs of approximately $130 million.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct. Executed this 18th day of September 2024.

Jessica L. Bednarcik

On Behalf of Duke Energy Carolinas, LLC, Duke Energy Progress, LLC, and Duke Energy Indiana, LLC

EXHIBIT 1

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.go
Eric J. Holcomb, *Governor*
Bruno L. Pigott, *Commissioner*

January 17, 2020

Duke Energy Indiana, LLC
Attn: Owen R. Schwartz
1000 East Main Street
Plainfield, Indiana 46168

Dear Owen R. Schwartz:

Re: Approval of Modified
Closure/Post-Closure Plan
Cayuga Generating Station
Vermillion County
SW Program ID 83-UP-01

Duke Energy's coal combustion residuals (CCR) surface impoundment modified closure and post-closure plan for the Duke Energy Cayuga Generating Station Ash Pond System (APS), consisting of West Ash Fill Area, the Lined Ash Disposal Area, the Ash Disposal Area #1, Primary Ash Settling Pond and the Secondary Ash Settling Pond is approved under 329 IAC 329 IAC 10-9-1(c), which incorporates portions of 40 CFR 257, Subpart D (CCR regulation). This approval is subject to the terms of this letter, the closure and post-closure plans referenced in this document, and the enclosed requirements. This approval also modifies previously approved closure and post-closure plans for Ash Disposal Area #1 dated June 7, 2012, (VFC #66148598). The facility is located at the Cayuga Generating Station, 3300 North State Road 63 near Cayuga, Vermillion County, Indiana.

The APS closure approval encompasses approximately 253.4 acres. West Ash Fill Area (65.7 acres), Lined Ash Disposal Area (36.9 acres), and Ash Disposal Area #1 (119.2 acres) will be closed in place. Secondary Ash Settling Pond (4.7 acres) and a small area of Ash Disposal Area #1 (0.9 acres) will be closed with closure by removal. Primary Ash Settling Pond (26.0 acres) will be closed by removing all visible CCR material only (modified in-place closure). Upon completing closure, these ponds will be subject to post-closure requirements.

Public records for your facility are available in IDEM's Virtual File Cabinet at www.in.gov/idem. Documents related to this approval include the closure and post-closure plan application dated December 21, 2016 (VFC #80399269) and additional information dated August 15, 2018 (VFC #82600861); September 25, 2018 (VFC #82623081); February 15, 2019 (VFC #82698640); and November 6, 2019 (VFC #82860689).

This approval does not: convey any property rights of any sort or any exclusive privileges; authorize any injury to any person or private property or invasion of other private rights or any infringement of federal, state, or local laws or regulations; or preempt any duty to comply with other state or local requirements.

If you wish to appeal this decision, you must file a request for administrative review with the Office of Environmental Adjudication within 18 days after the postmark of this letter. The enclosed guidance provides information on the appeal process and your rights and responsibilities for filing an adequate and timely appeal. If you have any questions, please contact Anna Mishel, the Permit Manager assigned this facility, by dialing (317) 233-6725 or by e-mail at Amishel@idem.IN.gov.

Sincerely,

Rebecca Eifert Joniskan

Rebecca Eifert Joniskan, Chief
Permits Branch
Office of Land Quality

Enclosures: Approval Requirements
Guidance on How to Appeal IDEM Decision

cc with enclosures Vermillion County Health Department
Vermillion County Commissioners
Vermillion Solid Waste Management District
President, Cayuga Town Council
President, Newport Town Council

REQUIREMENTS

A. General Requirements

B. Closure Requirements

C. Post-Closure Requirements

D. Groundwater Monitoring Requirements

E. Financial Responsibilities for Closure and Post-Closure

F. Compliance Schedule Requirements

A. GENERAL REQUIREMENTS

A1. The owner or operator must close and maintain the APS as described in the approved plans and specifications in the document titled "Closure and Post-Closure Plan" dated December 21, 2016 (VFC #80399269), the requirements of this approval, and the following submittals:

a. Document dated August 15, 2018 (VFC #82600861), response to request for additional information (RAI);

b. Document dated September 25, 2018 (VFC #82623081), response to RAI, Addendum 1;

c. Document dated February 15, 2019 (VFC #82698640), response to RAI, Addendum 2.

d. Document dated November 6, 2019 (VFC #82860689), response to RAI Addendum No.3

A2. The owner or operator must call **(888) 233-7745** (IDEM's emergency response line) as soon as possible after learning of any event related to the facility that may cause an imminent and substantial endangerment to human health or the environment, such as a reportable spill (327 IAC 2-6.1) or a fire or explosion that requires the response of the local fire department.

The owner or operator must submit a written report to the Solid Waste Permits Section at the address given in Requirement A3 within five business days after the event. The report must describe the event, and actions taken or planned to correct the event and prevent its recurrence.

A3. Unless otherwise noted, submittals must be sent to the permit manager assigned your facility at the following address:

Indiana Department of Environmental Management
Office of Land Quality
Solid Waste Permits Section
IGCN 1101
100 North Senate Avenue
Indianapolis, IN 46204-2251

Please provide three copies printed double-sided. We greatly appreciate an electronic copy in Acrobat PDF format on CD or DVD, in place of one of the printed copies.

A4. Records of all monitoring information and activities which are required to be submitted by this approval or specified in the closure or post-closure plan, must contain information listed in 329 IAC 10-1-4(a). Records must be maintained as specified in 40 CFR 257.105 and 329 IAC 10-1-4(b) and (c).

A5. Reports must be signed as specified in 329 IAC 10-11-3(b).

B. CLOSURE REQUIREMENTS

B1. The owner or operator must follow the facility closure and post-closure plans and specifications for closure and post closure of the APS, consisting of West Ash Fill Area, Lined Ash Disposal Area, Ash Disposal Area #1, Primary Ash Settling Pond, and Secondary Ash Settling Pond, in the documentation dated December 21, 2016 (VFC #80399269) and the following submittals:

a. Document dated August 15, 2018 (VFC #82600861);
b. Document dated September 25, 2018 (VFC #82623081);
c. Document dated February 15, 2019 (VFC #82698640); and
d. Document dated November 6, 2019 (VFC #82860689).

B2. The following methods of closure are approved for Cayuga APS:

- West Ash Fill Area - Closure in place; this pond will be closed at the plant's decommissioning subject to 329 IAC 10-3-1(9).
- Ash Disposal Area #1 – Closure in place with limited closure by removal of ash in an area underneath newly constructed lined Process Water Treatment Pond. This pond closure has been already partially approved under 329 IAC 10-3-1(9) in the Approval letter dated June 7, 2012 (VFC #66148598).
- Lined Ash Disposal Area – Closure in place subject to 329 IAC 10-3-1(9) and 329 IAC 10-9-1(c) with 40 CFR 257.
- Secondary Ash Settling Pond – Closure by removal of CCR material and one additional foot of soil with groundwater monitoring, and re-purposed as a lined process water basin subject to 329 IAC 10-3-1(9) and 329 IAC 10-9-1(c) with 40 CFR 257.
- Primary Ash Settling Pond – Modified in-place closure with removal of all visible ash, with groundwater monitoring subject to 329 IAC 10-3-1(9) and 329 IAC 10-9-1(c) with 40 CFR 257.

B3. The owner or operator must notify IDEM in writing at least 15 days before the intended date to begin construction of cover system for each approved ash pond.

B4. The owner or operator must follow the schedule included in the closure and post-closure plans to complete the preparation activities and final closure of the APS.

B5. The owner or operator must manage surface water as described in the approved plans and meet the following requirements:

a. Maintain drainage ditches and the sedimentation basin to prevent off-site deposition of waste and sediment. Remove waste deposits from drainage ditches as necessary to properly convey storm water.

b. Construct temporary run-off structures in areas which are unable to drain to sedimentation basin.

B6. The owner or operator must properly dispose of all collected leachate, including water that has been in contact with waste in accordance with all applicable local, state, and federal laws (329 IAC 10-28-16 and IC 13-30-2-1).

B7. The owner or operator must perform inspections of the APS until completion of the final closure as described in 40 CFR 257.83 and requirements of this approval.

B8. The owner or operator must adopt measures that will effectively minimize coal combustion residual becoming airborne, including waste that generates fugitive dust (40 CFR 257.80) and fugitive particulate matter in a way that does not violate the rule for fugitive dust (326 IAC 6-4) or fugitive particulate matter (326 IAC 6-5), including 326 IAC 6-5-4(g) for solid waste handling control measures (329 IAC 10-8.2-2). The owner or operator must implement dust control measures as specified in the facility CCR Fugitive Dust Control Plan dated April 30, 2019 (VFC #82827279), and take any additional steps necessary to prevent violations of fugitive dust rules and 40 CFR 257.80.

B9. The owner or operator must construct soil and CCR structural fill as follows:

a. Place CCR structural fill, at an elevation within five feet of final cover subgrade (top of CCR before placement of final cover) in loose lifts not to exceed 12 inches and be compacted to at least 85% of the standard proctor maximum dry density and as described in the Response to Request for Additional Information dated August 15, 2018 (VFC #82600861, pp. 6-7 of 57).

b. Soil structural fill must be placed in loose lifts not to exceed 12 inches and be compacted to 95% of standard proctor maximum density and as described in Quality Assurance Manual (QAM) dated December 21, 2016 (VFC #80399269, Appendix J, pp 646 of 697) and the Response to Request for Additional Information dated August 15, 2018 (VFC #82600861, pp. 6-7 of 57).

c. Use lime kiln dust (LKD) to dry and stabilize CCR as specified in the letter document dated February 15, 2019 (VFC #82698640 pp. 40-41 of 224).

B10. The owner or operator must follow confirmation procedure for CCR and one foot soil removal as described in the Response to Request for Additional Information dated August 15, 2018 (VFC #82600861 p.10 of 57). The approximate elevation contours of the bottom of the ash placement for Secondary Ash Settling Pond are depicted on Sheet 10 titled "Approximate Bottom of Ash Contours" dated November 2016 (VFC #80399269 p.67 of 697) and Sheet 16R2 titled Engineering Cross Sections X,Y and Z dated November 2016 and revised October 2019 (VFC #82860689 p.35 of 85).

B11. The owner or operator must remove all visible CCR materials from bottom and side slope of Primary Ash Settling Pond as described in Addendum No.3 dated November 6, 2019 (VFC #82860689). The approximate elevation contours of the bottom of the ash placement for Primary Ash Settling Pond are depicted on Sheet 10 titled "Approximate Bottom of Ash Contours" dated November 2016

(VFC #80399269 p.67 of 697) and Sheet 15R2 titled Engineering Cross Sections W and Sheet 16R2 titled Engineering Cross Sections X, Y and Z dated November 2016 and revised October 2019 (VFC #82860689 pp. 34 and 35 of 85).

B12. The owner or operator must construct the final cover for APS as specified in the approved plans and the following requirements. Grading and stabilization of final cover must be accomplished as described in 329 IAC 10-28-14.

a. **Lined Ash Disposal Area, Ash Disposal Area #1 and Secondary Ash Settling Pond:**

The final composite cover system must be constructed as specified on Sheet 12R3 titled "Proposed Grading Plan dated November 2016 and revised October 2019 (VFC #82860689 p.33 of 85) and Sheets 24R1 and 25R1 titled "Additional Details" (VFC #82860689, pp.36-37 of 85) and the following cover specifications:

i. For Lined Ash Disposal Area and Ash Disposal Area #1 except as noted for transition sections and drainage structures described in Addendum 2 of Response to Additional Information dated February 15, 2019 (VFC #82698640, pp.43-46 of 224) and depicted on Sheet 24R1 titled "Additional Details" (VFC #82860689, p.36 of 85) the final cover system extending upwards from the bottom must consist of the following:

- 30-mil PVC or 40-mil LLDPE or 60-mil HDPE geomembrane liner or equivalent installed over structural fill
- Geotextile cushion or geocomposite drainage layer
- 30 inches of uncompacted cover soil
- 6 inches of vegetative cover

ii. For Secondary Ash Settling Pond the owner or operator must construct the final cover/liner with the components extending upwards from the bottom:

- Soil structural fill over existing soil
- Geosynthetic Clay Liner
- 60-mil HDPE textured geomembrane
- 16 oz/yd^3 nonwoven geotextile
- 12 inches No.11 crushed stone and additional of 15" of INDOT Uniform A riprap on the side slopes

*Note: Secondary Ash Settling Pond is repurposed for the NPDES treatment unit.

b. **West Ash Fill Area:**

The final composite cover system for West Ash Fill Area starting from the bottom (top of existing ash) and extending upwards must consist of the following as shown on Sheet 13R2 titled Proposed Grading Plan – West Ash

Fill Area dated November 2016 and revised October 2019 (VFC #82860689 p.33 of 85):

- 30-mil PVC or 40-mil LLDPE or 60-mil HDPE geomembrane liner or equivalent installed over structural fill
- Geotextile cushion or geocomposite drainage layer
- 30 inches of uncompacted cover soil
- 6 inches of vegetative cover

c. **Primary Ash Settling Pond:**

The final cover system for Primary Ash Settling Pond must consist of the following after removal of all visible deposits of CCR material as shown on Sheet 12R4 titled Proposed Grading Plan dated July 2018 and revised October 2019 (VFC #82860689 p.32 of 85) and Detail 1 on Sheet 24R1 titled Additional Details, dated October 2019 (VFC #82860689 p.36 of 85):

- Soil structural fill
- 18 inches of compacted soil layer with a hydraulic conductivity of not greater than $1x10^{-5}$ centimeter/second
- 6 inches of vegetative cover

This APS closure approval encompasses approximately 253.4 acres. This APS closure contains 221.8 acres of composite cover system, 26 acres of compacted soil cover and 5.6 acres of soil cover.

B13. The owner or operator must test and install final cover components as specified in the Quality Assurance Manual dated December 2016, Appendix J (VFC #80399269, pp 627-697 of 697) and the Response to Request for Additional Information dated August 15, 2018, Item 3 (VFC #82600861, pp. 6-7 of 57), except as otherwise noted in this approval.

B14. Upon selecting the specific materials for the composite liner system, the permittee must test the materials to verify that the interface friction angle values meet or exceed the values in the approved design. If the tests show that the interface friction values do not achieve the minimum factor of safety assumed in the approved plans, the permittee must select and test alternate materials and rerun the slope stability analysis.

B15. The owner or operator must submit a final closure certification to IDEM no later than 90 days after the completion of construction of the final cover system and establishment of vegetation, or within 90 days of receipt of this closure and post-closure plan approval for construction activities that have already been completed. The owner or operator must submit verification of environmental restrictive covenant (ERC) and deed notation to IDEM no later than 90 days after completion of all closure activities included in this approval. The final closure certification must comply with the following:

a. Meet the requirements of 40 CFR 257.102(f)(3), (g), (h), and (i), and 329 IAC 10, as applicable.

b. Certify the final closure constructed according to the approved closure plan and the Quality Assurance Manual.

c. A registered professional engineer must certify that the closure construction complies with the approved plans and specifications.

d. The final closure certification must include the following:

(1) The boundaries of the certified area;
(2) The results of all tests conducted during construction;
(3) The results of the interface friction tests and any new slope stability analyses, if applicable;
(4) Documentation of all storm water management features that have been constructed or installed to the extent possible as designed;
(5) Any deviation/changes from the approved closure plan must be noted and explained in the report, if any; and
(6) Photographic verification of the results of the visual inspections and surveys for both the bottom of CCR material excavation and one-foot of additional soil at the Secondary Ash Settling Pond.

C. POST-CLOSURE REQUIREMENTS

C1. The owner or operator must perform 30 years of post-closure monitoring and maintenance including the activities specified in the facility updated post-closure plan dated October 24, 2019, Appendix A (VFC #82860689 pp.21-29 of 85) and the following:

a. Performance standards and post-closure duties as specified in 40 CFR 257.104 and 329 IAC 10, as applicable;

b. The 30-year post-closure period will begin when all the CCR units/areas at the facility are certified closed and IDEM accepts the certification; and

c. Monitor and maintain the closed CCR units/areas of the facility until the 30-year post-closure period begins.

C2. To be released from post-closure monitoring, the owner or operator must submit a post-closure certification statements signed by both the owner/operator and a registered professional engineer stating that the post-closure care requirements have been met and the surface impoundments are stabilized. The post-closure certification is considered adequate, unless within 90 days of receipt of the post-closure certification IDEM issues notice of deficiency of the post-closure, including actions necessary to correct the deficiency.

C3. The owner or operator must comply with facility's ERC and/or deed restriction subsequent to the completion of the post-closure care certification. The owner or operator is responsible for the following:

a. Correcting and controlling any nuisance conditions occurring at the facility (329 IAC 10-31-5);

b. Eliminating any threat to human health or the environment (329 IAC 10-31-6); and

c. Performing any remedial action at the facility, if necessary (329 IAC 10-31-7).

D. GROUNDWATER MONITORING REQUIREMENTS

D1. The owner or operator must comply with 329 IAC 10-9-1(c) with 40 CFR 257 (Groundwater Monitoring and Corrective Action).

D2. The owner or operator must conduct groundwater monitoring throughout the closure and the 30-year post-closure care period of the unit (40 CFR 257.104(c)). IDEM will extend the post-closure care period if the facility is under assessment monitoring until the facility returns to detection monitoring (40 CFR 257.104(c)(2)).

MONITORING DEVICES

D3. The facility's groundwater monitoring system (System) includes the following groundwater monitoring well locations:

a. Lined Ash Disposal Area Groundwater Monitoring Wells:
   i. MW-A21, MW-A22, and MW-A23.

b. Primary Ash Settling Pond Groundwater Monitoring Wells:
   i. MW-A26, MW-A27, MW-A28, and MW-A29.

c. Secondary Ash Settling Pond Groundwater Monitoring Wells:
   i. MW-A24, MW-A25, MW-A28, and P-104.

d. Site-Wide Groundwater Monitoring Wells (Ash Disposal Area #1):
   i. MW-A12, MW-A13, MW-A14, MW-A15, MW-A16, MW-A17, MW-A18, MW-A19, and MW-A20.

e. Background Groundwater Monitoring Wells:
   i. MW-100 and MW-101.

At least 60 days before installing new monitoring devices, the owner or operator must submit a device-installation plan for IDEM approval. The plan must provide the following:

1) A map showing the location of each device with respect to the facility's entire System and a current potentiometric surface.

2) A demonstration that each device will yield representative groundwater samples at an appropriate location and depth within the same aquifer or aquifers as the facility's existing System, and will meet the installation requirements of 40 CFR 257.91(e).

3) Drilling methods and procedures that follow 329 IAC 10-21-4; well construction materials and details, including protocol for collecting, describing, and analyzing consolidated or unconsolidated materials (329 IAC 10-24-3(3)).

4) An example of a borehole log that includes information specified under 329 IAC 10-24-3(2).

5) Environmental qualifications of all field personnel.

6) Provisions to include the installation records in the facility operating record (40 CFR 257.91(e)(1)).

The owner or operator must submit all field documentation to IDEM within 60 days after completing all related field work.

D4. The owner or operator must label all groundwater monitoring wells with a permanent and unique identification. When reporting well information, the owner or operator must include the identification for each well.

D5. The owner or operator must secure the access ways to all groundwater monitoring wells to prevent unauthorized access and maintain the access ways so they are passable year round with the exception of flooding conditions.

D6. The owner or operator must maintain all groundwater monitoring wells as follows:

a. Complete necessary repairs, other than replacement (see Requirement D8), within 10 days after discovery or other time frame approved by IDEM.
b. Keep the wells securely capped and locked when not in use.
c. Repair all cracks in and around the casings and well pads that affect the integrity of the well.
d. Control vegetation height.
e. Redevelop the wells as needed.

D7. When abandoning a groundwater monitoring well that is part of the facility's approved System listed in Requirement D3, the owner or operator must:

a. Submit a written proposal for approval explaining the reasons for and detailing the method of abandonment.
b. Use methods that comply with Indiana Department of Natural Resources (IDNR) regulation 312 IAC 13-10-2.
c. Notify the IDEM Geology Section by phone, email, or letter at least 10 days before the date the abandonment work will occur.

d. Provide written notification of abandonment to IDEM and IDNR within 30 days after plugging is complete. (IDNR (312 IAC 13-10-2(f)) requires written notice.); and
e. Include the abandonment records in the facility operating record (40 CFR 257.91(e)(1)).

D8. The owner or operator must notify IDEM by phone, email, or letter within 10 days after discovering that a groundwater monitoring well has been destroyed or is not functioning properly. The owner or operator must repair the well if possible. If the well cannot be repaired, then within 30 days after discovery, the owner or operator must submit a proposal for abandonment or replacement.

PLANS

D9. The owner or operator must follow an IDEM approved Sampling and Analysis Plan (SAP) that meets the minimum requirements listed in 40 CFR 257.93(a) through (e), and (i). Requirement F1 specifies the submission of an SAP.

D10. The owner or operator must follow an IDEM approved Quality Assurance Project Plan (QAPjP) that meets the requirements listed in 40 CFR 257.93(a) and (b). Requirement F2 specifies the submission of a QAPjP.

D11. The owner or operator must follow an IDEM approved Statistical Evaluation Plan (StEP) that meets the minimum requirement listed in 40 CFR 257.93(f) through (h). Requirement F3 specifies the submission of a StEP.

D12. If IDEM requests a revision to an SAP, QAPjP, or StEP, the owner or operator must submit the revised plan(s) for approval. The owner or operator must submit the plan(s) within 60 days after receiving the request. This submittal must include one original paper copy and one PDF electronic file of each plan. The owner or operator must not implement the revised plan(s) before receiving approval.

D13. If the owner or operator makes design changes to the existing System listed in Requirement D3, the owner or operator must submit a revised SAP, and if applicable, a revised QAPjP or StEP for approval. The owner or operator must submit the plans within 60 days after completing all field activities associated with the design changes. This submittal must include one original paper copy and one PDF electronic file of each plan. The owner or operator must not implement the revised plan(s) before receiving approval.

MONITORING PROGRAMS

D14. The owner or operator must sample the facility's System listed in Requirement D3 semiannually during March and September of each year. Each sample must be analyzed following the Detection Monitoring Program (40 CFR 257.94) for the following Appendix III constituents:

a. Total Boron
b. Total Calcium
c. Chloride

d. Fluoride
e. Field pH
f. Sulfate
g. Total Dissolved Solids

The owner or operator may demonstrate an alternative frequency of sampling for the Appendix III constituents following 40 CFR 257.94(d).

When applicable (see Requirement D19), each sample must be analyzed following the Assessment Monitoring Program (40 CFR 257.95) for the following Appendix IV constituents:

h. Total Antimony
i. Total Arsenic
j. Total Barium
k. Total Beryllium
l. Total Boron
m. Total Cadmium
n. Total Chromium
o. Total Cobalt
p. Fluoride
q. Total Lead
r. Total Lithium
s. Total Mercury
t. Total Molybdenum
u. Total Selenium
v. Total Thallium
w. Radium 226 and 228 combined

For specific metal constituents, the owner or operator may incorporate historic filtered (dissolved) results into the background data set instead of collecting a minimum of eight additional independent samples (40 CFR 257.94(c)) for the unfiltered (total recoverable) metal results, if the results for the filtered metal are no greater than 20% of the relative percent difference of the unfiltered metal. The owner or operator may propose an alternative method for incorporating historic results of the specific dissolved metal into the background data set for IDEM review and approval.

Whenever results of total chromium occur at or above its background concentration or maximum contaminant level, whichever is the higher concentration, the owner or operator must speciate and report both trivalent and hexavalent chromium.

D15. The owner or operator must use the results of the static water level measurements from the System listed in Requirement D3 to prepare potentiometric surface maps or groundwater flow maps that include the following information:

a. Location and identification of each groundwater monitoring well.

b. Groundwater elevations for each well and surface water elevations for the Wabash River. The owner or operator must measure all static water levels on the same day and as close in time as possible before the purging and sampling event.
c. Date and time of static water level measurement for each well.
d. Ground-surface elevation at each well.
e. Facility property boundaries.
f. Identification of the aquifer represented, either by a name or elevation.
g. Solid waste fill boundaries.
h. Facility name and county.
i. Map scale, north arrow, groundwater flow direction arrows, and potentiometric-surface contour intervals.
j. Indications of which wells are considered background, upgradient, or downgradient.
k. Locations and elevations of all site benchmarks.

D16. If a groundwater flow map indicates that the groundwater flow direction, including flow reversals, is other than anticipated in the design of the System listed in Requirement D3, then the owner or operator must notify IDEM of the difference in the groundwater monitoring report submitted for Requirement D23. The notification must include either of the following: information demonstrating that the System complies with 40 CFR 257.91(c); or a proposal to revise the System design for IDEM approval.

The owner or operator must determine if the System currently complies with 40 CFR 257.91(c) before collecting samples for the scheduled semiannual sampling event. If a flow reversal occurs, the owner and operator may postpone with IDEM approval the scheduled semiannual sampling event in 30-day extension increments if they determine that the System does not comply with 40 CFR 257.91(c).

If the owner or operator determines a groundwater flow reversal occurred during a scheduled semiannual sampling event, then data from that sampling event must not be utilized in statistical evaluations specified in the StEP or incorporated into background groundwater quality and groundwater protection standard calculations, unless the owner or operator adequately demonstrates to IDEM that the data accurately represents established groundwater quality conditions when a flow reversal did not occur. Additionally, the owner or operator must immediately schedule a replacement sampling event in order to complete the required semiannual evaluation for groundwater releases from the facility. Within seven days of scheduling the replacement sampling event, the owner or operator must notify IDEM of the schedule.

If design changes to the existing System are necessary, then the facility must make the changes within 30 days after receiving IDEM approval of the revised design or other time frame approved by IDEM.

D17. Background groundwater monitoring wells (MW-100 and MW-101) must provide groundwater samples that represent historical conditions unaffected by a CCR unit or facility activities that may contribute Appendix III and Appendix IV constituents listed in Requirement D14 against which background comparisons occur. Additionally, for any background well added to the System listed in Requirement D3, the owner or operator must:

a. Establish background groundwater quality for the Appendix III and Appendix IV constituents listed in Requirement C14.
b. Determine the background groundwater quality by sampling each new well for eight independent sampling events within 12 months after the well's installation, unless the owner or operator can justify to IDEM an extended period of no more than 12 additional months.

If the owner or operator or IDEM determines that the current System (see Requirement D3) does not have the required background well(s), then within 60 days the owner or operator must submit a plan per Requirement D3 proposing to establish new or additional background wells for the current System for IDEM review and approval. This plan must include well location(s) for obtaining background groundwater quality samples that satisfy the specifications of this requirement.

D18. The owner or operator must implement the StEP identified in Requirement D11 and include the outcome of each statistical determination in a statistical evaluation report (see Requirement D23.d).

D19. The owner or operator must implement a detection monitoring program consistent with 40 CFR 257.94 and the StEP. If the owner or operator determines there is a statistically significant increase (SSI) over background for one or more of the Appendix III constituents listed in Requirement D14 at any of the downgradient groundwater monitoring wells, then the owner or operator must comply with one of the following requirements:

a. Demonstrate that a source other than the CCR unit caused the SSI over background levels for a constituent, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality (40 CFR 257.94(e)(2)). Within 45 days of detecting an SSI over background levels, or other time frame approved by IDEM, the owner or operator must submit the written demonstration to IDEM.

   If the demonstration is approved, the owner or operator may continue with a detection monitoring program for any unit for which the demonstration was made;

b. Within 30 days of receiving notice that the demonstration is not acceptable to IDEM, submit an assessment monitoring program plan meeting the requirements of 40 CFR 257.95, which includes the Appendix IV constituents listed in Requirement D14, to IDEM for approval. Within 90 days of determining an SSI, the owner or operator must establish and implement the assessment monitoring program following 40 CFR 257.95,

which includes the Appendix IV constituents listed in Requirement D14. The owner or operator must also implement the assessment monitoring program plan after receiving approval from IDEM; or

c. If a demonstration is not pursued, the owner or operator must submit an assessment monitoring program plan specified in Requirement 19.b within 30 days of determining the SSI. Within 90 days of determining an SSI, the owner or operator must establish and implement the assessment monitoring program following 40 CFR 257.95, which includes the Appendix IV constituents listed in Requirement D14. The owner or operator must also implement the assessment monitoring program plan after receiving approval from IDEM.

D20 Within 90 days of finding that any of the Appendix IV constituents listed in Requirement D14 have been detected at a statistically significant level exceeding the groundwater protection standards (40 CFR 257.95(h)), the owner or operator must comply with one of the following requirements (40 CFR 257.95(g)(3)):

a. Complete the assessment of corrective measures as required by 40 CFR 257.96, and submit the results of the corrective measures assessment to IDEM for approval. As part of the selection of corrective measures, the owner or operator must include an evaluation of potential groundwater flow reversals on the System. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. After receiving IDEM approval, the owner or operator must implement Requirement D21; or

b. Demonstrate that a source other than the CCR unit caused the contamination, or that the statistically significant level exceeding the groundwater protection standard resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality consistent with 40 CFR 257.95(g)(3)(ii). Within 90 days of detecting a statistically significant level exceeding the groundwater protection standard, the owner or operator must complete and submit the written demonstration to IDEM for approval.

If the demonstration is approved, then the owner or operator may continue with an assessment monitoring program for any unit for which the demonstration was made.

D21. At least 30 days prior to initiating 40 CFR 257.97, the owner or operator must hold a public meeting to discuss the results of the corrective measures assessment with interested and affected parties. As soon as feasible, the owner or operator must select a remedy that, at a minimum, meets the standards listed in 40 CFR 257.97(b). The owner or operator must submit the first semiannual report describing the progress in selecting and designing the remedy (40 CFR 257.97(a)) to IDEM for review and approval. If additional semiannual progress reports are necessary, the owner or operator must submit the reports within six months of submitting the previous semiannual report. The final report for the selected remedy must, at a minimum, meet the standards listed in 40 CFR

257.97(b), utilizing the provisions specified in 40 CFR 257.97(c) and (d), and must be approved by IDEM.

D22. Within 90 days of receiving IDEM approval of the selected remedy, the owner or operator must initiate remedial activities based on the approved remedy and the standards listed in 40 CFR 257.98. The corrective action program is complete when IDEM approves the owner or operator's demonstration that concentrations of Appendix IV constituents listed in Requirement D14 have not exceeded the ground water protection standard(s) for a period of three consecutive years at all points of the plume beyond the System following 40 CFR 257.98(c).

REPORTING

D23. The owner or operator must submit a groundwater monitoring report that includes the results obtained from the implementation of Requirements D14 or D17 no later than 60 days after each groundwater monitoring event with the following exceptions:

- The owner or operator must submit radium-specific information no later than 90 days after the groundwater monitoring event.
- If the owner or operator implements a verification resampling program, then the owner or operator must submit verification resampling results no later than 30 days after the last verification event. Verification resampling is defined in the March 2009 *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities* (EPA 530/R-09-007).

The owner or operator must submit the report to the IDEM Solid Waste Permits Section in one unbound paper copy and in one electronic PDF file. The report must include the following:

a. One original unbound laboratory-certified report with analytical results, field parameters (see Requirement D24), field sheets, and chain-of-custody forms. The laboratory-certified report must include the following: detection limit for each chemical constituent, date samples collected, date the laboratory received the samples, date the laboratory analyzed the samples, date the laboratory prepared the report, method of analysis the laboratory used for each constituent, sample identification number for each sample, and results of all sample analyses.
b. All information specified in Requirement D15 and a table summarizing the static water level and groundwater elevation for each well.
c. An evaluation of the groundwater quality, recent notifications of any compliance issues related to a problematic well (see Requirement D8), special field observations and procedures, and deviations from the SAP.
d. One original unbound copy of the statistical evaluation report (see Requirement D18).

The owner or operator may mail the PDF copy and electronic data file specified in Requirement D24 on a CD-ROM or DVD. The owner or operator must clearly label the PDF copy and electronic data file with the facility name and a brief description of the file. Alternatively, the owner or operator may e-mail the PDF

copy and electronic data file to the IDEM Solid Waste Permits Section at the address listed in Requirement A4 and carbon copy olqdata@idem.IN.gov. The e-mail must include the facility name and a brief description typed in the e-mail's subject heading.

D24. The owner or operator must submit one electronic data file of the analytical results and field parameters from the System (see Requirement D3) formatted as an ASCII, tab-delimited text file. The electronic data file must contain the facility's name, SW Program ID number, and the name of the analytical laboratory. Additionally, the file must include the fields listed below for the analytical results and as applicable, the following field parameters: pH, specific conductance, turbidity, temperature, well depth, depth to water, and static water elevation.

a. SamplingDate: Month, day, and year (mm/dd/yyyy). Value should be formatted as a date if possible.
b. SamplePointName: Names of groundwater monitoring wells, piezometers, leachate wells, surface water collection points, etc.
c. LaboratorySample ID: ID assigned to the sample by the laboratory.
d. SampleType: Regular, duplicate(s), trip blank(s), equipment blank(s), field blank(s), verification re-sample(s), and replicate(s).
e. SpeciesName: Chloride, sodium, ammonia, field pH, etc. The order of constituents is not critical. However, it is best to reflect the order that is on the laboratory-data sheets and keep all field data grouped together. Metals should indicate "dissolved" phase or "total" phase. Associated static water levels do not have their own header, but must be entered as "GW WaterLevel" under the header "SpeciesName." The actual elevations must be entered under the header "Concentration."
f. Concentration (results): The entry must be a number. Please do not enter text, such as "NA," "ND," or "<."
g. ConcentrationUnits: mg/l, µg/l, standard units for pH, degrees Celsius (°C) or degrees Fahrenheit (°F) for temperature, and umhos/cm for specific conductance.
h. Detected: Yes or no.
i. DetectionLimit.
j. AnalyticalMethods.
k. EstimatedValue: Indicate "Yes" if the reported concentration is an estimated value. If a value recorded was not estimated, enter "No." If a concentration is estimated, use the "Comment" field to explain why the concentration was estimated.
l. Comment: Analytical laboratory and/or field personnel comments regarding the reported results.
m. SampleMedium: Groundwater, leachate, surface water, etc.
n. ProgramArea: Solid Waste.

Additional guidance on electronic data file submittals is available on IDEM's website at www.in.gov/idem/landquality/2369.htm or by e-mailing questions to olqdata@idem.IN.gov.

D25. The owner or operator must retain laboratory quality assurance/quality control (QA/QC) documentation from valid analyses of groundwater samples for at least three years.

Upon IDEM request, the owner or operator must submit the laboratory QA/QC for a specified groundwater monitoring data package, in one paper copy and one electronic copy in PDF format, within 60 days after receiving the request. The "*Solid & Hazardous Waste Programs, Analytical Data Deliverable Requirements: Supplemental Guidance*" provides additional information about laboratory QA/QC. The guidance is available on IDEM's website at www.in.gov/idem/landquality/files/sw_resource_data_deliverable_reqs.pdf.

E. FINANCIAL RESPONSIBILITY FOR CLOSURE AND POST-CLOSURE

E1. The owner or operator must update and maintain a financial assurance mechanism as specified in 329 IAC 10-39 in an amount not less than the estimated costs of closure and post-closure in the approved closure and post-closure plan. The owner or operator must submit signed originals of the financial assurance mechanism and updates used to meet this requirement.

E2. The owner or operator must annually review and submit an update by June 15 addressing the following items as detailed in 329 IAC 10-39-2(c) and (d), and 329 IAC 10-39-3(c):

a. The owner or operator must adjust the closure and post-closure cost estimates for inflation.

b. The owner or operator must revise the cost estimates to account for changes which increase the cost of closure or post-closure.

c. The owner or operator may revise the cost estimates to account for changes which reduce the cost of closure or post-closure. The permittee must provide documentation supporting reduced cost-estimates, for example, letters and maps documenting areas certified as closed.

d. The owner or operator must submit an existing contour map of the approved solid waste land disposal facility that delineates the boundaries of all areas into which waste has been placed, and the boundaries of areas certified as closed. The map must be certified by a professional engineer or a registered land surveyor.

e. The owner or operator must submit documentation showing that the financial assurance mechanism is current to cover the estimated costs of closure and post-closure. The permittee must submit signed originals of the financial assurance and/or updates used to meet this requirement.

F. COMPLIANCE SCHEDULE REQUIREMENTS

F1. Within 60 days after receiving this IDEM Approval Letter, the owner or operator must submit a Sampling and Analysis Plan (SAP) that meets the requirements of D9. The SAP must describe sampling protocols, equipment, and methods for collecting samples to be analyzed for constituents listed in Requirements D14. The owner or operator must implement the SAP upon IDEM's written approval. The submittal must include one original paper copy and one PDF electronic file.

F2. Within 60 days after receiving this IDEM Approval Letter, the owner or operator must submit a Quality Assurance Project Plan (QAP_jP) that meets the requirements of D10 for the constituents listed in Requirements D14. The owner or operator must implement the QAP_jP upon IDEM's written approval. The submittal must include one original paper copy and one PDF electronic file.

F3. Within 60 days after receiving this IDEM Approval Letter, the owner or operator must submit a Statistical Evaluation Plan (StEP) that meets the requirements of D11. The StEP is effective upon IDEM's written approval. The submittal must include one original paper copy and one PDF electronic file.

In the StEP, the owner or operator must present the data distribution assumptions. The statistical procedures must be appropriate for the data distribution and provide a balance between the probability of falsely identifying a statistically significant difference and the probability of failing to identify a statistically significant difference. To achieve the balance, the owner or operator should consider the background sample sizes, the number of individual statistical tests performed, the number of groundwater monitoring wells, and the specific verification resampling method. The statistical procedures must account for analytical results below method detection limits.

Indiana Department of Environmental Management
Response to Public Comments
Proposed Closure and Post-Closure Plans for the Ash Pond System located at
Duke Energy's Cayuga Generating Station 83-UP-01

Documents:	Date:	VFC #:
Closure Plan	12.21.16	80399269
RAI #1	06.15.18	82561316
Response to RAI #1	08.15.18	82600861
Response to RAI #1 Addendum 1	09.25.18	82623081
RAI #2	12.17.18	82664512
Response to RAI #2 Addendum 2	02.15.19	82698640
RAI #3	09.19.19	82839618
Response to RAI #3 Addendum 3	11.06.19	82860689

Comment #1:
The ash lagoons at Cayuga are sitting in groundwater year-round. much of the coal ash in the Cayuga ash ponds – up to about 20 feet of ash in some places – "lie[s] beneath the perennial water table…and …[is] subject to both short- and long-term water-table fluctuations that are typical of large, unconfined alluvial aquifers adjacent to rivers." The water table fluctuations that saturate, dry, and then re- saturate much of the coal ash at Cayuga generate an "ongoing source" of leachate that is transported by the "large-scale" lateral flow of groundwater to the Wabash River and other parts of the sand and gravel aquifer underlying the ash ponds.

Response to Comment #1:
We concur that before closure activities began, the elevation of the ground water was above the bottom depth of the ash within the ash ponds at the facility. Of the units subject to the Federal CCR Regulation, Duke has removed the ash from the former Secondary Ash Settling Pond; the Lined Ash Disposal Area does not have waste in contact with the water table; Duke proposes to remove CCR material from the Primary Ash Settling Pond.

Ash Disposal Area #1 and West Ash Fill Area are not subject to the Federal CCR Regulation. Ground water monitoring program is currently being implemented as approved in the closure plan approved by IDEM on June 7, 2012 (VFC #66148598).

Comment #2:
The Cayuga ash ponds also sit on top of bedrock that is likely permeable, as evidenced in part by the fact that the town of Newport, just two miles downstream, has developed drinking water wells in the same bedrock formation. If the bedrock underlying Cayuga is indeed permeable, that means that the toxic contaminants leaching into the groundwater at the site may be transported not only into the sand and gravel aquifer immediately beneath the ash ponds, but also into that underlying bedrock – spreading the pollution further down and laterally in directions Duke's groundwater model does not take into account.

Response to Comment #2:
40 CFR 257.91(a)(2) Ground water monitoring sytems, the system must be installed at the waste boundary that ensures detection of ground water contamination in the uppermost aquifer.

If the CCR units detect a release above the ground water protection standards in the ground water, then, per 40 CFR 257.95(g)(1), the site must characterize nature and extent, which includes characterizing the bedrock. Following the characterization of the nature and extent, the CCR unit will continue into the corrective action program.

Comment #3:
Groundwater monitoring at the site, as well as sampling of groundwater seeps pouring either directly into the Wabash River or into the cooling water discharge canal that flows into the river, reveal elevated levels of antimony, arsenic, boron, iron, manganese, selenium, and sulfate – pollutants long recognized as toxic to people, aquatic life, birds and wildlife. Boron is particularly notable because boron leaches readily from coal ash and is a recognized indicator of coal ash contamination; as such, its presence is clear evidence that the coal ash at Cayuga has been leaching.

Response to Comment #3:
The ground water will be monitored according to the approved ground water monitoring system included in the approved plan, the Federal CCR Rule, and IDEM ground water monitoring requirements provided in the IDEM Approval of Modified Closure/Post-Closure Plan. Boron will be included in Appendix IV of the IDEM Partial Approval of Modified Closure/Post-Closure Plan.

The seeps are monitored by IDEM Office of Water Quality under the approved Compliance Plan (VFC #82636118).

Comment #4:
Duke omits that critical background data in the Closure Plan, instead referring IDEM to "historical groundwater data" at the site. But the "historic" groundwater data from the monitoring wells surround the ash ponds does not represent background conditions. The Closure Plan itself, as well as the results of groundwater monitoring, make clear that all the wells surrounding the ash ponds, including the wells that the company cites as "upgradient" wells, have been impacted by coal ash pollution. Duke Energy admits that, until 2015, coal-ash contaminated water flowed in all directions from the ash pond "Ash Disposal Area #1, polluting groundwater even in the "upgradient" wells. Monitoring results confirm this contamination: wells designated 'upgradient' in Duke Energy's Closure Plan have boron as high as 6.6 ppm, a concentration much higher than that found in the landfill wells that provide the best available background at the site.

Response to Comments #4:
IDEM's requirement for background wells of the CCR ash ponds must provide ground water samples that represent historical conditions unaffected by a CCR unit (40 CFR 257.91(a)(1)) or facility activities that may contribute to the Appendices III and IV constituents of the IDEM Approval of Modified Closure/Post-Closure Plan against which background comparisons occur.

Background monitoring wells in the *Proposed Modification to Existing Closure and Post- Closure Plans* dated Dec 21, 2016 (VFC #80399269) are not acceptable; however all wells proposed will be ground water monitored. In Duke's "*Response to Request for Additional Information, Proposed Site Closure Implementation Plan*, dated August 15, 2018 (VFC #82600861 p. 20 of 57), the facility modified the ground water monitoring system to monitor each CCR unit (the Lined Ash Disposal Area, Primary Ash Setttling Pond, and the Secondary Ash Settling Pond) separately.

Specifically, IDEM will approve ground water monitoring wells MW-100 and MW-101 for each of the three ash ponds as background wells. IDEM is currently working on standard requirments for the three CCR units and these requirments will include these wells to be used as background.

Comment #5:
Contaminated groundwater flowing through Duke's coal ash ponds may be polluting the aquifers from which the towns of Cayuga and Newton obtain their drinking water. A large bedrock valley underlies the Wabash River bottomland along the northeast side of the Cayuga site. Only two miles upstream, the Town of Cayuga's drinking water wells are located in a deep portion of that

valley filled with up to 100 feet of gravel. It is "entirely possible this major buried valley aquifer… may be hydraulically connected to the CCW-impacted ground water at [Cayuga Generating Station]." Without adequate mapping and monitoring of the bedrock underlying the ash ponds, the question of where exactly ash polluted groundwater is travelling will remain unanswered.

Response to Comment #5:

As stated in our Response to Comment #2, if the CCR units detect a release above the ground water protection standards in the ground water, then, per 40 CFR 257.95(g)(1), the site must characterize nature and extent, which includes characterizing the bedrock. Following the characterization of the nature and extent, the CCR unit will continue into the corrective action program.

Additional mapping of the buried valley may be deemed necessary if a site enters into an assessment monitoring program.

Comment #6:

There are multiple uncontrolled seeps transporting groundwater full of harmful pollutants from the Cayuga ash ponds into the iconic Wabash River. Boron, a dependable indicator of coal ash contamination, has been found in all three seeps in every quarterly sample taken since March 2013 in concentrations up to 7.4 ppm – more than double EPA's drinking water health advisory for boron. On multiple occasions, Duke's seep samples have also revealed antimony, in concentrations of up to 16 ppb – nearly 3 times EPA's drinking water standard. In addition, molybdenum was found in the seeps in concentrations exceeding EPA's drinking water health advisory in every sample taken, up to 370 ppb (more than 4 times EPA's health advisory).

Response to Comment #6:

Please see our Response to Comment #3.

Comment #7:

Duke Energy's coal ash impoundments at Cayuga are sitting in groundwater now, and coal ash in those impoundments will continue to sit in groundwater even if those impoundments are capped. Because much coal ash will continue to sit in groundwater if the ash ponds are closed in place, and other coal ash above it will be periodically saturated with groundwater when the water table is high, the coal ash at Cayuga will continue to leach harmful coal ash pollutants into both the groundwater and the Wabash River into which some of that groundwater flows. The coal ash at the site will remain unlined in a zone of saturation.

Response to Comment #7:

Please see our Response to Comment #1.

Comment #8:

Serious threats of failure of the Cayuga ash impoundments will remain unaddressed if most impoundments at the site are allowed to close in place. The threat of impoundment collapse will remain because much of the capped ash will be sitting in groundwater.

Response to Comment #8:

Duke provided stability analyses for the impoundments in a document dated September 25, 2018 (VFC #82623081) and IDEM has evaluated the results and determined the analyses to be satisfactory.

Comment #9:

Serious threats of failure of the Cayuga ash impoundments will remain unaddressed if most impoundments at the site are allowed to close in place. The outlet pipes leading out of the impoundments, which drain ash-contaminated water into other lagoons and, finally, into the

Wabash River. The concrete outlet pipe from the "lined ash disposal area" is cracked all the way around. The two outlet pipes from the primary ash settling basin are made of corrugated metal, are corroded, full of debris, and have water leaking into them. The company's consultants have characterized the pipes as "a significant concern for the integrity of the embankment", yet nowhere in the Closure Plan does Duke Energy address how these damaged pipes will be remediated or removed.

Response to Comment #9:

Duke redirected the wastewater from the ash ponds to the newly constructed, geomembrane lined Process Water Treatment Pond. The Process Wate Treatment Pond then drains into the Secondary Ash Settling Pond, which was repurposed by removing ash from the pond and reconstructing it with new liners and outlet pipes. (IDEM OLQ does not regulate industrial waste water impoundments regulated under the 327 IAC 3 and 5)

Comment #10:

Duke Energy failed to consider cost of corrective action when evaluating cost of closure in place. The cost of decades of groundwater corrective action could make a significant difference in the total closure and post-closure cost for the Cayuga coal ash impoundments. If that cost is taken into account, is closure in place still the most cost-effective approach?

Response to Comment #10:

Cost of corrective action is not included in the post-closure cost maintenance. However, corrective action will be implemented as necessary. Please refer to the December 17th, 2018 letter (VFC #82664512) for additional information. The Federal CCR Regulation and IDEM rule do not require estimate of closure costs in selecting the closure method.

Comment #11:

Duke Energy failed to consider alternatives to closure in place. The most protective storage of coal ash is in a dry landfill on high ground with a composite liner and leachate collection and treatment. This alternative should be evaluated for the coal ash impoundments at Cayuga.

Response to Comment #11:

IDEM rules do not require analysis of alternative closure options. Duke proposed to close Secondary Ash Settling Pond by removing ash. Lined Ash Disposal Area has a bottom geomembrane liner and is above water table; therefore, minimizing future human health and environmental threats. Duke also proposes to remove CCR material from the Primary Ash Settling Pond.

Comment #12:

The Closure Plan does not meet the closure performance standards for closure in place, set forth at 40 C.F.R. § 257.102. The proposed Cayuga Closure Plan leaves abundant coal ash sitting in groundwater perennially and allows other coal ash to be periodically saturated by groundwater, without a liner. That will not control the post-closure infiltration of liquids into the waste, nor will it control the formation and escape of leachate. Moreover, Duke Energy did not include an analysis of different closure alternatives in the Closure Plan, and thus has not shown that its proposal limits infiltration of liquids or releases of leachate "to the maximum extent feasible." Finally, the high risk of structural failure of the ash impoundments at Cayuga means that there is a continued threat that earthen and ash dams separating the ash from the Wabash River will collapse, leading to the release of the ash itself.

Response to Comment #12:

Secondary Ash Settling Pond, Lined Ash Disposal Area and Primary Ash Settling Pond are subject to 40 CFR 257 (CCR rule) closure requirements. The Secondary Ash Settling Pond is closed by removal of ash from the impoundments and Lined Ash Disposal Area has a bottom

geomembrane liner therefore meeting closure standards of CCR rule. Duke also proposes to remove CCR material from the Primary Ash Settling Pond.

Comment #13:
Before Duke Energy may install any final cover over the impoundments at Cayuga, it must comply with the CCR rule's provisions concerning "drainage and stabilization of CCR surface impoundments," "free liquids" have not been eliminated from the coal ash in the impoundments, nor does the Closure Plan provide measures to fully eliminate that groundwater (including from the bottom of the impoundments) going forward. Nor does the Closure Plan ensure that the "remaining wastes" will be "stabilized sufficient to support the final cover system." As noted above, wet coal ash is not a stable material; a final cover would be a significant risk of sagging, dislodging or cracking if the subsurface ash gave way.

Response to Comment #13:
Secondary Ash Settling Pond is closed by removal of ash from the impoundments. Lined Ash Disposal Area will be dewatered. Since this impoundment is geomembrane lined, the ground water infiltration into the impoundment is not a concern. Duke also proposes to remove CCR material from the Primary Ash Settling Pond. West Ash Fill Area and Ash Disposal Area #1 have been out of service, and they are subject to IDEM rule.

Comment #14:
Duke Energy's Closure Plan fails to comply with the EPA CCR Rule's mandates for establishing background concentrations. Under the CCR Rule, the owner of coal ash ponds "must establish background groundwater quality in a hydraulically upgradient or background well for each of the constituents required" to be monitored, 40 C.F.R. § 257.93(d), and may not rely on groundwater that has been "affected by leakage from a CCR unit" 40 C.F.R. § 257.91(a)(1). As discussed herein, the monitoring wells Duke Energy cites as "upgradient" from the ash ponds appear to have been impacted by coal ash contaminated groundwater, and thus may not be used to establish background. And though there are monitoring wells near the landfill portion of the Cayuga site that appear to be unaffected by the coal ash leachate, nowhere in its Closure Plan does Duke Energy indicate that it plans to rely on those upgradient landfill wells to provide background.

Response to Comment #14:
Please see our Response to Comment #4.

Comment #15:
Closure Plan is inconsistent with the EPA CCR Rule's requirements pertaining to which constituents must be monitored. Under the EPA CCR Rule, owners of coal ash impoundments must first perform "detection monitoring" for boron, sulfate, total dissolved solids and several other constituents. 40 C.F.R. § 257.94. If any of those pollutants are found to exceed background concentrations, then "assessment monitoring" of constituents including antimony, arsenic, lead, mercury, molybdenum, and selenium, among others, must be performed. 40 C.F.R. § 257.95. Assessment monitoring must continue until concentrations of all constituents – both "detection monitoring" and "assessment monitoring" constituents – are at or below background levels.

Response to Comment #15:
IDEM agrees and Duke addressed this concern in its "*Response to Request for Additional Information, Proposed Site Closure Implementation Plan*," dated August 15, 2018 (VFC #82600861, p. 20 of 57) stating, "… monitoring will be conducted in accordance with the requirements of 40 CFR 257 Suppart D." Additionally, the IDEM Approval of Modified Closure/Post-Closure Plan includes boron in the Appendix IV list.

Comment #16:
The Closure Plan does not meet the CCR Rule's mandates for corrective action if groundwater contamination is found. The Closure Plan does not ensure that contamination is addressed in the same timeline as required by the EPA CCR Rule, nor does it propose the same triggers for corrective action as are mandated by the CCR Rule. Specifically, the Closure Plan proposes to compare future contaminant concentrations in each monitoring well against existing concentrations in the same wells to determine if further remedies are required, as opposed to comparing contaminant concentrations with the applicable groundwater standards (MCLs or, if no MCL has been established, background concentrations), as required the EPA CCR Rule. Moreover, the Closure Plan does not ensure that remedies put into place by the company achieve the groundwater protection standards, as required by the EPA CCR Rule.
Response to Comment #16:
Please see our Response to Comment #15.

Comment #17:
No surface impoundment in Indiana may be closed unless and until the associated closure plan is approved by IDEM's commissioner, and his approval is contingent on a showing that the proposed closure "is based on management practices that are protective of human health and the environment." In short, the Closure Plan does not protect either human health or the environment because it complies with neither the EPA CCR Rule nor the Indiana provisions that IDEM looks to evaluating impoundment closure plans, and, over all, because it would allow toxic coal ash constituents to pollute Indiana's groundwater and the Wabash River in perpetuity.
Response to Comment #17:
IDEM has reviewed the closure plan and is approving closure for the Secondary Ash Settling Pond, Lined Ash Disposal Area, and Primary Ash Settling Pond that are meeting CCR Rule requirements. IDEM also has reviewed and is approving closure for Ash Disposal Area #1 and West Ash Fill Area meeting IDEM closure requirements under 329 IAC 10.

Comment #18:
The base-of-ash elevation is poorly defined in parts of the site. Boreholes that define the ash base are widely and irregularly spaced and some seem to show areas of deep ash fill in places where the original site topography was much higher, and vice-versa. A major area in the north central part of ADA1, for example, has no borehole data regarding ash thickness or base elevation, and similar smaller areas of poor subsurface control occur throughout. The absence of data makes it rather unclear how the base-of-ash contour map (sheet 10, Modified Site Closure Plan or MSCP) was derived in these areas, other than by relying on hearsay and unfounded assumptions regarding any modifications that may have been made to the original land surface prior to ash emplacement, or by using smoothing routines in a contouring software package. It is thus likely that additional portions of the CCW will remain permanently below the water table during and after closure of the site, while still other portions of the CCW may be periodically saturated after closure due to natural rises in the water table, such as in response to high stages in the adjacent river.
Response to Comment #18:
Lined Ash Disposal Area is located in the north central area on top of the existing Ash Disposal Area 1, therefore no borings were performed in that area due to the presence of geomembrane liner that separates top surface of Ash Disposal Area 1 and Lined Ash Disposal Area.

The ground water monitoring system is designed to determine whether the ash is contaminating ground water, even if the base of the ash is estimated.

Comment #19:
No appreciable monitoring of groundwater quality in the bedrock appears to have been performed at or adjacent to the site, despite the general abundance of wells in the region developed in bedrock aquifers. Without additional detailed subsurface exploration and hydrogeologic and geochemical mapping in targeted areas, informed by empirical observations of subsurface geologic conditions and groundwater quality at the site and surrounding areas, the MSCP cannot reliably forecast future solute paths and concentrations.

Response to Comment #19:
IDEM agrees, however, Duke's ground water monitoring system is designed to monitor the uppermost aquifer, which is required in 40 CFR 257.91(a).

Comment #20:
It is unclear what constitutes the actual "conceptual site model" that is obliquely referred to at a number of places in the MSCP, but never quite identified or presented on its own terms in a clear narrative. Is it the Beljin & Associates (2011) ground-water model? Or is it the large compendium of raw, but largely uninterpreted borehole logs and other geologic and groundwater data appended to the plan?

Response to Comment #20:
IDEM Geology has not yet found the term "Conceptual Site Model" used in the *Proposed Modification to Existing Closure and Post-Closure Plans* dated Dec 16, 2016 (VFC #80399269), however, if it was used, then we default to the compendium of borehole logs and ground water data. Typically, IDEM does not request modeling as in the Cayuga Ash Pond System closure post –closure plan Appendix E *2011 Caygua Generating Station Ground Water Model,* Belgin report dated November 30, 2011 (VFC #64382637). It is a tool that may shed some light on solute transport and due to many variables in data input and assumptions may not be reliable.

Comment #21:
No attempt appears to have been made to define the heterogeneity and anisotropy so clearly present in the principal (outwash) aquifer at the site: in addition to some trends in grain size distribution evident in the boring logs and lab analyses, the hydraulic conductivity data seem to define distinct spatial domains within the aquifer that very likely play a strong role in groundwater flow patterns and contaminant migration. Instead, the MSCP and (with the exception of a lower vertical hydraulic conductivity parameter) the groundwater model it is based on treat the aquifer as a monolithic entity. There are not even basic maps showing variations in the distribution, thickness, elevation, and saturated thickness of the outwash aquifer on site, something that seems essential to an effective conceptual site model, much less a reliably predictive groundwater flow model.

Response to Comment #21:
In the *Proposed Modification to Existing Closure and Post-Closure Plans* dated Dec 16, 2016 (VFC #80399269, pp. 3-697 of 697), the heterogeneity and anistrophy does exist in the section's soil lithology along with the 11 different short hydrogeologic summaries (pp. 17-22 of 697), Table 2A Summary of Soil Laboratory Test Results (p. 37 of 697), as well as Page 15 of 697 and Table 1 (p. 36 of 697). The basic maps are Figure 1: Bedrock Surface Elevation Map (p. 47 of 697) and Appendix A: Geologic Cross-Sections (Sheet 7-9, pp. 64-66 of 697) with marked ground water elevations. Based on historical ground water flow maps, including Figure 2 Water Level Map dated June 2, 2016 (p. 48 of 697), water flow direction is strongly towards the Wabash River with approximately up to nine feet of head between the upgradient side of the CCR units and the downgradient monitoring wells.

Comment #22:
There is no mention of the crucial role bedrock topography likely plays in controlling the architecture of the overlying outwash aquifer, nor the relative elevations of the (presumably "impermeable", according to Beljin & Associates, 2011) bedrock surface and the water table below different parts of the site and the influence this almost certainly has on local ground- water flow directions, locations of seeps, and contaminant transport in the outwash aquifer. Instead, the bedrock surface elevation map shown in Figure 1 of the MSCP, and the 25-30 feet of bedrock relief it depicts, are presented without comment. The map also is rather rudimentary in that it is limited to the immediate confines of the impoundments, omits the key seepage area along the river in the northern part of the Cayuga property, and does not reflect all of the relevant borehole and outcrop data available on and immediately around the site.

Response to Comment #22:
Typically, bedrock maps do not come with the aforementioned data; however, the location of seeps would be beneficial. The bedrock map Figure 1 Bedrock Surface Elevation Map shows the greatest elevation change being between bore hole log B-18 and B-9 at 23.8 feet and located approximmately 1500 hundred feet to the north beyond the limits of the Lined Ash Disposal Pond. The bedrock does not show as much relief under the three CCR units varying and undulating between five and ten feet.

Comment #23:
The transient groundwater flow model has too many limitations to provide predictive reliability in such a complex, heterogeneous site at the fine-grained scale it is currently being applied to. This is true of nearly all groundwater models. The model needs to be used within its limits, that is, to serve as one tool within the broader conceptual site model, not as a substitute for the conceptual model itself or critical geologic thinking and problem solving. All groundwater models are wrong; some are useful.

Response to Comment #23:
IDEM reviews the data put in models to assess the model's validity.

Comment #24:
Water quality in the fractured bedrock aquifer system underlying the site must be investigated to determine the presence and extent of any CCR-related contamination. It is not reasonable to assume the groundwater flow system stops at the bedrock surface when there is so much local evidence to the contrary.

Response to Comment #24:
Please see Response to Comment #2.

Comment #25:
A denser monitoring well network is needed to provide better detection and plume characterization, especially: a) along the northwest side of the site where contamination not explained by the conceptual site model has been observed in MW-A19, and b) beneath the central parts of the impoundments themselves, where no groundwater level or quality data are currently available. The sampling frequency should be increased to at least quarterly, matching that used at the seeps and to accelerate the response time to exceedances.

Response to Comment #25:
IDEM has determined that the ground water monitoring well system is adequate for the detection ground water monitoring program required under 40 CFR 257.94.

Comment #26:
One or both of the upgradient monitoring wells (MW-100 or MW-101) at the onsite restricted waste landfill should be used as the benchmark for upgradient, background water quality. None of the existing monitoring wells around the impoundments are truly "upgradient".

Response to Comment #26:
IDEM agrees, please see our Response to Comment #4.

Additional Comments

Supplemental Comments on the Cayuga Generating Station Ash Pond System Approval of Modified Closure/Post-Closure Plan (Comments) dated May 24, 2019 (VFC #82781680) were submitted to IDEM. The Comments essentially agree with IDEM's assertion that coal combustion residuals (CCR) must be separated from ground water to the maximum extent feasible to satisfy the closure performance standard under 40 CFR 257.102(d). IDEM received the Comments from Citizens Action Coalition, Hoosier Environmental Council, and Earthjustice. The Comments supplement previously submitted public comments dated July 24, 2017 (VFC #80500200). IDEM sent Duke Energy Indiana (DEI) a supplemental Request for Additional Information (RAI2) dated December 17, 2018 (VFC #82664512). DEI responded to IDEM's RAI with a letter dated February 15, 2019 (VFC #82698640). The Comments address items from DEI's February 2019 letter.

Comment #27:
The coal ash impoundments at Cayuga Generating Station sit below the water table and will continue to contaminate groundwater indefinitely if left in place.

Response to Comment #27:
Please refer to Comment #1 response.

Comment #28:
Duke Energy's argument that closure by removal is not "feasible" after groundwater has been contaminated is belied by statements by EPA and Duke and Duke's conduct.

Response to Comment #28:
Even where closure by removal of CCR is feasible, the CCR rule does not mandate selection of that closure option. The owner or operator of a CCR surface impoundment may elect to leave CCR in place as long as the owner or operator satisfies the closure performance standard at 40 CFR 257.102(d).

NOTICE OF DECISION

The Indiana Department of Environmental Management (IDEM) made a decision on the closure and post-closure plans for the Duke Cayuga Generating Station Ash Pond System (Duke Cayuga) located at 3300 North State Road 63, Cayuga, Vermillion County (SW Program ID 83-UP-01). This decision approves the closure of a portion of the coal combustion residual (CCR) surface impoundments at the facility, and it allows CCR to be permanently disposed of at Duke Cayuga. The approved closure and post-closure plans are available for review at:

Newport – Vermillion County Public Library, 385 East Market Street, PO Box 100, Newport, 47996-0097

The final decision is also available online via IDEM's Virtual File Cabinet (VFC). Please go to: http://vfc.idem.in.gov/. You can search there for approval documents using a variety of criteria.

APPEAL PROCEDURES

If you wish to challenge this decision, IC 13-15-6-1 and IC 4-21.5-3-7 require that you file a Petition for Administrative Review. If you seek to have the effectiveness of the permit stayed during the Administrative Review, you must also file a Petition for Stay. The Petition(s) must be submitted to the Office of Environmental Adjudication (OEA) at the following address within 15 days of the date of newspaper publication of this Notice:

Office of Environmental Adjudication
Indiana Government Center North, Room N103
100 North Senate Avenue
Indianapolis, IN 46204

The Petition(s) must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision, or otherwise entitled to review by law. Identifying the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, or date of this notice will expedite review of the petition. Additionally, IC 13-15-6-2 and 315 IAC 1-3-2 require that your Petition include:

1. the name, address, and telephone number of the person making the request;
2. the interest of the person making the request;
3. identification of any persons represented by the person making the request;
4. the reasons, with particularity, for the request;
5. the issues, with particularity, for the request;
6. identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type granted or denied by the Commissioner's action; and
7. a copy of the pertinent portions of the permit, decision, or other order for which you seek review, at a minimum, the portion of the Commissioner's action that identifies the person to whom the action is directed and the identification number of the action.

Pursuant to IC 4-21.5-3-1(f), any document serving as a petition for review or review and stay must be filed with the OEA. Filing of such a document is complete on the earliest of the following dates:

1. the date on which the petition is delivered to the OEA;
2. the date of the postmark on the envelope containing the petition, if the petition is mailed to the OEA by United States mail; or
3. the date on which the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent to the OEA by private carrier.

In order to assist permit staff in tracking any appeals of the decision, please provide a copy of your petition to Anna Mishel, IDEM, Solid Waste Permits, IGCN 1154, 100 North Senate Ave., Indianapolis, IN 46204-2251.

The OEA will provide you with notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders regarding this decision if you submit a written request to the OEA. If you do not provide a written request to the OEA, you will no longer be notified of any proceedings pertaining to this decision.

More information on the review process is available at the website for the Office of Environmental Adjudication at http://www.in.gov/oea..

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
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Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

What if you are not satisfied with this decision and you want to file an appeal?

Who may file an appeal?
The decision described in the accompanying Notice of Decision may be administratively appealed. Filing an appeal is formally known as filing a "Petition for Administrative Review" to request an "administrative hearing".

If you object to this decision issued by the Indiana Department of Environmental Management (IDEM) and are: 1) the person to whom the decision was directed, 2) a party specified by law as being eligible to appeal, or 3) aggrieved or adversely affected by the decision, you are entitled to file an appeal. (An aggrieved and adversely affected person is one who would be considered by the court to be negatively impacted by the decision. If you file an appeal because you feel that you are aggrieved, it will be up to you to demonstrate in your appeal how you are directly impacted in a negative way by the decision).

The Indiana Office of Environmental Adjudication (OEA) was established by state law – see Indiana Code (IC) 4-21.5-7 – and is a separate state agency independent of IDEM. The jurisdiction of the OEA is limited to the review of environmental pollution concerns or any alleged technical or legal deficiencies associated with the IDEM decision making process. Once your request has been received by OEA, your appeal may be considered by an Environmental Law Judge.

What is required of persons filing an appeal?
Filing an appeal is a legal proceeding, so it is suggested that you consult with an attorney. Your request for an appeal must include your name and address and identify your interest in the decision (or, if you are representing someone else, his or her name and address and their interest in the decision). In addition, please include a photocopy of the accompanying Notice of Decision or list the permit number and name of the applicant, or responsible party, in your letter.

Before a hearing is granted, you must identify the reason for the appeal request and the issues proposed for consideration at the hearing. You also must identify the permit terms and conditions that, in your judgment, would appropriately satisfy the requirements of law with respect to the IDEM decision being appealed. That is, you must suggest an alternative to the language in the permit (or other order, or decision) being appealed, and your suggested changes must be consistent with all applicable laws (See Indiana Code 13-15-6-2) and rules (See Title 315 of the Indiana Administrative Code, or 315 IAC).

The effective date of this agency action is stated on the accompanying Notice of Decision (or other IDEM decision notice). If you file a "Petition for Administrative Review" (appeal), you may wish to specifically request that the action be "stayed" (temporarily halted) because most appeals do not allow for an automatic "stay". If, after an evidentiary hearing, a "stay" is granted, the IDEM-approved action may be halted altogether, or only allowed to continue in part, until a final decision has been made regarding the appeal. However, if the action is not "stayed" the IDEM-approved activity will be allowed to continue during the appeal process.

Where can you file an appeal?
If you wish to file an appeal, you must do so in writing. There are no standard forms to fill out and submit, so you must state your case in a letter (called a petition for administrative review) to the Indiana Office of Environmental Adjudication (OEA). Do not send the original copy of your appeal request to IDEM. Instead, send or deliver your letter to:

The Indiana Office of Environmental Adjudication
100 North Senate Avenue, Room N103
Indianapolis, IN 46204

If you file an appeal, also please send a copy of your appeal letter to the IDEM contact person identified in the Notice of Decision, and to the applicant (person receiving an IDEM permit, or other approval).

Your appeal (petition for administrative review) must be received by the Office of Environmental Adjudication in a timely manner. The due date for filing an appeal may be given, or the method for calculating it explained, on the accompanying Notice of Decision (NOD). Generally appeals must be filed within 18 days of the mailing date of the NOD. To ensure that you meet this filing requirement, your appeal request must be:

1) Delivered in person to OEA, by the close-of-business on the eighteenth day (if the 18th day falls on a day when the Office of Environmental Adjudication (OEA) is closed for the weekend or for a state holiday, then your petition will be accepted on the next business day on which OEA is open), or
2) Given to a private carrier who will deliver it to the OEA on your behalf, (and from whom you must obtain a receipt dated on or before the 18th day), or
3) For those appeal requests sent by U.S. Mail, your letter must be postmarked by no later than midnight of the 18th day, or
4) Faxed to the OEA at (317) 233-9372 before the close-of-business on the 18th day, provided that the original signed "Petition for Administrative Review" is also sent, or delivered, to the OEA in a timely manner.

What are the costs associated with filing an appeal?
The OEA does not charge a fee for filing documents for an administrative review or for the use of its hearing facilities. However, OEA does charge a fifteen cent ($.15) per page fee for copies of any documents you may request. Another cost that could be associated with Your appeal would be for attorney's fees. Although you have the option to act as your own

Attorney, the administrative review and associated hearing are complex legal proceedings; therefore, you should consider whether your interests would be better represented by an experienced attorney.

What can you expect from the Office of Environmental Adjudication (OEA) after you file for an appeal?

The OEA will provide you with notice of any prehearing conference, preliminary hearings, hearings, "stays," or orders disposing of the review of this decision. In addition, you may contact the OEA by phone at (317) 233-0850 with any scheduling questions. However, technical questions should be directed to the IDEM contact person listed on the Notice of Decision.

Do not expect to discuss details of your case with OEA other than in a formal setting such as a prehearing conference, a formal hearing, or a settlement conference. The OEA is not allowed to discuss a case without all side being present. All parties to the proceeding are expected to appear at the initial prehearing conference.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

January 17, 2020

Newport – Vermillion County Public Library
385 East Market Street, PO Box 100
Newport, Indiana 47996-0097

Re: Documents for Public View

Dear Sir/Madam:

A copy of a permit decision for the Duke Cayuga Generating Station is enclosed. Also enclosed is a copy of the public notice announcing this permit decision and indicating the documents' availability at your library. This public notice will appear in a local newspaper soon. Please make these documents available to the public for the next 20 days since this permit can be appealed.

Please date and sign the enclosed verification of receipt form and mail it to our office in the envelope provided.

If you have any questions or comments about the permit notice, please contact me by dialing (317) 233-6725 or by e-mail at Amishel@idem.IN.gov.

Sincerely,

Anna Mishel
Solid Waste Permits Section
Office of Land Quality

Enclosures: Notice of Decision
Permit Letter
Verification of Receipt Form
Agency Addressed Envelope

cc with enclosures: Vermillion County Health Department
Vermillion County Commissioners
Vermillion Solid Waste Management District
President, Plainfield Town Council

Poe, Diane L

From: Poe, Diane L
Sent: Friday, January 17, 2020 1:37 PM
To: 'cccc@mikes.com'
Subject: Duke Cayuga Generating Station Approval of Modified Closure Plan
Attachments: Cayuga Closure NOD only.docx

To Whom It May Concern:

Please insert for one time only the enclosed legal notice, in The Tribune-Star, on Tuesday, January 21, 2020 (or earliest possible date).

If there is an additional charge to post this notice on your web site, please DO NOT post.

Starting January 2019, we are asking all newspapers to provide us an estimated invoice prior to publishing this notice. You may email
it to my attention. Please include **Account Number 100174737** on all billing correspondence.

As we understand it, you will provide us with a notarized form (publishers claim) and clippings showing the date on which the advertisement appeared in your paper. This information should be mailed to Diane Poe at the following address:

dpoe@idem.IN.gov or

Indiana Department of Environmental Management
Office of Land Quality
Permits Branch
IGCN Room 1101
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Please contact Diane Poe at (317) 232-4473 or dpoe@idem.IN.gov or Anna Mishel at (317) 233-6725 or amishel@idem.in.gov if you have any questions. Thank you for your cooperation.

Diane Poe, Administrative Assistant
Permits Branch | Office of Land Quality
Indiana Department of Environmental Management

(317) 232-4473 | dpoe@idem.IN.gov

EXHIBIT 2

Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
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Michael R. Pence
Governor

Carol S. Comer
Commissioner

November 1, 2016

Duke Energy Indiana, Inc.
Attn: Owen Schwartz
1000 East Main Street
Plainfield, Indiana 46168

Dear Mr. Schwartz:

Re: Solid Waste Land Disposal Facility
Minor Modification
Gallagher Landfill RWS I
SW Program ID 22-01
Floyd County

Duke Energy Indiana, Inc.'s (DEI) minor modification for the Gallagher Landfill RWS I is approved. You, the permittee, must comply with Indiana's rules for solid waste land disposal facilities (329 IAC 10) and the terms of this approval.

This minor modification allows DEI to do the following:

a. Revise the final cover design with an alternative design to comply with the Coal Combustion Residuals (CCR) rule requirements
b. Extend limits of the final cover system to cover the areas of the former Ash Pond B outside the boundary of the RWS1 landfill
c. Revise the final grading plan
d. Revise the Quality Assurance Manual
e. Revise the closure and post-closure plans.

Public records for your facility are available in IDEM's Virtual File Cabinet at www.in.gov/idem. Documents related to this approval include the application dated August 24, 2016 (VFC #80342479).

You can review the statutes and regulations referenced in this approval at www.in.gov/legislative/ic_iac/.

This approval does not: convey any property rights of any sort or any exclusive privileges; authorize any injury to any person or private property or invasion of other private rights or any infringement of federal, state, or local laws or regulations; or preempt any duty to comply with other state or local requirements (329 IAC 10-13-4(a)).

If you wish to appeal this decision, you must file a request for administrative review with the Office of Environmental Adjudication within 18 days after the postmark of this letter. The enclosed Notice of Decision notifies you of additional important details regarding the appeal process and your rights and responsibilities for filing an adequate and timely appeal.

If you have any questions, please contact Nick Batton, the permit manager assigned to this facility, by dialing (317) 232-8731 or by e-mail at nbatton@idem.IN.gov.

Sincerely,

Jeffrey L. Sewell, Chief
Permits Branch
Office of Land Quality

Enclosures: Permit Requirements
Notice of Decision
Guide to Appeals Process
Letter to New Albany - Floyd County Public Library
Letter to The Tribune

cc with enclosures: Floyd County Health Department
Floyd County Commissioners
Floyd County Solid Waste Management District
Mark Amick, Director, IDEM Southeast Regional Office
Mayor, City of New Albany

PERMIT REQUIREMENTS

The following Permit Requirements are in addition to or in replacement of the permit requirements of the Permit Renewal dated July 2, 2013 (VFC #69068554):

Former requirement B4 is replaced with the following requirement:

B4. The permittee must test and install all liner and final cover components as specified in the approved construction plans and quality assurance procedures detailed in the minor modification application dated April 23, 2010 (VFC #55453475) and in the minor modification application dated August 24, 2016 (VFC #80342479 p. 24-93 of 114).

Former requirement E3 is replaced with the following requirement:

E3. The permittee must construct the final cover as specified in the approved final grading plan as shown on Sheet 3, titled "Proposed Revised Final Cover Grading Plan," dated August 2016 (VFC #80342479 p.19 of 114); and applicable requirements of 329 IAC 10-30-2 and 329 IAC 10-28-11. The permittee is approved for the following alternative final cover designs, from bottom extending upwards:

A) Final cover with composite liner system constructed within the landfill's solid waste boundary (48.8 acres) and between the ditch and the solid waste boundary on the west side (4.1 acres) as depicted on Sheet 6, entitled "Details" dated August 2016, (VFC #80342479 p. 22 of 114) must include:
   1) 6 inches of compacted structural fill soil
   2) A geomembrane such as 30 mil PVC, 60 mil HDPE or 40 mil LLDPE
   3) A geotextile/geocomposite cushion/drainage layer
   4) 30 inches of protective soils
   5) 6 inches of topsoil

B) Final cover constructed over perimeter drainage ditches (5.1 acres) must include:
   1) 24 inches of compacted clay-type soil
   2) 45 mil Geotextile Reinforced Polypropylene (RPP) liner

C) Final cover for the areas located between the RPP-lined ditched and limits of Ash Pond B (3.7 acres) must include:
   1) 24 inches of compacted clay-type soil and
   2) 6 inches of vegetative cover except for areas within the limits of the perimeter road, which will have 18 inches of crushed stone.

The facility closure of the landfill includes 48.8 acres and, currently, a total of 10.4 acres have been constructed and certified to receive waste. No area has been certified as closed. The closure of the remaining areas of former Ash Pond B contains approximately 12.9 acres.

Former requirement E4 is replaced with the following requirement:

E4. The permittee must follow the facility closure plan dated August 17, 2016 (VFC #80342479, p. 24-93).

The following requirement is added to the current land disposal permit:

E5. The permittee must follow requirement B8 of the Permit Renewal dated July 2, 2013 (VFC #69068554) when selecting the specific materials for the composite cover system.

Former requirement F1 is replaced with the following requirement:

F1. The permittee must perform post-closure monitoring and maintenance as specified in the facility post-closure plan dated August 17, 2016 (VFC #80342479, p. 94-114) and the applicable requirements of 329 IAC 10-31.

The following requirement is added to the current land disposal permit:

G3. The permittee must update the financial assurance mechanism for the revised costs for closure and post-closure as approved by this permit modification using a financial assurance mechanism and the estimating standards in 329 IAC 10-39. The permittee must submit signed originals of the financial assurance mechanism and updates used to meet this requirement.

NOTICE OF DECISION

Indiana Department of Environmental Management (IDEM)

IDEM issued a permit decision for the Gallagher Landfill RWS I. This decision allows the facility to modify the final cover design and closure/post-closure plans. The landfill is located at 30 Jackson Street, Floyd County, Indiana. A copy of this permit is available for review at the New Albany - Floyd County Public Library located at 180 West Spring Street, New Albany, Indiana.

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1. Go to http://vfc.idem.in.gov/, which is VFC's "Document Search" page
2. Once there, click on the ***Alternate Field*** dropdown menu.
3. Select ***SW Program ID***.
4. Enter the Solid Waste Program ID, ***22-01,*** in the box to the right of the ***Alternate Field*** menu.
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6. Click on the ***x out of y Pages*** dropdown menu to view additional pages with document links.
7. To find and review the permit decision, click the highlighted numbers in the ***Doc #*** column for the most recent dates listed. If the permit decision is not yet available when you first search, try again later, it will soon be posted.

Challenging this Decision

If you disagree with this decision and wish to challenge it, IC 13-15-6-1 and IC 4-21.5-3-7 require that you file a petition for administrative review. If you want the permit put on hold during this administrative review ("stayed"), you must also file a petition for stay. These petitions must be submitted to the Office of Environmental Adjudication (OEA) at the following address within the timeframes below:

Office of Environmental Adjudication
Indiana Government Center North
100 North Senate Avenue, Room N501
Indianapolis, Indiana 46204

You will need to include the following in your petitions:

1. Information identifying the decision you are appealing, including the following:
   - name of the facility
   - name of the applicant/permittee
   - permit number
   - date of this notice

2. Information showing you are either:
   - the applicant

- someone "aggrieved or adversely affected" by the decision, i.e., the decision has a negative impact on you, or
- someone otherwise entitled by the law

3. Your name and address, or that of the person making the request that you represent

4. Your interest in the decision, or the interest of the person you represent

5. Identification of any persons represented by the person making the request

6. The reasons for the request, with particular detail

7. The issues involved, with particular detail

8. Identification of appropriate new permit terms and conditions that you would like to see used to replace existing ones in the permit that you feel do not comply with the laws governing this kind of permit

9. A copy of the pertinent portions of the permit, decision, or other order for which you seek review. At a minimum, include the portion of the Commissioner's action that identifies the person to whom the action is directed and the identification number of the action.

Deadlines and Timeframes

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1. If you read this notice in a newspaper, you must file the petition within 15 days of the notice's publication date (either the date of the printed newspaper, or the notice date given on the newspaper's website).

2. If you received this notice by U.S. mail, you must file the petition within 18 days of the notice postmark date (15 days from the date IDEM mailed the notice, plus 3 days because the notice was sent via U.S. mail).

3. If you received this notice by email, you must file the petition within 15 days of the date IDEM sent the email.

4. If an IDEM representative personally gave ("served") you this notice, you must file the petition within 15 days of the date you were given the notice.

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3. Or, if you send the petition to OEA through a private carrier like UPS, Federal Express, etc., the date you gave the document to the carrier, as shown by the sales receipt you receive from the carrier.

In order to assist permit staff in tracking any appeals of the decision, please provide a copy of your petition to Nick Batton, IDEM, Solid Waste Permits, IGCN 1101, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251.

Receiving Updates on the Status of this Decision

The OEA will provide you with notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders regarding this decision if you submit a written request to the OEA. If you do not provide a written request to the OEA, you will no longer be notified of any proceedings pertaining to this decision.

How to Obtain Additional Information

If you have procedural or scheduling questions regarding your petition, you may contact OEA by dialing (317) 232-8591.

If you have questions regarding other aspects of the permit decision, contact Nick Batton, the Solid Waste Permit Manager assigned to the facility, by dialing (317) 232-8731 or by e-mail at nbatton@idem.in.gov.

Please bring this matter to the attention of persons you believe may have an interest in it.

What if you are not satisfied with this decision and you want to file an appeal?

Who may file an appeal?
The decision described in the accompanying Notice of Decision may be administratively appealed. Filing an appeal is formally known as filing a "Petition for Administrative Review" to request an "administrative hearing".

If you object to this decision issued by the Indiana Department of Environmental Management (IDEM) and are: 1) the person to whom the decision was directed, 2) a party specified by law as being eligible to appeal, or 3) aggrieved or adversely affected by the decision, you are entitled to file an appeal. (An aggrieved or adversely affected person is one who would be considered by the court to be negatively impacted by the decision. If you file an appeal because you feel that you are aggrieved, it will be up to you to demonstrate in your appeal how you are directly impacted in a negative way by the decision).

The Indiana Office of Environmental Adjudication (OEA) was established by state law - see Indiana Code (IC) 4-21.5-7 - and is a separate state agency independent of IDEM. The jurisdiction of the OEA is limited to the review of environmental pollution concerns or any alleged technical or legal deficiencies associated with the IDEM decision making process. Once your request has been received by OEA, your appeal may be considered by an Environmental Law Judge.

What is required of persons filing an appeal?
Filing an appeal is a legal proceeding, so it is suggested that you consult with an attorney. Your request for an appeal must include your name and address and identify your interest in the decision (Or, if you are representing someone else, his or her name and address and their interest in the decision). In addition, please include a photocopy of the accompanying Notice of Decision or list the permit number and name of the applicant, or responsible party, in your letter.

Before a hearing is granted, you must identify the reason for the appeal request and the issues proposed for consideration at the hearing. You also must identify the permit terms and conditions that, in your judgment, would appropriately satisfy the requirements of law with respect to the IDEM decision being appealed. That is, you must suggest an alternative to the language in the permit (or other order, or decision) being appealed, and your suggested changes must be consistent with all applicable laws (See Indiana Code 13-15-6-2) and rules (See Title 315 of the Indiana Administrative Code, or 315 IAC).

The effective date of this agency action is stated on the accompanying Notice of Decision (or other IDEM decision notice). If you file a "Petition for Administrative Review" (appeal), you may wish to specifically request that the action be "stayed" (temporarily halted) because most appeals do not allow for an automatic "stay". If, after an evidentiary hearing, a "stay" is granted, the IDEM-approved action may be halted altogether, or only allowed to continue in part, until a final decision has been made regarding the appeal. However, if the action is not "stayed" the IDEM-approved activity will be allowed to continue during the appeal process.

(See reverse side)

Where can you file an appeal?
If you wish to file an appeal, you must do so in writing. There are no standard forms to fill out and submit, so you must state your case in a letter (called a petition for administrative review) to the Indiana Office of Environmental Adjudication (OEA). Do not send the original copy of your appeal request to IDEM. Instead, send or deliver your letter to:

The Indiana Office of Environmental Adjudication
100 North Senate, Room N501E
Indianapolis, Indiana 46204

If you file an appeal, also please send a copy of your appeal letter to the IDEM contact person identified in the Notice of Decision, and to the applicant (person receiving an IDEM permit, or other approval).

Your appeal (petition for administrative review) must be received by the Office of Environmental Adjudication in a timely manner. The due date for filing an appeal may be given, or the method for calculating it explained, on the accompanying Notice of Decision (NOD). Generally appeals must be filed within 18 days of the mailing date of the NOD. To ensure that you meet this filing requirement, your appeal request must be:

1) Delivered in person to OEA by the close-of-business on the eighteenth day (If the 18th day falls on a day when the Office of Environmental Adjudication (OEA) is closed for the weekend or for a state holiday, then your petition will be accepted on the next business day on which OEA is open.), or
2) Given to a private carrier who will deliver it to the OEA on your behalf, (and from whom you must obtain a receipt dated on or before the 18th day), or
3) For those appeal requests sent by U.S. Mail, your letter must be postmarked by no later than midnight of the 18th day, or
4) Faxed to the OEA at 317/233-9372 before the close-of-business of the 18th day, provided that the original signed "Petition for Administrative Review" is also sent, or delivered, to the OEA in a timely manner.

What are the costs associated with filing an appeal?
The OEA does not charge a fee for filing documents for an administrative review or for the use of its hearing facilities. However, OEA does charge a fifteen cent ($.15) per page fee for copies of any documents you may request. Another cost that could be associated with your appeal would be for attorney's fees. Although you have the option to act as your own attorney, the administrative review and associated hearing are complex legal proceedings; therefore, you should consider whether your interests would be better represented by an experienced attorney.

What can you expect from the Office of Environmental Adjudication (OEA) after you file for an appeal?
The OEA will provide you with notice of any prehearing conferences, preliminary hearings, hearings, "stays," or orders disposing of the review of this decision. In addition, you may contact the OEA by phone at 317/232-8591 with any scheduling questions. However, technical questions should be directed to the IDEM contact person listed on the Notice of Decision.

Do not expect to discuss details of your case with the OEA other than in a formal setting such as a prehearing conference, a formal hearing, or a settlement conference. The OEA is not allowed to discuss a case without all sides being present. All parties to the proceeding are expected to appear at the initial prehearing conference.

Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

November 1, 2016

Legal Advertising Department
The Tribune
PO Box 997
New Albany, Indiana 47150

Re: Public Notice

Dear Sir/Madam:

Enclosed is our Notice of Decision about a permit for the Gallagher Landfill RWS I, Floyd County. We request you publish this notice, one time only, as soon as possible.

For billing, please send a notarized form and clippings showing the date of publication to Nick Batton, IDEM, Solid Waste Permits, IGCN 1101, 100 North Senate Avenue, Indianapolis, Indiana 46204-2251. On the backside of your publisher claim, please be sure to include your Federal Identification number on the first line below the statement: "In the sum of $..."

If you have any questions, please contact me by dialing (317) 232-8731 or by e-mail at nbatton@idem.in.gov.

Sincerely,

Nick Batton
Solid Waste Permits Section
Office of Land Quality

Enclosure: Notice of Decision

cc with enclosures: Floyd County Health Department
Floyd County Commissioners
Floyd County Solid Waste Management District
Mark Amick, Director, Southeast IDEM Regional Office
Mayor, City of New Albany

NOTICE OF DECISION

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If you disagree with this decision and wish to challenge it, IC 13-15-6-1 and IC 4-21.5-3-7 require that you file a petition for administrative review. If you want the permit put on hold during this administrative review ("stayed"), you must also file a petition for stay. These petitions must be submitted to the Office of Environmental Adjudication (OEA) at the following address within the timeframes below:

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Indiana Government Center North
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Indiana Department of Environmental Management
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(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

November 1, 2016

New Albany - Floyd County Public Library
180 West Spring Street
New Albany, Indiana 47150

Re: Documents for Public View

Dear Sir/Madam:

A copy of a permit decision for the Gallagher Landfill RWS I is enclosed. Also enclosed is a copy of the public notice announcing this permit decision and indicating the documents' availability at your library. This public notice will appear in a local newspaper soon. Please make these documents available to the public for the next 20 days since this permit can be appealed.

Please date and sign the enclosed verification of receipt form and mail it to our office in the envelope provided.

If you have any questions or comments about the permit notice, please contact me by dialing (317) 232-8731 or by e-mail at nbatton@idem.in.gov.

Sincerely,

Nick Batton
Solid Waste Permits Section
Office of Land Quality

Enclosures: Notice of Decision
Permit Letter
Verification of Receipt Form
Agency Addressed Envelope

cc with enclosures: Floyd County Health Department
Floyd County Commissioners
Floyd County Solid Waste Management District
Mark Amick, Director, Southeast IDEM Regional Office
Mayor, City of New Albany

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5. Identification of any persons represented by the person making the request

6. The reasons for the request, with particular detail

7. The issues involved, with particular detail

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Please bring this matter to the attention of persons you believe may have an interest in it.

EXHIBIT 3

USCA Case #24-1200 Document #2076058 Filed: 09/20/2024 Page 78 of 201

2C1C

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.state.in.us/idem

March 14, 2001

VIA CERTIFIED MAIL 7000 0600 0026 8335 6477

Mr. Paul E. King
Cinergy Corp.
7200 Industrial Rd.
Florence, KY 41042

Dear Mr. King:

Re: Approval of New Solid Waste Facility
And Major Modification Permit
FP 26-2
Gibson Generating Station RWS II Landfill
Gibson County

You are hereby notified of the approval of the new solid waste facility permit application submitted on February 2, 2001, which includes the major modification application submitted December 17, 1997, for the above-referenced solid waste management facility, subject to the right of any aggrieved person to file objections thereto, and the terms of this letter and enclosed requirements.

This permit for a new Restricted Waste Site Type II Landfill allows PSI Energy Inc. to continue to operate the current Landfill and construct a vertical and horizontal expansion at the facility subject to the terms of this letter and the enclosed requirements. In accordance with 329 IAC 10-13-4, solid waste facility permit, FP 26-2, as amended by this permit modification, does not authorize: any injury to any person or private property; the invasion of other private rights; the infringement of federal, state, or local laws or regulations; nor preempt any duty to comply with other state or local requirements.

This solid waste facility permit consists of plans and specifications for an acreage expansion and a height increase. The expansion area adjoins the present site and includes, but is not limited to, the following features:

*bottom liner system
*final cover system
*seepage collection system
*ground water monitoring system

This solid waste disposal facility is located eleven miles west of Princeton on PSI Gibson Station property and will contain approximately 86 acres of the current facility and will add 49 new acres over an existing ash pond for a total area of approximately 135 acres for waste disposal as well as increasing the existing facility's height.

PSI Energy Inc. is certified as having completed the requirements for a new solid waste facility permit, FP 26-2, in accordance with IC 13-15, and the regulations promulgated thereunder. Authorization is hereby granted to construct the area for the newly permitted capacity and operate the solid waste facility described above, subject to the terms and conditions of this letter and its requirements. The Indiana Department of Environmental Management (IDEM) reserves the right to take enforcement action against the Applicant herein for failure to comply with the terms and requirements of the above-referenced permit as modified.

Pursuant to IC 4-21.5, a Petition for Review of this permit modification letter may be initiated by you, as applicant, or by an "aggrieved or adversely affected person". This permit modification becomes effective once all applicable time periods for petitioning for Stays of Effectiveness have expired, unless you are notified in writing by an Environmental Law Judge that the permit modification has been further stayed. As discussed in our enclosed Notice of Decision, if you wish to challenge this decision, you must file a Petition for Review with the Office of Environmental Adjudication within eighteen (18) days from the date that this permit modification letter was mailed, pursuant to IC 4-21.5-3-7.

If you have any questions regarding this matter, please call (800) 451-6027, press 0 and ask for Bill Holland or dial direct at (317) 233-0449.

Sincerely,

Thomas Linson, Chief
Permits Branch
Office of Land Quality

Enclosure: Permit Requirements

cc: Gibson County Health Department
Gibson County Solid Waste Management District
Gibson County Commissioners
IDEM, Southwest Regional Office

PERMIT REQUIREMENTS

A. General Permit Requirements

B. General Reporting Requirements

C. Pre-Operational Requirements

D. Construction Requirements

E. Operational Requirements

F. Ground Water Monitoring Requirements

G. Closure Requirements

H. Post-Closure Requirements

I. Financial Responsibility for Closure and Post-Closure

A. GENERAL PERMIT REQUIREMENTS

A1. The Permittee shall comply with all applicable requirements of 329 IAC 10, where not specifically addressed in this permit.

A2. The Permittee shall construct, operate and close the facility as described in the new construction/operation permit application submitted February 2, 2001 and in the "Permit Application for Major Modification" dated December 19, 1997, and all subsequent revisions, unless otherwise specified in this permit. For the purpose of this approval the application means all the narrative, construction plans, specifications, and appendices, including all the revisions submitted to IDEM to date from both of the aforementioned permit applications.

A3. The Permittee shall at all times properly manage, operate, and maintain all facilities and systems of treatment and control which are installed or used by the Permittee to achieve compliance with the construction and operating specifications included in the application and permit requirements. Proper operation and maintenance includes, but is not limited to, proper handling of solid waste, sufficient funding, adequate operator staffing and training, and laboratory and process controls with appropriate quality assurance procedures.

A4. IDEM may reevaluate the construction and operational requirements of this permit, at any time, if significant unanticipated geotechnical information becomes available during construction and operation of the facility.

B. GENERAL REPORTING REQUIREMENTS

B1. It is recommended that all required submittals be sent via certified mail, and printed on double-sided paper. All reports, notifications, ground water reports, and other information required to be submitted by this permit modification should be sent to:

Mr. Bill Holland
Permits Branch
Office of Land Quality
Indiana Department of Environmental Management
P.O. Box 6015
Indianapolis, Indiana 46206-6015

B2. The Permittee shall report to the Indiana Department of Environmental Management (IDEM) any event or noncompliance with this permit or 329 IAC 10 which may cause an imminent and substantial endangerment to human health or the environment. Unless specified otherwise by the requirements of this permit, this information shall be reported

orally to IDEM within twenty-four (24) hours from the time the Permittee becomes aware of the event or noncompliance. A written report shall also be provided within five (5) working days of the time of the noncompliance event. The report shall include for each event: date and time, possible causes, actions taken or planned to correct, reduce, eliminate, and prevent recurrence of the event.

C. PRE-OPERATIONAL REQUIREMENTS

C1. The Permittee shall comply with 329 IAC 10-27 (Operation Approval and Pre-Operational Requirements) and this section of the permit.

C2. All construction activities and testing denoted in the CQA plan, included in the application and modified by this permit, must be completed and results submitted along with the construction report as specified in Requirement D2 of this letter.

C3. The Permittee shall amend financial responsibility to include the expansion area prior to any waste placement in the unfilled expansion portion of the site as specified in Section I, FINANCIAL RESPONSIBILITY FOR CLOSURE AND POST-CLOSURE, of this permit.

C4. The pre-operational notice from the Permittee must provide the construction details and drilling logs not previously included in the permit application for any required ground water monitoring wells. The required wells can be found in this permit under Ground Water Monitoring Requirements.

D. CONSTRUCTION REQUIREMENTS

Construction Requirements are applicable to the unfilled portions of the site.

D1. The Permittee shall notify IDEM in writing at least fifteen (15) days in advance of the construction of each unit.

D2. Twenty-one (21) days prior to placement of waste in any newly constructed area except as specified in Requirement D4, a report shall be submitted to IDEM by an Indiana registered professional engineer certifying that the Permittee is in compliance with the construction requirements. The report shall indicate the boundaries of the certified area and shall include the results of all tests conducted during construction. Unless notified otherwise by IDEM, the Permittee may begin to accept waste in the newly constructed area after the twenty-one (21) day notice period has expired.

D3. Boundary markers shall be placed to identify the limits of construction of each new unit.

D4. For all unfilled portions of the site, the liner system construction shall consist of two geosynthetic clay liners (GCLs) with at least 12-inches of compacted clay between them, with a minimum hydraulic conductivity of 10^{-7}centimeters/second, overlain by a seepage collection system which includes 12-inches of sand and 24-inches of FSS as presented in the major modification application.

D5. The Permittee shall follow the construction plans and quality procedures, detailed in the December 17, 1997 application and all subsequent submittals unless modifications are requested and approved. The current set of construction drawings was modified in November 2000.

D6. The liner system shall be tested and placed according to the manufacturer's specifications as specified in the application. During liner placement, the subgrade must be inspected daily. Questionable subgrade areas should be identified and proper remedial measures shall be applied by the geotechnical engineer before placement.

D7. The instruments (piezometers, inclinometers and settlement plates) shall be placed in the strategic liner locations as discussed in the application. If during operation, the acquired data indicates the necessity to establish additional monitoring data points, IDEM will require the facility to install additional piezometers and inclinometers or other types of instruments as appropriate.

D8. During construction of the liner, the facility shall review and record the instrumentation results on a daily basis to build a baseline for pore pressure generation at the site. Following construction, during the filling of the Landfill, instrumentation measurements shall be performed on a biweekly basis. The facility shall submit the data from all the instruments (piezometer, inclinometer, settlement plates etc.) for IDEM's review on a quarterly basis.

D9. Prior to waste disposal in newly constructed units, the safe disposal rates shall be established from stability analyses incorporating the instrumentation readings. It is necessary to design the critical loading rate to optimize both the dissipation and maximum pore pressure. The rate and any other pertinent information shall be submitted to IDEM along with the construction certification documentation as required by C2.

D10. If visual observation or inclinometer data indicate any measurable ground movements or if piezometer data indicate that pore pressures are rising, liner construction or waste disposal in the Landfill shall be stopped and the facility shall notify IDEM within 24 hours. The observed data from the instrumentation shall be evaluated further and the construction sequence shall be modified, as necessary, and as approved by IDEM.

D11. The facility may be required by IDEM to modify the size, the design of the berm and the placement at the toe of the slope, based on any indication of lateral stress of the substrate. Any required modification must be approved by IDEM prior to implementation.

D12. All testing must be performed in accordance with American Society for Testing and Materials (ASTM) standards and the Construction Quality Assurance (CQA) plan included in the application.

E. OPERATIONAL REQUIREMENTS

E1. The Permittee shall comply with all applicable requirements of 329 IAC 10-28 (Operational Requirements).

E2. The facility shall accept only Type II, III, or IV waste generated by Gibson Station Generating Facility.

E3. Resampling of the waste shall be conducted as specified in the waste classification. The application for renewal of the waste classification must be submitted at least sixty (60) days prior to the waste classification expiration date.

E4. Permanent, visible boundary markers which delineate the approved facility and waste boundaries shall be maintained for the life of the facility.

E5. Waste disposal shall be limited to the areas delineated by the waste boundary line as shown on Sheet Drawing C-131, titled "Layout and Final Elevation," modified on October 31, 2000, and received by IDEM on November 13, 2000.

E6. The Permittee must control public access to the facility and prevent unauthorized vehicular traffic and illegal dumping of wastes by using artificial barriers, natural barriers, or both, to protect human health and the environment.

E7. Surface water must be diverted from the active fill area to minimize surface water contact with the waste and interference with the daily operation.

E8. The Permittee shall manage surface water as described in the application. The drainage ditches and sedimentation basins shall be properly maintained to prevent sediment from deposition off-site. Temporary run-off control structures shall be constructed in areas which are unable to drain to the sedimentation basins.

E9. The site benchmark shall be maintained.

E10. The placement of the waste FSS and the slope of the fill shall be maintained adequately to minimize the contact of rainwater with the waste.

E11. If any nuisance or ground surface pollution conditions are created at this facility, the Permittee shall initiate corrective action within 24 hours.

E12. During construction and filling, the geometry of the Landfill needs to be preserved.

E13. If the physical appearance of the cover soil is noted to change, or the Permittee uses borrow sites other than those specified in the application, samples of the material shall be subjected to gradation and Atterberg Limits tests, and the results submitted to IDEM within fifteen (15) days of such testing and prior to the use of this material as cover at the Landfill site.

E14. The intermediate cover (monthly and yearly) variance requested in the letter dated March 15, 1995, is still in effect with the following requirements:

a. Drainage ditches shall be inspected monthly for excessive sediment leaving the active portion of the site and routinely cleaned out as necessary.

b. An unacceptable inspection report by IDEM documenting the violation of Requirement E14a will be considered grounds for revocation of this variance.

c. The Permittee shall minimize the working face of the Landfill. All areas of the Landfill filled to the approved elevations shall comply with Requirement G6. All other areas that have not received additional waste within one (1) year of the time of filling shall be covered with six (6) inches of intermediate cover of clay type soil.

d. Intermediate cover shall be graded to promote surface water drainage and to prevent ponding of water. The Permittee shall minimize sediment and erosion at the site by implementing appropriate sedimentation/erosion control measures such as but not limited to: establishment of vegetation, use of alternative/synthetic covers or liners, and/or use of other applicable erosion/sedimentation control measures.

e. The Permittee shall take appropriate measures to minimize fugitive dust at the restricted waste site to prevent the dust from creating a nuisance or threat to human health and the environment. If the facility operation is found to be in violation of fugitive dust regulations or if visible waste deposits carried by wind or surface water beyond the site property boundary are documented, the Permittee shall be bound by the requirements of 329 IAC 10-28-13 for application of a daily cover.

E15. The outlet and clean out features of the seepage collection system shall be inspected quarterly. Any contaminated liquid collected from the seepage collection system must be properly disposed of.

E16. The Permittee shall not cause a discharge of pollutants into waters of the United States, including wetlands, that violates the Clean Water Act, including, but not limited to, the requirements of the National Pollutant Discharge Elimination System (NPDES).

E17. The Permittee shall not cause the discharge of a nonpoint source of pollution into the waters of the United States, including wetlands, that violates any requirements of an areawide or statewide water quality management plan that has been approved under Section 208 or 319 of the Clean Water Act, as amended. The Permittee shall comply with applicable requirements of 327 IAC 15 regarding storm water discharge.

F. GROUND WATER MONITORING REQUIREMENTS

F1. Each ground water monitoring well and each piezometer must be labeled with a permanent and unique identification that must be used in reporting all well and piezometer information.

F2. Proposed abandonment of any ground water monitoring well or any piezometer at a facility must have written approval from IDEM. Methods used shall be those recommended by the OLQ Permits Geology Section, and those pursuant to the Indiana Department of Natural Resources regulation 310 IAC 16-10-2. The Permittee shall notify the OLQ Permits Geology Section ten (10) days prior to abandonment. Documents for each well that is abandoned must be submitted to OLQ within thirty (30) days of removal.

F3. Access ways to each monitoring well must be maintained and passable throughout each season of the year. The use of these access ways must be restricted to persons authorized by the owner, operator, or permittee.

F4. The Permittee must maintain all ground water monitoring wells. Necessary repairs, other than replacement (see Requirement F7), must be completed within ten (10) days of discovery. The Permittee must keep the monitoring wells securely capped and locked when not in use, repairing cracks, retaining mounds of clay-rich soil around the casings unless concrete pads have been installed, controlling vegetation height around the wells, and redeveloping the wells as needed.

F5. The Permittee must submit ground water potentiometric-surface maps, or flow maps, of the aquifer(s) being monitored at the site. The ground water elevations must be obtained during the scheduled ground water sampling months and must be submitted with the water-quality results to OLQ. The maps must contain the following:

a. Location and identification of each ground water monitoring well and piezometer;

b. Static water-level relative to mean sea-level for each well and piezometer. All elevations shall be measured on the same day and as close in time as possible prior to the purging and sampling event;

c. Date and time of static water-level measurement for each well and piezometer;

d. Ground-surface elevation at each well and piezometer;

e. Facility property boundaries;

f. Identification of the aquifer represented, either by a name or an elevation;

g. Solid waste fill boundaries;

h. Facility name and county;

i. Map scale, north arrow, ground water flow direction arrows, and the potentiometric-surface contour interval;

j. Indications of which monitoring wells are considered background, downgradient, or intrawell;

k. Locations and elevations of all site benchmarks.

F6. If ground water flow data indicate that flow is other than anticipated in the design of the monitoring well system, the Permittee must notify OLQ within ten (10) days of discovery. Within thirty (30) days of the notification, the Permittee shall submit to OLQ a report demonstrating that the facility is in compliance with 329 IAC 10-29-1(b). If additional ground water monitoring wells are required, the monitoring well(s) must be installed within thirty (30) days of receiving written approval of the revised design from OLQ.

F7. If for any reason a ground water monitoring well or piezometer is destroyed or otherwise fails to properly function, OLQ must be notified within ten (10) days of discovery. The well shall be repaired if possible. If the well cannot be repaired, it must be properly abandoned and replaced within sixty (60) days of the notification, unless the Permittee is notified otherwise in writing by OLQ.

F8. Pursuant to 329 IAC 10-29-2 sampling procedures, the Permittee must follow the ground water monitoring plan (Sampling and Analysis Plan (SAP)) dated January 13, 2000. See Requirement F19 for sampling procedures, equipment, and methodology for the sample-collection points SCS #1 and SCS #2. The Permittee must revise the plan if

notified to do so by OLQ. Any revision to the plan will be considered an insignificant modification of this permit.

F9. All ground water monitoring wells that constitute the facility's detection monitoring well system must have individual water samples collected and analyzed for contaminants during May and November every year. These wells have been identified as follows; MW-1A, MW-1B, MW-1C, MW-2A, MW-2B, MW-2C, MW-3A, MW-3B, MW-3C, MW-4A, MW-4B, MW-4C, MW-5A, MW-5B, and MW-5C. Additional sampling points are to be surface-water samples from the Cooling Lake and the North Ash Pond.

Each sample must be analyzed for the following Phase I parameters:

(1) Field pH
(2) Field specific conductance
(3) Field temperature
(4) Arsenic (Dissolved)
(5) Barium (Dissolved)
(6) Boron (Dissolved)
(7) Cadmium (Dissolved)
(8) Chloride
(9) Chromium (Dissolved)
(10) Fluoride
(11) Lead (Dissolved)
(12) Mercury (Dissolved)
(13) Selenium (Dissolved)
(14) Silver (Dissolved)
(15) Sodium (Dissolved)
(16) Sulfate
(17) Total Dissolved Solids
(18) Zinc (Dissolved) and
(19) Copper (Dissolved).

F10. All analytical results and field parameters from required ground water sampling must be submitted to OLQ within sixty (60) of the sampling event. The submittal must include one (1) original unbound laboratory certified report with field sheets and chain of custody forms; and one (1) electronic version of the analytical results with the field parameters including pH, specific conductance, temperature, well depth, depth to water, and static water elevation must be submitted to OLQ within sixty (60) days of the sampling event.

The electronic version must be on a DOS formatted 3 ½-inch diskette, 100 MB Zip disk, or CD-ROM; or may be submitted via electronic mail (e-mail) to the e-mail address, oshwmdata@dem.state.in.us. The facility name and a brief description of the file contents should be clearly marked on the digital media or typed in the subject heading of the e-mail. The electronic version should be submitted as an ASCII, tab-delimited text file and contain the facility's name, and permit number. Field parameters and analytical results must include the fields listed below.

1. Sampling Date: Month, day and year
2. Well Name: Include permitted and corrective action wells
3. Sample Type: Regular, duplicate(s), trip blank(s), equipment blank(s), field blank(s), verification re-sample(s) and replicate(s)
4. Species Name: Chloride, sodium, ammonia, etc.

5. Concentration (results)
6. Concentration Units: mg/l, ug/l, standard units for pH, degrees Celsius (°C), or degrees Fahrenheit (°F) for temperature, and umhos/cm for specific conductance
7. Detected: Yes or no
8. Detection Limit
9. Analytical methods
10. Estimated Value: Indicate "Yes" if the reported value is an estimated value. If a value is estimated, use the "Comment" field to explain why the value was estimated
11. Comment: Analytical lab and/or field personnel comments regarding the reported results.

F11. All applicable Quality Assurance/Quality Control (QA/QC) documentation generated from valid analyses of ground water samples by the laboratory must be retained and be available upon request by OLQ, for a minimum of three (3) years. In addition, two (2) copies of a level III ground water monitoring data package, as described in the current edition of the "Solid Waste Program Analytical Data Deliverable Requirements: A Guidance Document", must be submitted to OLQ within sixty (60) days of the first ground water monitoring event scheduled after the permit issuance date.

F12. Ground-water monitoring must be conducted throughout the active life and the post-closure care period of the facility. Monitoring may be extended beyond the post-closure care period if OLQ determines that the facility is adversely impacting the ground water or poses a threat to human health and the environment.

F13. Pursuant to 329 IAC 10-29-4, the Permittee must use the site-established background water quality data. Background data must also be established for any additional background wells. Background data shall be established during at least four (4) consecutive, sampling events and be completed within one (1) year after well installation. Background water quality shall be established for the following:

a. The Phase I parameters in Requirement F9;

b. The secondary standards in 329 IAC 10-29-7(c);

c. The ground water protection standard in 329 IAC 10-29-10.

The upgradient or background (for intra-well) monitoring wells are MW-5A, MW-5B, and MW-5C for each respective monitoring zone identified as "A", "B", and "C". Additional background-sampling points are to be surface-water samples from the Cooling Lake and the North Ash Pond.

F14. Pursuant to 329 IAC 10-29-5, the Permittee must determine whether there is a statistically significant increase (or decrease in the case of pH) over the background for each Phase I or Phase II parameter by comparing the value obtained during each semiannual analysis with the established background. During the Phase I Monitoring Program, Total Dissolved Solids, Zinc (Dissolved), Copper (Dissolved), and Field Temperature shall not be subjected to a statistical evaluation.

Two (2) copies of the semiannual statistical evaluation report must be submitted to OLQ within sixty (60) days of the sampling event.

In the statistical evaluation report the Permittee must present the distribution assumptions. A statistical procedure must be chosen that is appropriate for the distribution of the data being considered and that provides a balance between the probability of falsely identifying a significant difference and the probability of failing to identify a significant difference. The statistical procedure shall provide a 95 percent level of confidence to determine if a statistically significant increase occurs in the concentration of a Phase I or Phase II parameter. To achieve the 95 percent level of confidence, the Permittee should consider the background sample sizes, the number of individual statistical tests performed, and the specific verification resampling method.

F15. If the Permittee determines that there is a statistically significant increase (or pH decrease) over background for two (2) or more of the Phase I parameters at any of the downgradient monitoring wells, the Permittee must comply with the following requirements:

a. Notify OLQ in writing within fourteen (14) days of the finding. The notification must state which Phase I parameters showed statistically significant increases (or pH decrease) over background levels and from which downgradient monitoring well(s) the elevated concentrations came.

b. Collect and analyze the ground water from all monitoring wells for the parameters in Requirement F9 and the parameters determined from 329 IAC 10-29-7(d). These results must be submitted to OLQ within sixty (60) days of determining the statistically significant increases.

c. The Permittee must establish a Phase II monitoring program based on the results obtained in F15(b) and in consultation with the OLQ Permits Geology Section within thirty (30) days of completion of Requirement F15(b).

The Permittee must continue the scheduled Phase I monitoring as described in Requirement F9 and 329 IAC 10-29 throughout the establishment and implementation of a Phase II monitoring program.

F16. In lieu of doing Requirements F15(b) and (c), the Permittee may attempt to demonstrate that a source other than the solid waste facility caused the increase (or pH decrease) or that the increase (or pH decrease) resulted from error in sampling, analysis, or evaluation. For the demonstration to be accepted by OLQ, the Permittee must comply with the following requirements:

a. Notify OLQ in writing of the intent to make a demonstration. This notification must be submitted within seven (7) days of determining a statistically significant increase (or pH decrease);

b. Submit a report to OLQ within ninety (90) days of determining a statistically significant increase (or pH decrease). The report must demonstrate that a source other than the solid waste facility caused the increase (or pH decrease), or that the increase (or pH decrease) resulted from error in sampling, analysis, or evaluation. The report must state what efforts will be taken to prevent these errors from recurring;

c. Continue to monitor ground water at all monitoring wells according to the scheduled Phase I monitoring established under 329 IAC 10-29-6.

If a demonstration is not acceptable to OLQ, the Permittee must continue with Requirement F15(b) and (c).

F17. If necessary, the Permittee must implement a corrective action program as required under 329 IAC 10-29-9. The corrective action program shall be deemed complete when ground water protection standards have been met at all points of the plume beyond the monitoring boundary for a period of three (3) consecutive years using the statistical procedures outlined in 329 IAC 10-29-5 and procedures approved through this permit.

F18. For each sampling event required in Requirement F9, static-water level measurements shall be collected from all wells, including: MW-6A, MW-6B, MW-7A, MW-7B, MW-8A, MW-8B, MW-8C, MW-10A, MW-10B, MW-10C, MW-11A, MW-11B, and MW-11C. The static-water level measurements shall be used to develop the potentiometric map, as required in Requirement F5, for each monitoring zone ("A", "B", and "C").

The static-water level measurements, depth to water, and total well depth shall be included in the electronic version described in Requirement F10. In addition, the surface-water level measurement and the date of measurement of the Cooling Lake and the North Ash Pond shall be included on each potentiometric map.

F19. Water samples shall be collected and analyzed from two (2) sample stations of the Seepage Collection System. These sample stations, labeled "7/9 Reinforced Concrete

Manhole Station 35+2" and "7/9 Reinforced Concrete Manhole Station 18+52" on Drawing FMSM 8 of 9 (dated November 2000 and received by OLQ on November 13, 2000) titled "Seepage Collection Figuration", shall be identified as SCS #1 and SCS #2 for sampling and analyses purposes, respectfully.

Sampling shall commence in May or November following the completion of the construction of the Seepage Collection System. For each sampling event, if the flow rate of liquid being discharged from the system can be observed, the flow must be recorded on the field sheets, preferably in gallons per minute. Each sample must be:

(a) analyzed for those constituents listed in Requirement F9;
(b) collected during May and November of each year at the same time samples are collected from the monitoring wells identified in Requirement F9;
(c) included in the same report package as the ground-water data; and
(d) digitally submitted (see Requirement F10).

F20. The Permittee must submit, and obtain written approval for, a Sampling and Analysis Plan (SAP) for the Seepage Collection System sampling stations SCS #1 and SCS #2. Items to include when developing the SAP are:

(a) If different equipment is used for ground-water sampling, then an equipment blank must be provided;
(b) Provide specific detail for equipment, procedures, and methodology for collecting the samples. Descriptions of procedures for collecting field measurements needs to be included;
(c) Description of sample-collection containers if different than those used for the ground-water samples;
(d) Description of the decontamination procedures for all nondedicated equipment;
(e) Estimates of the volume of seepage (leachate) over the course of the monitoring interval;
(f) an estimate of the minimum volume of seepage required for a representative sample collection;
(g) a description of the actual seepage sample;
(h) a physical description of each sample point (SCS #1 and SCS #2).

The Permittee must revise the plan if notified to do so by OLQ. Any revision to the plan will be considered an insignificant modification of this permit.

F21. Within ninety (90) days of receipt of this permit, the Permittee shall submit two (2) copies of the complete SAP and Quality Assurance Project Plan (QAPP), which includes:

(a) the Items discussed in Requirement F20;
(b) the formula used for calculating one (1) well volume of a 2-inch diameter well. The revised version of Appendix B in the document submitted on November 13,

2000 did not include this calculation. The formula for this calculation is as follows:
Volume of well (in gallons) = water column (in feet) x .163 gal/ft; and

(c) the analytical procedures and detection levels for Zinc (Dissolved) and Copper (Dissolved).

F22. Within ninety (90) days of receiving this permit, the Permitee shall submit two (2) copies of a map illustrating all sampling locations. Sampling locations include all wells, the surface-water sampling points for the Cooling Lake and the North Ash Pond, and the sampling stations SCS #1 and SCS #2 of the Seepage Collection System.

F23. After the first three (3) years of sampling, as described in Requirement F19, the facility must compare the results to the values for RWS Type II criteria listed in Tables 1, 2, and 3 under 329 IAC 10-9-4. If one (1) or more Type II criteria are exceeded for two (2) consecutive sampling events, the Permittee must incorporate wells MW-8A, MW-8B, MW-8C, MW-11A, MW-11B, and MW-11C into the facility's ground-water monitoring system as described in Requirements F8 and F9.

If sampling is initiated at these wells due to the two (2) consecutive exceedances, then with the approval of the Commissioner, sampling of SCS #1 and SCS #2 may be suspended.

G. CLOSURE REQUIREMENTS

G1. The Permittee shall comply with all applicable requirements of 329 IAC 10-30 (Closure Requirements). Closure of the facility shall proceed in accordance with the facility closure plan, included in the major modification application, dated December 19, 1997.

G2. The Permittee shall construct a cap with six-inch layer of vegetative cover underlain by two-feet of compacted clay as detailed in the application.

G3. Before installing the final cover system, the facility shall submit a third party certification stating that the instrumentation in the Landfill confirms that the final slope of the Landfill is stable within the desired factor of safety, along with other related geotechnical factors, as stated in the application to IDEM, and state that the facility is stable, and ready to receive the final cover system.

G4. The total closure cost is estimated to be $3,570,310.

G5. The Permittee shall notify IDEM in writing at least sixty (60) days prior to the date on which closure is intended to begin on each unit.

G6. The final cover shall be constructed in accordance with the approved final grading plan, Sheet Drawing C-131, titled "Layout and Final Elevations," modified on October 31, 2000, and received by IDEM on November 13, 2000, and applicable requirements of 329 IAC 10-30-3 and 10-28-11. Grading and stabilization of final cover shall be accomplished in accordance with 329 IAC 10-28-14.

G7. The cover materials shall be tested and placed in accordance with the specifications included in the application.

G8. Upon final closure of the facility, the Permittee shall submit to IDEM a certification and verification of deed notation as required by 329 IAC 10-30-7.

H. POST-CLOSURE REQUIREMENTS

H1. The Permittee shall comply with all applicable requirements of 329 IAC 10-31 (Post-closure Requirements).

H2. The Permittee shall perform post-closure duties as specified in 329 IAC 10-31-2(a) and the facility post-closure plan included in the application, for a period of thirty (30) years following the date of final closure certification. Post-closure certification shall be accomplished as specified in 329 IAC 10-31-4.

H3. The total Post-Closure cost is estimated to be $2,220,205.

H4. Subsequent to the completion of post-closure, the owner or operator of a closed facility or the owner of real estate upon which a closed facility is located, shall be responsible for correcting and controlling any nuisance conditions occurring at the facility, and eliminating any threat to human health or the environment, as specified in 329 IAC 10-31-5, 6, and 7.

I. FINANCIAL RESPONSIBILITY FOR CLOSURE AND POST-CLOSURE

I1. The Permittee shall amend and annually update a financial responsibility instrument as required by 329 IAC 10-39 for closure and post-closure. Annual updates shall be submitted within thirty (30) days of the anniversary date of the original submittal. The amount for closure shall not be less than the closure cost estimate specified in the modification application. The amount for post-closure shall not be less than the post-closure cost estimate calculated in the post-closure plan included in the application.

I2. A final contour map which meets the requirements of 329 IAC 10-39-2(c) must also be submitted annually.

I3. If the restricted waste site operations, the site design and/or ground water monitoring system are modified to the extent that such revisions would necessitate changes in the amount of the funding provided for the restricted waste site closure and post-closure care periods, the Permittee must revise the plan and appropriately adjust the financial responsibility instrument.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Frank O'Bannon
Governor

Lori F. Kaplan
Commissioner

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March 14, 2001

Legal Advertising Department
Princeton Daily Clarion
P.O. Box 321
Princeton, Indiana 47670

Re: Public Notice

Dear Sir/Madam:

Enclosed please find a copy of our Notice of Decision to issue a solid waste facility construction and operation permit and major modification permit to the Gibson Generating Station RWS II, in Gibson County. We request that you publish this notice, one time only, as soon as possible.

For billing, please send a notarized form and clippings showing the date of publication to Mr. Bill Holland, Indiana Department of Environmental Management, P.O. Box 6015, Indianapolis, Indiana 46206-6015. On the backside of your publisher claim, please be sure to include your Social Security or Federal Identification number on the first line below the statement: "In the sum of $..."

If you have any questions regarding this matter, please call (800) 451-6027, press 0 and ask for Bill Holland or dial direct at (317) 233-0449.

Sincerely,

William Holland
Solid Waste Permits Section
Office of Land Quality

WEH

Enclosure (Notice of Decision)

cc: Gibson County Health Department (with enclosure)
Gibson County Commissioners (with enclosure)
IDEM, Southwest Regional Office
Gibson County Solid Waste Management District (with enclosure)

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NOTICE OF DECISION

Indiana Department of Environmental Management

Please be advised that the Indiana Department of Environmental Management, Office of Land Quality, has issued a solid waste facility construction and operation permit and major modification permit for the Gibson Generating Station Restricted Waste Site Type II which is located on Gibson Generating Station property, in Gibson County. This permit allows PSI Energy, Inc. to continue operations at the facility and adds 49 acres for disposal as well as increasing the final height approximately fifty feet. A copy of this permit is available for review at the Princeton Public Library located at124 S. Hart Street, Princeton, Indiana, or on the IDEM website at http://www.state.in.us/idem/oshwm/permitnods.html.

If anyone wishes to challenge this decision, IC 13-15-6-1 and IC 4-21.5-3-7 requires that they file a petition for administrative review not later than fifteen (15) days after being served with this notice. Under IC 13-15-6-7(c) you are considered to be served with this notice when you are personally served with the notice or three (3) days after the notice is deposited in the United States mail and addressed to you, whichever occurs first. Your petition describing your intent to challenge the IDEM decision must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204.

Your filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing: (1) The date the document is delivered to the Office of Environmental Adjudication (OEA), (2) The date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail, or (3) The date on which the document is deposited with a private carrier, as shown by the receipt issued by the carrier, if the document is sent to the OEA by private carrier. This petition must include facts demonstrating that the petitioner is the applicant, a person aggrieved by the decision, or a person entitled to review by law. In order to assist the permit staff in tracking appeals, we request that you submit a copy of your petition to Mr. Bill Holland, Permits Branch, Office of Land Quality, at 100 N. Senate Ave., P.O. Box 6015, Indianapolis, Indiana 46206. Identifying the permit decision, or other order for which you seek review by permit number, name of the application, location, or date of this notice will expedite review of the petition.

Additionally, IC 13-15-6-2 requires that such petition for administrative review include: (1) The name and address of the person making the request, (2) The interest of the person making the request, (3) Identification of any persons represented by the person making the request, (4) The reasons, with particularity, for the request, (5) The issues, with particularity, proposed for consideration at the hearing, and (6) The permit terms and conditions which, in the judgement of the person making the request, would be appropriate.

Pursuant to IC 4-21.5-3-5(d), the Office of Environmental Adjudication will provide the petitioner or any person requesting notice with notice of prehearing conferences, preliminary hearings, hearing stays or orders disposing of the petition for review if a written request for such notice is submitted to the Office of Environmental Adjudication at the above address. If you have procedural or scheduling questions regarding your petition, you may contact OEA by dialing (800) 451-6027, press 0 and ask for extension 2-8591 or dial (317) 232-8591. Questions regarding the technical aspects of the permit decision should be directed to Bill Holland by calling (800) 451-6027, press 0 and ask for Bill Holland, or dial (317) 233-0449.

Please bring this matter to the attention of persons you believe may have an interest in it.

Newspaper NOD

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

65-45-1 mg7000 0600 0026 8335 6477
MR PAUL E KING
CINERGY CORP
7200 INDUSTRIAL ROAD
FLORENCE KY 41042

4a. Article Number

4b. Service Type

☐ Registered ☐ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5 Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*

X

PS Form **3811**, December 1994 102595-98-B-0229 **Domestic Return Receipt**

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Thank you for using Return Receipt Service.

EXHIBIT 4

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.go

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

February 10, 2021

VIA EMAIL

Duke Energy Indiana, LLC
Attn: Owen R. Schwartz
1000 East Main Street
Plainfield, Indiana 46168

Dear Mr. Schwartz:

Re: Approval of Closure/Post-Closure Plan
Gibson Generating Station
South Ash Basin System
Gibson County
SW Program ID 26-UP-12

Duke Energy's coal combustion residuals (CCR) surface impoundment closure and post-closure plan for Duke Energy Gibson Generating Station South Ash Basin System (SABS) consisting of South Settling Basin and South Ash Fill Area, is approved under 329 IAC 10-9-1(c), which incorporates portions of 40 CFR 257, Subpart D (CCR regulation), and under 329 IAC 10-3-1(9). This approval is subject to the terms of this letter, the closure and post-closure plans referenced in this document, and the enclosed requirements. The SABS is located at the Gibson Generating Station, Owenville, Gibson County, Indiana.

The SABS closure approval encompasses approximately 240.0 acres and includes two ponds: South Settling Basin (51.5 acres) and South Ash Fill Area (188.5 acres). Upon completing closure, these ponds will be subject to post-closure requirements.

On May 18, 2020, Duke Energy Indiana, LLC submitted the leachate redirection plan for the Gibson Restricted Waste Type II Fixated Scrubber Solids (FSS) Landfill (VFC #82971337) in response to item 6 of the request for additional information letter dated January 31, 2019 (VFC #82683644).

Public records for your facility are available in IDEM's Virtual File Cabinet at www.in.gov/idem. Documents related to this approval include the closure and post-closure plan application dated December 21, 2016 (VFC #80398684) and additional information dated August 15, 2018 (VFC #82600864), September 25, 2018 (VFC

#82623082), April 5, 2019 (VFC #82746629), February 26, 2020 (VFC #82923942), and May 18, 2020 (VFC #82971337).

You can review the Indiana Code (IC) and the Indiana Administrative Code (IAC) references in this document at iga. IN. gov. IC references are under the "Laws" link; IAC references are under the "Publications" link.

This approval does not: convey any property rights of any sort or any exclusive privileges; authorize any injury to any person or private property or invasion of other private rights or any infringement of federal, state, or local laws or regulations; or preempt any duty to comply with other state or local requirements.

If you wish to appeal this decision, you must file a request for administrative review with the Office of Environmental Adjudication within 18 days after the postmark of this letter. The enclosed guidance provides information on the appeal process and your rights and responsibilities for filing an adequate and timely appeal.

If you have any questions, please contact Anna Mishel, the Permit Manager assigned this facility, by dialing (317) 233-6725 or by email at AMishel@idem.IN.gov.

Sincerely,

Stephen D. Thill, Chief
Permits Branch
Office of Land Quality

Enclosure: Permit Requirements
Guidance on How to Appeal IDEM Decision

cc with enclosure: Gibson County Health Department
Gibson County Commissioners
Gibson County Solid Waste Management District
Director, Southwest IDEM Regional Office

REQUIREMENTS

A. General Requirements

B. Closure Requirements

C. Post-Closure Requirements

D. Groundwater Monitoring Requirements

E. Financial Responsibility for Closure and Post-Closure

F. Compliance Schedule Requirements

A. GENERAL REQUIREMENTS

A1. The owner or operator must close and maintain the South Ash Basin System (SABS) as described in the approved plans and specifications in the document titled "Closure and Post-Closure Plan," dated December 21, 2016 (VFC #80398684), the following subsequent submittals, and the requirements of this approval:

a. Document dated August 15, 2018 (VFC #82600864), Response to Request for Additional Information (RAI);

b. Document dated September 25, 2018 (VFC #82623082), Response to Request for Additional Information (RAI), Addendum 1; Slope Stability and Bearing Capacity Analyses;

c. Document dated April 5, 2019 (VFC #82746629), Response to Request for Additional Information (RAI), Proposed Site Closure Implementation Plan; and

d. Document dated February 26, 2020 (VFC #82923942), Supplemental Response to Request for Additional Information, Proposed Site Closure Implementation Plan.

A2. The owner or operator must call **(888) 233-7745** (IDEM's emergency response line) as soon as possible after learning of any event related to the facility that may cause an imminent and substantial endangerment to human health or the environment, such as a reportable spill (327 IAC 2-6.1) or a fire or explosion that requires the response of the local fire department.

The owner or operator must submit a written report to the Solid Waste Permits Section at the address given in Requirement A3 within five business days after the event. The report must describe the event, and actions taken or planned to correct the event and prevent its recurrence.

A3. Unless otherwise noted, submittals must be sent to the permit manager assigned your facility at the following address:

Indiana Department of Environmental Management
Office of Land Quality
Solid Waste Permits
IGCN 1101
100 North Senate Avenue
Indianapolis, IN 46204-2251

An electronic copy in Acrobat PDF format on CD or DVD, or emailed, in place of printed copies is appreciated, but not required.

A4. Records of all monitoring information and activities which are required to be submitted by this approval or specified in the closure or post-closure plan, must contain information listed in 329 IAC 10-1-4(a). Records must be maintained as specified in 40 CFR 257.105 and 329 IAC 10-1-4(b) and (c).

A5. Reports must be signed as specified in 329 IAC 10-11-3(b).

B. CLOSURE REQUIREMENTS

B1. The following methods of closure are approved for Gibson SABS:

South Ash Fill Area – closure in place, subject to 329 IAC 10-3-1(9).

South Settling Basin – closure by removal[1] of CCR material and one additional foot of underlying soil except for 1.3 acres of closure in place area underneath existing pump structure and access road. This pond is subject to 329 IAC 10-9-1(c), which incorporates portions of 40 CFR 257, Subpart D. Upon removal of CCR material and one foot of underlying soil, this pond will be re-purposed to serve as a geosynthetic clay liner/geomembrane lined pond to store non-CCR waste streams and other runoff from the Gibson Station.

B2. The owner or operator must notify IDEM in writing at least 15 days before the intended date to begin construction of the cover system for each area of South Ash Fill Area.

B3. The owner or operator must follow the schedule included in the closure and post-closure plans to complete the preparation activities and final closure of the SABS.

B4. The owner or operator must manage surface water as described in the approved plans and meet the following requirements:

a. Maintain drainage ditches and the sedimentation basin to prevent off-site deposition of waste and sediment. Remove sediment deposits from drainage ditches as necessary to properly convey storm water.

b. Construct temporary run-off structures in areas which are unable to drain to sedimentation basin.

B5. The owner or operator must properly dispose of water that has been in contact with waste in accordance with all applicable local, state, and federal laws (329 IAC 10-28-16 and IC 13-30-2-1).

B6. The owner or operator must perform inspections of the South Settling Basin until completion of the final closure as described in 40 CFR 257.83 (Inspection Requirement for CCR Surface Impoundments) and requirements of this approval.

B7. The owner or operator must adopt measures that will effectively minimize coal combustion residual becoming airborne, including waste that generates fugitive dust (40 CFR 257.80) and fugitive particulate matter in a way that does not violate the rule for fugitive dust (326 IAC 6-4) or fugitive particulate matter (326

[1] As used in this approval, “removal” does not mean closure as contemplated by 40 CFR 257.102(c). “Removal” as used herein is intended to have its commonly understood, everyday meaning, and is not intended as a term of art.

IAC 6-5), including 326 IAC 6-5-4(g) for solid waste handling control measures (329 IAC 10-8.2-2). The owner or operator must implement dust control measures as specified in the facility's CCR Fugitive Dust Control Plan dated October 2, 2017 (VFC #82970149), and take any additional steps necessary to prevent violations of fugitive dust rules and 40 CFR 257.80.

B8. The owner or operator must follow confirmation procedure for removal of CCR and one additional foot of underlying soil as described in the document dated December 21, 2016 (VFC #80398684, pp. 26-27 of 604). The approximate elevation contours of the bottom of the ash placement for South Settling Basin are depicted on drawings titled "Sheet 9, Approximate Bottom of Ash Contours" dated December 2016 (VFC #80398684, p. 61 of 604).

B9. The owner or operator must construct soil and CCR structural fill as follows:

a. Place CCR structural fill, at an elevation within five feet of final cover subgrade (top of CCR before placement of final cover) in loose lifts not to exceed 12 inches and be compacted to at least 85% of the standard proctor maximum dry density and as described in the document dated December 21, 2016 (VFC #80398684, pp. 553-556 of 604) and document dated August 15, 2018 (VFC #82600864, pp. 7-8 of 67).

b. Soil structural fill must be placed in loose lifts not to exceed 12 inches and be compacted to 95% of standard proctor maximum density, and as described in Quality Assurance Manual (QAM) dated December 21, 2016 (VFC #80398684, Appendix J, pp. 553-556 of 604) and the document dated August 15, 2018 (VFC #82600864, pp. 7-8 of 67).

B10. The owner or operator must construct the final cover for South Ash Fill Area and South Settling Basin as specified in the approved plans and the following requirements. Grading and stabilization of final cover must be accomplished as described in 329 IAC 10-28-14.

South Ash Fill Area

a. For the Interim Closure of 104 acres of South Ash Fill Area as depicted on the drawing titled "Sheet 11R1, Proposed Interim Grading Plan, Ash Basin Closure Plan-South Ash Basin System" dated July 16, 2018 (VFC #82600864, p. 30 of 67) and the following cover specifications, extending upwards from the top of the ash grades:

- 30-mil PVC or 40-mil LLDPE or 60-mil HDPE geomembrane liner or equivalent installed over structural fill
- Geotextile cushion or geocomposite drainage layer
- 30 inches of uncompacted cover soil
- 6 inches of vegetative cover

b. For the Final Closure of 188.5 acres of South Ash Fill Area as depicted on the drawing titled "Sheet 12R1, Proposed Final Grading Plan, Ash Basin Closure Plan-South Ash Basin System" dated July 16, 2018 (VFC #82600864, p. 31 of

67) and the following cover specifications from the top of ash grades extending upwards:

- 30-mil PVC or 40-mil LLDPE or 60-mil HDPE geomembrane liner or equivalent installed over structural fill
- Geotextile cushion or geocomposite drainage layer
- 30 inches of uncompacted cover soil
- 6 inches of vegetative cover

c. For the West Ditch portion located within South Ash Fill Area as depicted on the drawing titled "Details-Sheet 1 GBS00-CVL-0021, Water Redirection Program, South Settling Basin, Basin Construction Plan" dated April 19, 2016 (VFC #82998166) and the following cover specifications extending upwards from the top of ash grade:

- 60 mil dual textured HDPE geomembrane
- 16 ounce/square yard nonwoven geotextile
- 12 inches No. 8 crushed stone
- 8 inches cast in place concrete at the bottom of the ditch and 6 inches cast in place concrete on the 3:1 slopes.

South Settling Basin

d. For the South Settling Basin, except for the 1.3 acres of closure in place underneath the existing pump structure and access road, as depicted on the drawing titled "Sheet GBS00-CVL-0021, Water Redirection Program, South Settling Basin, Basin Construction Plan" dated April 12, 2016 (VFC #80398684, p. 72 of 604) and the following cover specifications from the soil subbase extending upwards:

- Geosynthetic Clay Liner
- 60 mil textured HDPE geomembrane
- 16 ounce/square yard nonwoven geotextile
- 12 inches of INDOT No. 12 gradation granual cover material
- Additional 15 inches of riprap (INDOT Uniform A stone) placed on the side slopes.

The South Settling Basin was repurposed to serve as a lined pond for the collection of non-CCR waste streams and other runoff from the Gibson Station. Upon decommissioning of the station, the basin will be cleaned out and graded as depicted on the drawing titled "Sheet 12R1, Proposed Final Grading Plan, Ash Basin Closure Plan-South Ash Basin System" dated July 16, 2018 (VFC #82600864, p. 31 of 67) and covered with the following:

- 30 inches of additional soil
- 6 inches of vegetative cover graded to no less than 2% slope.

Upon decommissioning of the station, the 1.3-acre closure in place area must be covered with 24 inches of clay-type soil and 6 inches of vegetative soil graded to no less than 2% slope.

B11. The owner or operator must test and install final cover components as specified in the Quality Assurance Manual dated December 21, 2016 (VFC #80398684, pp. 534-604 of 604) and the document dated August 15, 2018 (VFC #82600864, pp. 7-8 of 67), except as otherwise noted in this approval.

B12. Upon selecting the specific materials for the composite liner system, the permittee must test the materials to verify that the interface friction values meet or exceed the values in the approved design. If the tests show that the interface friction values do not achieve the minimum factor of safety assumed in the approved plans, the permittee must select and test alternate materials and rerun the slope stability analysis.

B13. The owner or operator must submit a final closure certification to IDEM no later than 90 days after completion of construction of the final cover system and establishment of vegetation or within 90 days of receipt of this closure and post-closure plan approval for closure construction activities that have already been completed. The owner or operator must submit verification of environmental restrictive covenant (ERC) and deed notation to IDEM no later than 90 days after completion of all closure activities included in this approval. The final closure certification must comply with the following:

a. Meet the requirements of 40 CFR 257.102(f)(3), (g), (h), and (i), and 329 IAC 10, as applicable.

b. Certify the final closure constructed according to the approved closure plan and the Quality Assurance Manual.

c. A registered professional engineer must certify that the closure construction complies with the approved plans and specifications.

d. The final closure certification must include the following:

(1) The boundaries of the certified area;
(2) The results of all tests conducted during construction;
(3) The results of the interface friction tests and any new slope stability analyses, if applicable;
(4) Documentation of all storm water management features that have been constructed or installed to the extent possible as designed;
(5) Any deviation/changes from the approved closure plan must be noted and explained in the report, if any; and
(6) Surveys and photographic verification for both the bottom of CCR material excavation and one-foot of additional soil.

C. POST-CLOSURE REQUIREMENTS

C1. The owner or operator must perform a minimum of 30 years of post-closure monitoring and maintenance including the activities specified in the facility's revised post-closure plan dated April 5, 2019 (VFC #82746629 Appendix A, pp. 24-32 of 34), and the following:

a. Performance standards and post-closure duties as specified in 40 CFR 257. 104 and 329 IAC 10, as applicable;

b. The 30-year post-closure period will begin when all the CCR units/areas in this closure plan are certified closed and IDEM accepts the certifications; and

c. Monitor and maintain the closed CCR units/areas in this closure plan until the 30-year post-closure period begins.

C2. To be released from post-closure monitoring, the owner or operator must submit a post-closure certification statements signed by both the owner/operator and a registered professional engineer stating that the post-closure care requirements have been met and the surface impoundments are stabilized. The post-closure certification is considered adequate, unless within 90 days of receipt of the post-closure certification IDEM issues notice of deficiency of the post-closure, including actions necessary to correct the deficiency.

C3. The owner or operator must comply with facility's ERC and/or deed restriction subsequent to the completion of the post-closure care certification. The owner or operator is responsible for the following:

a. Correcting and controlling any nuisance conditions occurring at the facility (329 IAC 10-31-5);

b. Eliminating any threat to human health or the environment (329 IAC 10-31-6); and

c. Performing any remedial action at the facility, if necessary (329 IAC 10-31-7).

D. GROUNDWATER MONITORING REQUIREMENTS

D1. The owner or operator must comply with 329 IAC 10-9-1(c) and 40 CFR 257, Subpart D (Groundwater Monitoring and Corrective Action).

D2. The owner or operator must conduct groundwater monitoring throughout the closure and the 30-year post-closure care period of the unit (40 CFR 257.104(c)). IDEM will extend the post-closure care period if the facility is under assessment monitoring until the facility returns to detection monitoring (40 CFR 257.104(c)(2)).

MONITORING DEVICES

D3. The facility's groundwater monitoring system (System) includes the following groundwater monitoring wells: MW-14A, MW-14C, MW-19A, MW-19C, MW-27C, MW-28A, MW-28BR, MW-28CR, MW-29B, MW-29C, MW-30C, MW-31B, MW-31C, MW-41C, MW-42C, MW-43B, MW-43C MW-56B, MW-56C, MW-57B, MW-57C, MW-58C, and MW-59C. Background groundwater monitoring wells are MW-14A, MW-14C, MW-19A, and MW-19C.

At least 60 days before installing new monitoring devices, the owner or operator must submit a device-installation plan for IDEM approval. The plan must provide the following:

a. A map showing the location of each device with respect to the facility's entire System and a current potentiometric surface.
b. A demonstration that each device will yield representative groundwater samples at an appropriate location and depth within the same aquifer or aquifers as the facility's existing System, and will meet the installation requirements of 40 CFR 257.91(e).
c. Drilling methods and procedures that follow 329 IAC 10-21-4; well construction materials and details, including protocol for collecting, describing, and analyzing consolidated or unconsolidated materials (329 IAC 10-24-3(3)).
d. An example of a borehole log that includes information specified under 329 IAC 10-24-3(2).
e. Environmental qualifications of all field personnel.
f. Provisions to include the installation records in the facility operating record (40 CFR 257.91(e)(1)).

The owner or operator must submit all field documentation to IDEM within 60 days after completing all related field work.

D4. The owner or operator must label all groundwater monitoring wells with a permanent and unique identification. When reporting well information, the owner or operator must include the identification for each well.

D5. The owner or operator must secure the access ways to all groundwater monitoring wells to prevent unauthorized access and maintain the access ways so they are passable year round with the exception of flooding conditions.

D6. The owner or operator must maintain all groundwater monitoring wells as follows:

a. Complete necessary repairs, other than replacement (see Requirement D8), within 10 days after discovery or other time frame approved by IDEM;
b. Keep the wells securely capped and locked when not in use;
c. Repair all cracks in and around the casings and well pads that may affect the integrity of the well;
d. Control vegetation height; and
e. Redevelop the wells as needed.

D7. When abandoning a groundwater monitoring well that is part of the facility's approved System listed in Requirement D3, the owner or operator must:

a. Submit a written proposal for approval explaining the reasons for and detailing the method of abandonment;
b. Use methods that comply with Indiana Department of Natural Resources (IDNR) regulation 312 IAC 13-10-2;
c. Notify the IDEM Geology Section by phone, email, or letter at least 10 days before the date the abandonment work will occur;
d. Provide written notification of abandonment to IDEM and IDNR within 30 days after plugging is complete. (IDNR (312 IAC 13-10-2(f)) requires written notice.); and
e. Include the abandonment records in the facility operating record (40 CFR 257.91(e)(1)).

D8. The owner or operator must notify IDEM by phone, email, or letter within 10 days after discovering that a groundwater monitoring well has been destroyed or is not functioning properly. The owner or operator must repair the well if possible. If the well cannot be repaired, then within 30 days after discovery, the owner or operator must submit a proposal for abandonment or replacement.

PLANS

D9. The owner or operator must follow an IDEM approved Sampling and Analysis Plan (SAP) that meets the minimum requirements listed in 40 CFR 257.93(a) through (e), and (i). Requirement F1 specifies the submission of an SAP.

D10. The owner or operator must follow an IDEM approved Quality Assurance Project Plan (QAP_jP) that meets the requirements listed in 40 CFR 257.93(a) and (b). Requirement F2 specifies the submission of a QAPjP.

D11. The owner or operator must follow an IDEM approved Statistical Evaluation Plan (StEP) that meets the minimum requirement listed in 40 CFR 257.93(f) through (h). Requirement F3 specifies the submission of a StEP.

D12. If IDEM requests a revision to an SAP, QAPjP, or StEP, the owner or operator must submit the revised plan(s) for approval. The owner or operator must submit the plan(s) within 60 days after receiving the request. This submittal must include one original paper copy and one PDF electronic file of each plan. The owner or operator must not implement the revised plan(s) before receiving approval.

D13. If the owner or operator makes design changes to the existing System listed in Requirement D3, the owner or operator must submit a revised SAP, and if applicable, a revised QAPjP or StEP for approval. The owner or operator must submit the plans within 60 days after completing all field activities associated with the design changes. This submittal must include one original paper copy and one PDF electronic file of each plan. The owner or operator must not implement the revised plan(s) before receiving approval.

MONITORING PROGRAMS

D14. The owner or operator must sample the facility's System listed in Requirement D3 semiannually during May and November of each year. Each sample must be analyzed following the Detection Monitoring Program (40 CFR 257.94) for the following Appendix III constituents:

a. Total Boron
b. Total Calcium
c. Chloride
d. Fluoride
e. Field pH
f. Sulfate
g. Total Dissolved Solids

The owner or operator may demonstrate an alternative frequency of sampling for the Appendix III constituents following 40 CFR 257.94(d).

When applicable (see Requirement D19), each sample must be analyzed following the Assessment Monitoring Program (40 CFR 257.95) for the following Appendix IV constituents:

h. Total Antimony
i. Total Arsenic
j. Total Barium
k. Total Beryllium
l. Total Boron
m. Total Cadmium
n. Total Chromium
o. Total Cobalt
p. Fluoride
q. Total Lead
r. Total Lithium
s. Total Mercury
t. Total Molybdenum
u. Total Selenium
v. Total Thallium
w. Radium 226 and 228 combined

For specific metallic constituents, if the permittee demonstrates with the approval of IDEM that the results for a filtered (dissolved) metal are no greater than 20% of the relative percent difference of an unfiltered (total recoverable) metal, then the owner or operator may incorporate historic filtered results into the background data set instead of collecting a minimum of eight additional independent samples (40 CFR 257.94(c)) for the unfiltered metal results. The owner or operator may propose an alternative method for incorporating historic results of the specific dissolved metal into the background data set for IDEM review and approval.

Whenever results of total chromium occur at or above its background concentration or maximum contaminant level, whichever is the higher concentration, the owner or operator must speciate and report both trivalent and hexavalent chromium.

D15. The owner or operator must use the results of the static water level measurements from the System listed in Requirement D3 to prepare potentiometric surface maps or groundwater flow maps for each screened interval (deep 'A', intermediate 'B', and shallow 'C') that include the following information:

a. Location and identification of each groundwater monitoring well;
b. Groundwater elevations for each well, and surface water elevations for the Wabash River and the Cooling Lake. The owner or operator must measure all static water levels on the same day and as close in time as possible before the purging and sampling event;
c. Date and time of static water level measurement for each well;
d. Ground-surface elevation at each well;
e. Facility property boundaries;
f. Identification of the aquifer represented, either by a name or elevation.
g. Solid waste fill boundaries;
h. Facility name and county;
i. Map scale, north arrow, groundwater flow direction arrows, and potentiometric-surface contour intervals;
j. Indications of which wells are considered background, upgradient, or downgradient; and
k. Locations and elevations of all site benchmarks.

D16. If a groundwater flow map indicates that the groundwater flow direction, including flow reversals, is other than anticipated in the design of the approved System listed in Requirement D3, then the owner or operator must notify IDEM of the difference in the groundwater monitoring report submitted for Requirement D23. The notification must include either of the following: information demonstrating that the System complies with 40 CFR 257.91(c); or a proposal to revise the System design for IDEM approval.

The owner or operator must determine if the System currently complies with 40 CFR 257.91(c) or a groundwater monitoring system approved by IDEM before collecting samples for the scheduled semiannual sampling event. If a flow reversal occurs, then the owner or operator may postpone, with IDEM approval, the scheduled semiannual sampling event in 30-day extension increments if they determine that the System does not comply with 40 CFR 257.91(c) or a groundwater monitoring system approved by IDEM.

If the owner or operator determines a groundwater flow reversal occurred during a scheduled semiannual sampling event, then data from that sampling event must not be utilized in statistical evaluations specified in the StEP or incorporated into background groundwater quality calculations and groundwater protection standard calculations, unless the owner or operator adequately demonstrates to IDEM that the data accurately represents established groundwater quality conditions when a flow reversal did not occur. Additionally, the owner or operator

must immediately schedule a replacement sampling event in order to complete the required semiannual evaluation for groundwater releases from the facility. Within seven days of scheduling the replacement sampling event, the owner or operator must notify IDEM of the schedule.

If design changes to the existing System are necessary, then the owner or operator must make the changes within 30 days after receiving IDEM approval of the revised design or other time frame approved by IDEM.

D17. Background groundwater monitoring wells must provide groundwater samples that represent historical conditions unaffected by a CCR unit or facility activities that may contribute Appendix III and Appendix IV constituents listed in Requirement D14 against which background comparisons occur. Additionally, for any background well added to the System listed in Requirement D3, the owner or operator must:

a. Establish background groundwater quality for the Appendix III and Appendix IV constituents listed in Requirement D14; and
b. Determine the background groundwater quality by sampling each new well for eight independent sampling events within 12 months after the well's installation, unless the owner or operator can justify to IDEM an extended period of no more than 12 additional months.

If the owner, operator, or IDEM determines that the current System (see Requirement D3) does not have the required background well(s), then within 60 days the owner or operator must submit a plan per Requirement D3 proposing to establish new or additional background wells for the current System for IDEM review and approval. This plan must include well location(s) for obtaining background groundwater quality samples that satisfy the specifications of this requirement.

D18. The owner or operator must implement the StEP identified in Requirement D11 and include the outcome of each statistical determination in a statistical evaluation report (see Requirement D23.d).

D19. The owner or operator must implement a detection monitoring program consistent with 40 CFR 257.94 and the StEP. If the owner or operator determines there is a statistically significant increase (SSI) over background for one or more of the Appendix III constituents listed in Requirement D14 at any of the downgradient groundwater monitoring wells, then the owner or operator must comply with one of the following requirements:

a. Demonstrate that a source other than the CCR unit caused the SSI over background levels for a constituent, or that the SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality (40 CFR 257.94(e)(2)). Within 45 days of detecting an SSI over background levels, or other time frame approved by IDEM, the owner or operator must submit the written demonstration to IDEM.

If the demonstration is approved, the owner or operator may continue with a detection monitoring program for any unit for which the demonstration was made;

b. Within 30 days of receiving notice that the demonstration is not acceptable to IDEM, submit an assessment monitoring program plan consistent with the requirements of 40 CFR 257.95, which includes the Appendix IV constituents listed in Requirement D14, to IDEM for approval. Within 90 days of determining an SSI, the owner or operator must establish and implement the assessment monitoring program following 40 CFR 257.95, which includes the Appendix IV constituents listed in Requirement D14. The owner or operator must also implement the assessment monitoring program plan after receiving approval from IDEM; or

c. If a demonstration is not pursued, the owner or operator must submit an assessment monitoring program plan specified in Requirement 19.b within 30 days of determining the SSI. Within 90 days of determining an SSI, the owner or operator must establish and implement the assessment monitoring program following 40 CFR 257.95, which includes the Appendix IV constituents listed in Requirement D14. The owner or operator must also implement the assessment monitoring program plan after receiving approval from IDEM.

D20. Within 90 days of finding that any of the Appendix IV constituents listed in Requirement D14 have been detected at a statistically significant level exceeding the groundwater protection standards (40 CFR 257.95(h)), the owner or operator must comply with one of the following requirements consistent with (40 CFR 257.95(g)(3)):

a. Complete the assessment of corrective measures consistent with 40 CFR 257.96, and submit the results of the corrective measures assessment to IDEM for approval. As part of the selection of corrective measures, the owner or operator must include an evaluation of potential groundwater flow reversals on the System. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. After receiving IDEM approval, the owner or operator must implement Requirement D21; or

b. Demonstrate that a source other than the CCR unit caused the contamination, or that the statistically significant level exceeding the groundwater protection standard resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality consistent with 40 CFR 257.95(g)(3)(ii). Within 90 days of detecting a statistically significant level exceeding the groundwater protection standard, the owner or operator must complete and submit the written demonstration to IDEM for approval.

If the demonstration is approved, then the owner or operator may continue with an assessment monitoring program for any unit for which the demonstration was made.

D21. At least 30 days prior to initiating actions consistent with 40 CFR 257.97 or approved by IDEM, the owner or operator must hold a public meeting to discuss the results of the corrective measures assessment with interested and affected parties. As soon as feasible, the owner or operator must select a remedy that, at a minimum, meets the standards listed in 40 CFR 257.97(b). The owner or operator must submit the first semiannual report describing the progress in selecting and designing the remedy (40 CFR 257.97(a)) to IDEM for review and approval. If additional semiannual progress reports are necessary, the owner or operator must submit the reports within six months of submitting the previous semiannual report. The final report for the selected remedy must, at a minimum, meet the standards listed in 40 CFR 257.97(b), utilizing the provisions specified in 40 CFR 257.97(c) and (d), and must be approved by IDEM.

D22. Within 90 days of receiving IDEM approval of the selected remedy, the owner or operator must initiate remedial activities based on the approved remedy and the standards listed in 40 CFR 257.98 or standards approved by IDEM. The corrective action program is complete when IDEM approves the owner or operator's demonstration that concentrations of Appendix IV constituents listed in Requirement D14 have not exceeded the groundwater protection standard(s) for a period of three consecutive years at all points of the plume beyond the System following 40 CFR 257.98(c).

REPORTING

D23. The owner or operator must submit a groundwater monitoring report that includes the results obtained from the implementation of Requirements D14 or D17 no later than 60 days after each groundwater monitoring event with the following exceptions:

- The owner or operator must submit radium-specific information no later than 90 days after the groundwater monitoring event.
- If the owner or operator implements a verification resampling program, then the owner or operator must submit verification resampling results no later than 30 days after the last verification event. Verification resampling is defined in the March 2009 *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities* (EPA 530/R-09-007).

The owner or operator must submit the report to the IDEM Solid Waste Permits Section in one unbound paper copy and in one electronic PDF file.
The report must include the following:

a. One original unbound laboratory-certified report with analytical results, field parameters (see Requirement D24), field sheets, and chain-of-custody forms. The laboratory-certified report must include the following: detection limit for each chemical constituent, date samples collected, date the laboratory received the samples, date the laboratory analyzed the samples, date the laboratory prepared the report, method of analysis the laboratory used for each constituent, sample identification number for each sample, and results of all sample analyses;

b. All information specified in Requirement D15 and a table summarizing the static water level and groundwater elevation for each well;
c. An evaluation of the groundwater quality, recent notifications of any compliance issues related to a problematic well (see Requirement D8), special field observations and procedures, and deviations from the SAP; and
d. One original unbound copy of the statistical evaluation report (see Requirement D18).

The owner or operator may mail the PDF copy and electronic data file specified in Requirement D24 on a CD-ROM or DVD. The owner or operator must clearly label the PDF copy and electronic data file with the facility name and a brief description of the file. Alternatively, the owner or operator may email the PDF copy and electronic data file to the IDEM Solid Waste Permits Section at the address listed in Requirement A3 and carbon copy olqdata@idem. IN. gov. The email must include the facility name and a brief description typed in the email's subject heading.

D24. The owner or operator must submit one electronic data file of the analytical results and field parameters from the System (see Requirement D3) formatted as an ASCII, tab-delimited text file. The electronic data file must contain the facility's name, SW Program ID number, and the name of the analytical laboratory. Additionally, the file must include the fields listed below for the analytical results and as applicable, the following field parameters: pH, specific conductance, temperature, turbidity, well depth, depth to water, and static water elevation.

a. SamplingDate: Month, day, and year (mm/dd/yyyy). Value should be formatted as a date if possible.
b. SamplePointName: Names of groundwater monitoring wells, piezometers, leachate wells, surface water collection points, etc.
c. LaboratorySample ID: ID assigned to the sample by the laboratory.
d. SampleType: Regular, duplicate(s), trip blank(s), equipment blank(s), field blank(s), verification re-sample(s), and replicate(s).
e. SpeciesName: Chloride, sodium, ammonia, field pH, etc. The order of constituents is not critical. However, it is best to reflect the order that is on the laboratory-data sheets and keep all field data grouped together. Metals should indicate "dissolved" phase or "total" phase. Associated static water levels do not have their own header, but must be entered as "GW WaterLevel" under the header "SpeciesName. " The actual elevations must be entered under the header "Concentration. "
f. Concentration (results): The entry must be a number. Please do not enter text, such as "NA," "ND," or "<. "
g. ConcentrationUnits: mg/l, µg/l, standard units for pH, degrees Celsius (°C) or degrees Fahrenheit (°F) for temperature, and umhos/cm for specific conductance.
h. Detected: Yes or no.
i. DetectionLimit.
j. AnalyticalMethods.

k. EstimatedValue: Indicate “Yes” if the reported concentration is an estimated value. If a value recorded was not estimated, enter “No. ” If a concentration is estimated, use the “Comment” field to explain why the concentration was estimated.
l. Comment: Analytical laboratory and/or field personnel comments regarding the reported results.
m. SampleMedium: Groundwater, leachate, surface water, etc.
n. ProgramArea: Solid Waste.

Additional guidance on electronic data file submittals is available on IDEM's website at www.in.gov/idem/landquality/2369.htm or by emailing questions to olqdata@idem.IN.gov.

D25. The owner or operator must retain laboratory quality assurance/quality control (QA/QC) documentation from valid analyses of groundwater samples for at least three years.

Upon IDEM request, the owner or operator must submit the laboratory QA/QC for a specified groundwater monitoring data package, in one paper copy and one electronic copy in PDF format, within 60 days after receiving the request. The "*Solid & Hazardous Waste Programs, Analytical Data Deliverable Requirements: Supplemental Guidance*" provides additional information about laboratory QA/QC. The guidance is available on IDEM's website at:
www.in.gov/idem/landquality/files/sw_resource_data_deliverable_reqs.pdf.

E. FINANCIAL RESPONSIBILITY FOR CLOSURE AND POST-CLOSURE

E1. The owner or operator must update and maintain a financial assurance mechanism as specified in 329 IAC 10-39 in an amount not less than the estimated costs of closure and post-closure in the approved closure and post-closure plans for the APS. The owner or operator must submit signed originals of the financial assurance mechanism and updates used to meet this requirement.

E2. The owner or operator must annually review and submit an update by June 15 addressing the following items as detailed in 329 IAC 10-39-2(c) and (d), and 329 IAC 10-39-3(c):

a. The owner or operator must adjust the closure and post-closure cost estimates for inflation.

b. The owner or operator must revise the cost estimates to account for changes which increase the cost of closure and/or post-closure.

c. The owner or operator may revise the cost estimates to account for changes which reduce the cost of closure and/or post-closure. The owner or operator must provide documentation supporting reduced cost-estimates, for example: letters and maps documenting areas certified as closed.

d. The owner or operator must submit an existing contour map showing the approved solid waste land disposal facility that delineates the boundaries of all areas into which waste has been placed and the boundaries of areas certified as closed. The map must be certified by a professional engineer or a registered land surveyor.

e. The owner or operator must submit documentation showing that the financial assurance mechanism is current and adequate to cover the estimated costs of closure and post-closure. The owner or operator must submit signed originals of the financial assurance mechanism and/or updates used to meet this requirement.

F. COMPLIANCE SCHEDULE REQUIREMENTS

F1. Within 60 days after receiving this IDEM Approval Letter, the owner or operator must submit a Sampling and Analysis Plan (SAP) that meets Requirement D9. Prior to IDEM's approval of the SAP, the owner or operator will continue to operate in accordance with groundwater sampling and analysis requirements under 40 CFR 257.93. The SAP must describe sampling protocols, equipment, and methods for collecting samples to be analyzed for constituents listed in Requirement D14. The owner or operator must implement the SAP upon IDEM's written approval. The submittal must include one original paper copy and one PDF electronic file.

F2. Within 60 days after receiving this IDEM Approval Letter, the owner or operator must submit a Quality Assurance Project Plan (QAP_jP) that meets Requirement D10 for the constituents listed in Requirement D14. Prior to IDEM's approval of the QAP_jP, the owner or operator will continue to operate in accordance with quality assurance and quality control requirements under 40 CFR 257.93. The owner or operator must implement the QAP_jP upon IDEM's written approval. The submittal must include one original paper copy and one PDF electronic file.

F3. Within 60 days after receiving this IDEM Approval Letter, the owner or operator must submit a Statistical Evaluation Plan (StEP) that meets Requirement D11. Prior to IDEM's approval of the StEP, the owner or operator will continue to operate in accordance with the statistical methods developed under 40 CFR 257.93. The StEP is effective upon IDEM's written approval. The submittal must include one original paper copy and one PDF electronic file.

In the StEP, the owner or operator must present the data distribution assumptions. The statistical procedures must be appropriate for the data distribution and provide a balance between the probability of falsely identifying a statistically significant difference and the probability of failing to identify a statistically significant difference. To achieve the balance, the owner or operator should consider the background sample sizes, the number of individual statistical tests performed, the number of groundwater monitoring wells, and the specific verification resampling method. The statistical procedures must account for analytical results below method detection limits.

F4. Within 180 days after receiving this IDEM Approval Letter, the owner or operator must submit for review and approval a groundwater monitoring well installation plan and schedule for the installation of MW-28A, MW-56A (if applicable depending on aquifer thickness encountered during drilling), MW-56B, MW-56C, MW-57B, MW-57C, MW-58C, and MW-59C listed in Requirement D3.

F5. Within 60 days after completing well installations described under Requirement F4, the owner or operator must submit new and updated geologic cross-sections including the information specified in Item 3 of the Geology Enclosure of the *Request for Additional Information* dated June 15, 2018 (VFC #82561369).

F6. The owner or operator must establish a financial assurance mechanism as specified in 329 IAC 10-39 in an amount not less than the estimated costs of closure and post-closure in the approved closure and post-closure plan no later than 45 days after receipt of this approval and submit proof of the establishment of the financial assurance to IDEM no later than 60 days after receipt of this approval.

NOTICE OF DECISION

The Indiana Department of Environmental Management (IDEM) issued a decision regarding a closure and post-closure plan for the Duke Gibson Generating Station South Ash Basin System (SW Program ID 26-UP-12) located at 1097 N 950 S, Owensville. This decision approves the closure of a portion of the coal combustion residual (CCR) surface impoundments at the facility, and it allows CCR to be permanently disposed of at the Duke Energy, LLC, Gibson Generation Station in Gibson County. The approved closure and post-closure plans are available for review online via IDEM's Virtual File Cabinet (VFC). Please go to: http://vfc.idem.in.gov/. You can search there for approval documents using a variety of criteria. A copy of the permit decision has also been mailed to the following library:

Owensville Carnegie Public Library, 110 South Main Street, Owensville, Indiana 47665-0218

However, due to the COVID-19 pandemic, the library may be closed or have limited access. If you need assistance accessing the permit, please contact the Solid Waste Permits Section at (317) 234-9536 or toll free within Indiana at (800) 451-6027, or send an e-mail to OLQ@idem.IN.gov with the permit information in the subject line.

APPEAL PROCEDURES

If you wish to challenge this decision, IC 13-15-6-1 and IC 4-21.5-3-7 require that you file a Petition for Administrative Review. If you seek to have the effectiveness of the permit stayed during the Administrative Review, you must also file a Petition for Stay. The Petition(s) must be submitted to the Office of Environmental Adjudication (OEA) at the address below within the following timeframes:

1. If you received this notice by U.S. mail, you must file the petition within 18 days of the notice postmark date (15 days from the date IDEM mailed the notice, plus 3 days because the notice was sent via U.S. mail).
1. If you received this notice by email, you must file the petition within 15 days of the date IDEM sent the email.
2. If an IDEM representative personally gave ("served") you this notice, you must file the petition within 15 days of the date you were given the notice.

Office of Environmental Adjudication
Indiana Government Center North, Room N103
100 North Senate Avenue
Indianapolis, IN 46204

The Petition(s) must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision, or otherwise entitled to review by law. Identifying the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, or date of this notice will expedite review of the petition. Additionally, IC 13-15-6-2 and 315 IAC 1-3-2 require that your Petition include:

1. the name, address, and telephone number of the person making the request;
2. the interest of the person making the request;
3. identification of any persons represented by the person making the request;
4. the reasons, with particularity, for the request;
5. the issues, with particularity, for the request;
6. identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type granted or denied by the Commissioner's action; and
7. a copy of the pertinent portions of the permit, decision, or other order for which you seek review, at a minimum, the portion of the Commissioner's action that identifies the person to whom the action is directed and the identification number of the action.

Pursuant to IC 4-21.5-3-1(f), any document serving as a petition for review or review and stay must be filed with the OEA. Filing of such a document is complete on the earliest of the following dates:

1. the date on which the petition is delivered to the OEA;
2. the date of the postmark on the envelope containing the petition, if the petition is mailed to the OEA by United States mail; or
3. the date on which the petition is deposited with a private carrier, as shown by a receipt issued by the carrier, if the petition is sent to the OEA by private carrier.

In order to assist permit staff in tracking any appeals of the decision, please provide a copy of your petition to Anna Mishel, IDEM, Solid Waste Permits, IGCN 1154, 100 North Senate Ave., Indianapolis, IN 46204-2251.

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The OEA will provide you with notice of any pre-hearing conferences, preliminary hearings, hearings, stays, or orders regarding this decision if you submit a written request to the OEA. If you do not provide a written request to the OEA, you will no longer be notified of any proceedings pertaining to this decision.

More information on the review process is available at the website for the Office of Environmental Adjudication at http://www.in.gov/oea..

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www. idem. IN. gov
Eric J. Holcomb
Governor
Bruno L. Pigott
Commissioner

What if you are not satisfied with this decision and you want to file an appeal?

Who may file an appeal?
The decision described in the accompanying Notice of Decision may be administratively appealed. Filing an appeal is formally known as filing a "Petition for Administrative Review" to request an "administrative hearing".

If you object to this decision issued by the Indiana Department of Environmental Management (IDEM) and are: 1) the person to whom the decision was directed, 2) a party specified by law as being eligible to appeal, or 3) aggrieved or adversely affected by the decision, you are entitled to file an appeal. (An aggrieved and adversely affected person is one who would be considered by the court to be negatively impacted by the decision. If you file an appeal because you feel that you are aggrieved, it will be up to you to demonstrate in your appeal how you are directly impacted in a negative way by the decision).

The Indiana Office of Environmental Adjudication (OEA) was established by state law – see Indiana Code (IC) 4-21. 5-7 – and is a separate state agency independent of IDEM. The jurisdiction of the OEA is limited to the review of environmental pollution concerns or any alleged technical or legal deficiencies associated with the IDEM decision making process. Once your request has been received by OEA, your appeal may be considered by an Environmental Law Judge.

What is required of persons filing an appeal?
Filing an appeal is a legal proceeding, so it is suggested that you consult with an attorney. Your request for an appeal must include your name and address and identify your interest in the decision (or, if you are representing someone else, his or her name and address and their interest in the decision). In addition, please include a photocopy of the accompanying Notice of Decision or list the permit number and name of the applicant, or responsible party, in your letter.

Before a hearing is granted, you must identify the reason for the appeal request and the issues proposed for consideration at the hearing. You also must identify the permit terms and conditions that, in your judgment, would appropriately satisfy the requirements of law with respect to the IDEM decision being appealed. That is, you must suggest an alternative to the language in the permit (or other order, or decision) being appealed, and your suggested changes must be consistent with all applicable laws (See Indiana Code 13-15-6-2) and rules (See Title 315 of the Indiana Administrative Code, or 315 IAC).

The effective date of this agency action is stated on the accompanying Notice of Decision (or other IDEM decision notice). If you file a "Petition for Administrative Review" (appeal), you may wish to specifically request that the action be "stayed" (temporarily halted) because most appeals do not allow for an automatic "stay". If, after an evidentiary hearing, a "stay" is granted, the IDEM-approved action may be halted altogether, or only allowed to continue in part, until a final decision has been made regarding the appeal. However, if the action is not "stayed" the IDEM-approved activity will be allowed to continue during the appeal process.

Where can you file an appeal?
If you wish to file an appeal, you must do so in writing. There are no standard forms to fill out and submit, so you must state your case in a letter (called a petition for administrative review) to the Indiana Office of Environmental Adjudication (OEA). Do not send the original copy of your appeal request to IDEM. Instead, send or deliver your letter to:

The Indiana Office of Environmental Adjudication
100 North Senate Avenue, Room N103
Indianapolis, IN 46204

If you file an appeal, also please send a copy of your appeal letter to the IDEM contact person identified in the Notice of Decision, and to the applicant (person receiving an IDEM permit, or other approval).

Your appeal (petition for administrative review) must be received by the Office of Environmental Adjudication in a timely manner. The due date for filing an appeal may be given, or the method for calculating it explained, on the accompanying Notice of Decision (NOD). Generally appeals must be filed within 18 days of the mailing date of the NOD. To ensure that you meet this filing requirement, your appeal request must be:

1) Delivered in person to OEA, by the close-of-business on the eighteenth day (if the 18th day falls on a day when the Office of Environmental Adjudication (OEA) is closed for the weekend or for a state holiday, then your petition will be accepted on the next business day on which OEA is open), or
2) Given to a private carrier who will deliver it to the OEA on your behalf, (and from whom you must obtain a receipt dated on or before the 18th day), or
3) For those appeal requests sent by U. S. Mail, your letter must be postmarked by no later than midnight of the 18th day, or
4) Faxed to the OEA at (317) 233-9372 before the close-of-business on the 18th day, provided that the original signed "Petition for Administrative Review" is also sent, or delivered, to the OEA in a timely manner.

What are the costs associated with filing an appeal?
The OEA does not charge a fee for filing documents for an administrative review or for the use of its hearing facilities. However, OEA does charge a fifteen cent ($. 15) per page fee for copies of any documents you may request. Another cost that could be associated with your appeal would be for attorney's fees. Although you have the option to act as your own attorney, the administrative review and associated hearing are complex legal proceedings; therefore, you should consider whether your interests would be better represented by an experienced attorney.

What can you expect from the Office of Environmental Adjudication (OEA) after you file for an appeal?
The OEA will provide you with notice of any prehearing conference, preliminary hearings, hearings, “stays,” or orders disposing of the review of this decision. In addition, you may contact the OEA by phone at (317) 232-8591 with any scheduling questions. However, technical questions should be directed to the IDEM contact person listed on the Notice of Decision.

Do not expect to discuss details of your case with OEA other than in a formal setting such as a prehearing conference, a formal hearing, or a settlement conference. The OEA is not allowed to discuss a case without all side being present. All parties to the proceeding are expected to appear at the initial prehearing conference.

Indiana Department of Environmental Management
Response to Public Comments
Proposed Closure and Post-Closure Plans for the South Ash Basin System
located at Duke Energy's Gibson Generating Station 26-UP-12

SW Program ID 26-UP-12 (the South Ash Basin System) includes both the South Settling Basin and the South Ash Fill Area.

It should be noted that some of these comments were made on the original closure plan/post-closure plans prior to requests for additional information from IDEM, and additional modifications/changes and addendum to the original submittals dated July 24, 2019 (VFC #82821966).

Documents:	Date:	VFC #:
Closure Plan	12.21.16	80398684
RAI #1	06.15.18	82561369
Response to RAI #1	08.15.18	82600864
Response to RAI #1 Addendum 1	09.25.18	82623082
RAI #2	01.31.19	82683644
Response to RAI #2	04.05.19	82746629
Supplemental Response to RAI #2	02.26.20	82923942

Comment #1:

Duke Energy's own analysis reveals significant groundwater contamination at Gibson. Groundwater monitoring at the site, as well as in the Gibson Cooling Pond (also known as Gibson Lake), shows that groundwater is already impaired for boron, sulfate, total dissolved solids, manganese, arsenic and other coal ash-related constituents. The impacts of coal ash disposal at the site are especially pronounced in the Cooling Pond. the "overwhelming" hydrological influence of the Cooling Pond ensures that groundwater elevations exceed the base of the ash in both the North and South Ash Pond systems, meaning that the ash will continue to sit in (and leach into) groundwater even after ash pond closure is completed.

Response to Comment #1:

Improvements to surface water quality are being addressed through an enforcement action by IDEM's Office of Water Quality (Duke Energy's approved Implementation Plan, Rev. 2 dated August 16, 2017 (VFC #82906735), the Gibson Generating Station Surface Water Quality Model for Gibson Station Cooling Pond dated December 15, 2019, and consistent with the requirements of the Agreed Order (Case No. 2015-23003-W)).

The South Settling Basin is going through closure by removal[1] of all coal combustion residuals (CCR) and a minimum of 1 foot of soil beneath the waste. Additionally, this unit is still required to perform 30 years of post-closure maintenance and groundwater monitoring.

The historical South Ash Fill Area does include CCR below the historical high water table, but it is not bound by the Federal CCR Rule under 40 CFR 257, Subpart D. Regardless, the IDEM Approval does require the single groundwater monitoring system that surrounds both the South Settling Basin and the South Ash Fill Area to meet all detection monitoring,

[1] As used in this document, "removal" does not mean closure as contemplated by 40 CFR 257.102(c). "Removal" as used herein is intended to have its commonly understood, everyday meaning, and is not intended as a term of art.

assessment monitoring, and corrective action groundwater monitoring requirements specified in the Federal CCR Rule.

Comment #2:

Duke in the Closure Plans refers IDEM to "historical groundwater data" at the site. But the "historic" groundwater data from the monitoring wells surround the ash ponds does not represent background conditions. The Closure Plans themselves, as well as the results of groundwater monitoring, make clear that all the wells surrounding the ash ponds, including the wells that the company cites as "upgradient" wells, have been impacted by coal ash pollution. There are no unaffected background wells in the vicinity of the South Ash Basin System.

Response to Comment #2:

Requirements D3 and D17 of the IDEM approval specify that the facility must use groundwater monitoring wells MW-14A, MW-14C, MW-19A, and MW-19C as their background monitoring locations. These wells are located east of the Cooling Lake and east of the East Ash Pond, and appear to be appropriate background groundwater monitoring locations. Requirement D17 also specifies that background groundwater monitoring wells (MW-14A, MW-14C, MW-19A, and MW-19C) must provide groundwater samples that represent historical conditions unaffected by a CCR unit or facility activities that may contribute Appendix III and IV constituents listed in Requirement D14, against which background comparisons occur.

Requirement D17 further states, "If the facility or IDEM determines that the current groundwater monitoring system does not have the required background well(s), then within 60 days the facility must submit a plan proposing to establish new or additional background wells for the current monitoring system for IDEM review and approval. This plan must include well location(s) for obtaining background groundwater quality samples that satisfy the specifications of this requirement."

Comment #3:

Closure in place will not prevent continued contamination of the Wabash River and groundwater. Duke Energy's coal ash impoundments at Gibson are sitting in groundwater now, and coal ash in those impoundments will continue to sit in groundwater even if those impoundments are capped. Because much coal ash will continue to sit in groundwater if the ash ponds are closed in place, and other coal ash above it will be periodically saturated with groundwater when the water table is high, the coal ash at Gibson will continue to leach harmful coal ash pollutants into both the groundwater and the Wabash River into which some of that groundwater flows.

Response to Comment #3:

As noted above, the South Settling Basin is undergoing closure by removal. Therefore, this unit will no longer have CCR in contact with the groundwater.

Please note, South Ash Fill Area is not subject to 329 IAC 10-9-1(c), which incorporates portions of 40 CFR 257, Subpart D. Regardless, the IDEM Approval does require the single groundwater monitoring system that surrounds both the South Settling Basin and the South Ash Fill Area to meet all detection monitoring, assessment monitoring, and corrective action groundwater monitoring requirements specified in the Federal CCR Rule.

Comment #4:

Duke Energy failed to consider cost of corrective action when evaluating cost of closure in place. Duke's Closure Plans for the Gibson ash impoundments include estimated costs for some closure and post-closure activities, but they do not estimate the costs of corrective action for the groundwater contamination at the Gibson site. As has been documented in Duke Energy's sampling to date, groundwater under the ash ponds at Gibson is heavily impacted by coal ash contaminants. Utilities that have contaminated groundwater with coal ash are required to take corrective action under the federal CCR rule.

The cost of decades of groundwater corrective action could make a significant difference in the total closure and post-closure cost for the Gibson coal ash impoundments. If that cost is taken into account, is closure in place still the most cost-effective approach?

Response to Comments #4:

As noted above, the South Settling Basin is undergoing closure by removal. Therefore, this unit will no longer have CCR in contact with the groundwater.

Please note, South Ash Fill Area is not subject to 329 IAC 10-9-1(c), which incorporates portions of 40 CFR 257, Subpart D. Regardless, the IDEM Approval does require the single groundwater monitoring system that surrounds both the South Settling Basin and the South Ash Fill Area to meet all detection monitoring, assessment monitoring, and corrective action groundwater monitoring requirements specified in the Federal CCR Rule.

Cost of remediation is not included in the post-closure cost maintenance. However, remediation will be implemented as required by law. The CCR rule and IDEM rule do not require estimate of closure costs in selecting the closure method.

Comment #5:

Duke Energy failed to consider alternatives to closure in place. Duke Energy's Closure Plans for Gibson does not include an analysis of alternatives. The most protective storage of coal ash is in a dry landfill on high ground with a composite liner and leachate collection and treatment. This alternative should be evaluated for the coal ash impoundments at Gibson.

Response to Comment #5:

IDEM and federal rules do not require analysis of alternative closure options. Duke proposed to close South Ash Fill Area by closure in-place and South Settling Basin by removing ash, and IDEM has deemed Duke's plans approvable under applicable law.

Comment #6:

The Closure Plans do not meet the closure performance standards for closure in place, set forth at 40 C.F.R. § 257.102. The proposed Gibson Closure Plans would leave abundant coal ash sitting in groundwater perennially and allows other coal ash to be periodically saturated by groundwater, without a liner. That would not control the post-closure infiltration of liquids into the waste, nor would it control the formation and escape of leachate.

Response to Comment #6:

South Settling Basin is to be closed by removal of all ash. This basin meets closure requirements set in 40 CFR 257, Subpart D. The closure of South Ash Fill Area is governed by IDEM rules, 329 IAC 10, and Duke demonstrated that closure method with

geomembrane cover will be protective and control escape of waste and leachate. Contamination detected in the groundwater will need to be addressed by all detection monitoring, assessment monitoring, and corrective action groundwater monitoring requirements specified in the Federal CCR Rule.

Comment #7:

The Closure Plans do not meet the closure performance standards for closure in place, set forth at 40 C.F.R. § 257.102. Duke Energy did not include an analysis of different closure alternatives in the Closure Plans, and thus has not shown that its proposal limits infiltration of liquids or releases of leachate "to the maximum extent feasible."

Response to Comment #7:

Please refer to IDEM Response to Comments #1, #5 and #6.

Comment #8:

The Closure Plans do not meet the closure performance standards for closure in place, set forth at 40 C.F.R. § 257.102. The high risk of structural failure of the ash impoundments at Gibson means that there is a continued threat that earthen and ash dams separating the ash from the Wabash River will collapse, leading to the release of the ash itself.

Response to Comment #8:

South Ash Fill Area is subject to IDEM closure standards. Duke provided adequate slope stability calculations in the documents dated September 25, 2018 (VFC #82623082), and IDEM has evaluated the results and determined the analyses to be satisfactory. The South Settling Basin is to be closed by removal of ash, but still subject to post-closure maintenance and monitoring requirements.

Comment #9:

Before Duke Energy may install any final cover over the impoundments at Gibson, it must comply with the CCR rule's provisions concerning "drainage and stabilization of CCR surface impoundments." "Free liquids" have not been eliminated from the coal ash in the impoundments, nor do the Closure Plans provide measures to fully eliminate that groundwater (including from the bottom of the impoundments) going forward. Nor do the Closure Plans ensure that the "remaining wastes" will be "stabilized sufficient to support the final cover system." As noted above, wet coal ash is not a stable material; a final cover would be a significant risk of sagging, dislodging or cracking if the subsurface ash gave way.

Response to Comment #9:

Please refer to Response to Comments #1, #5, and #6.

Comment #10:

Duke Energy's Closure Plans fail to comply with the EPA CCR Rule's mandates for establishing background concentrations. Under the CCR Rule, the owner of coal ash ponds "must establish background groundwater quality in a hydraulically upgradient or background well for each of the constituents required" to be monitored, 40 C.F.R. § 257.93(d), and may not rely on groundwater that has been "affected by leakage from a CCR unit." 40 C.F.R. § 257.91(a)(1). As described in detail in the attached Geo-Hydro reports, the monitoring wells Duke Energy cites as "upgradient" from the ash ponds appear to have been impacted by coal ash contaminated groundwater, and thus may not be used to establish background.

Response to Comment #10:

Please refer to Response to Comment #2.

Comment #11:

The Closure Plans are inconsistent with the EPA CCR Rule's requirements pertaining to which constituents must be monitored. Under the EPA CCR Rule, owners of coal ash impoundments must first perform "detection monitoring" for boron, sulfate, total dissolved solids and several other constituents. 40 C.F.R. § 257.94. If any of those pollutants are found to exceed background concentrations, then "assessment monitoring" of constituents including antimony, arsenic, lead, mercury, molybdenum, and selenium, among others, must be performed. 40 C.F.R. § 257.95. Assessment monitoring must continue until concentrations of all constituents – both "detection monitoring" and "assessment monitoring" constituents – are at or below background levels.

Response to Comment #11:

The closure/post-closure plan has been updated to reference groundwater and corrective action requirements under 40 CFR 257, Subpart D. Additionally, the IDEM Approval Letter also specifies that the facility must comply with 329 IAC 10-9-1(c), which incorporates portions of 40 CFR 257, Subpart D (Groundwater Monitoring and Corrective Action), and includes groundwater monitoring requirements that meet 40 CFR 257, Subpart D standards for detection monitoring, assessment monitoring, and corrective action.

Comment #12:

The Closure Plans do not meet the CCR Rule's mandates for corrective action if groundwater contamination is found. The Closure Plans do not ensure that contamination is addressed in the same timeline as required by the EPA CCR Rule, nor do they propose the same triggers for corrective action as are mandated by the CCR Rule. Specifically, the Closure Plans propose to compare future contaminant concentrations in each monitoring well against existing concentrations in the same wells to determine if further remedies are required, as opposed to comparing contaminant concentrations with the applicable groundwater standards (MCLs or, if no MCL has been established, background concentrations), as required the EPA CCR Rule. Moreover, the Closure Plans do not ensure that remedies put into place by the company achieve the groundwater protection standards, as required by the EPA CCR Rule.

Response to Comment #12:

Please refer to Response to Comment #11.

Comment #13:

No surface impoundment in Indiana may be closed unless and until the associated closure plan is approved by IDEM's commissioner, and his approval is contingent on a showing that the proposed closure "is based on management practices that are protective of human health and the environment." The Closure Plans do not protect either human health or the environment because they comply with neither the EPA CCR Rule nor the Indiana provisions to which IDEM looks when evaluating impoundment closure plans. The Closure Plans would allow toxic coal ash constituents to pollute Indiana's groundwater and the Wabash River in perpetuity.

Response to Comment #13:

Please refer to Response to Comment #11.

Additionally, for South Ash Fill Area subject to closure under IDEM rule, Duke demonstrated that closure method with geomembrane cover will be protective and control escape of waste and leachate.

Comment #14:

Redox sensitive parameters such as arsenic, chromium and other sensitive parameters may be liberated from wastes and/or sediments in response to changes in groundwater elevation, or other changes that affect chemical equilibrium. The closure plan needs to evaluate and describe the conditions that have the potential to affect subsurface redox conditions in order to avoid unexpected releases of ash-related contaminants.

Response to Comment #14:

40 CFR 257, Subpart D does not require facilities to report redox measurements. However, evaluation of redox sensitive parameters may be appropriate if the facility moves into assessment monitoring and/or corrective action. Following the issuance of IDEM's approval letter, the facility must submit all groundwater monitoring results to IDEM for review and approval. IDEM staff will evaluate whether the facility adequately determined if further monitoring or remediation activities are necessary. All facets of 40 CFR 257, Subpart D including detection monitoring, assessment monitoring, and corrective action, when applicable, will be required of the facility.

Comment #15:

The post-closure care period is inadequate, even in the unlikely event that the elevation of the bottom of the ponds is determined to be located well above groundwater. The Closure Plan describes a post-closure care period of at least 30 years. A 30-year post-closure care period renders the proposed closure a temporary fix to a permanent problem. Over time, the processes of cap erosion and decomposition, animal burrowing, and/or anthropogenic activities will invariably result in increased infiltration of water into the waste and leaching of contamination into groundwater. Even more problematic is that the monitoring program may have been discontinued by the time that these processes manifest themselves in deteriorating water quality. The proposed Closure Plan essentially pushes the problem under a cover that may last long enough that nobody will be looking.

Response to Comment #15:

The closure plan complies with current regulatory requirements. In addition to requirements listed in 329 IAC 10-31-5, -6, and -7, 329 IAC 10-31-4, and 40 CFR 257.104 provide IDEM the ability to extend the post-closure care period. Please see Requirement C2 of the approval letter.

Comment #16:

The key to successful disposal of coal ash is to keep the ash dry. Episodic re-wetting of ash placed above the normal water table, but within range of high water events will cause continued generation of ash leachate and impacts to downgradient groundwater quality.

Response to Comment #16:

Please refer to Response to Comment #13.

Comment #17:

The Closure Plan indicates that the base of coal ash elevation in the South Ash Fill is at an elevation of between 376 and 386 feet. The Wabash River is at an elevation of 379.34 and groundwater elevations at up to 385 feet. The data included in the Closure Plan confirm that the bottom of ash is located three feet below that of the elevation of the river and up to

9 feet below groundwater. The high groundwater elevations beneath the ash basins is unlikely to diminish appreciably as long as the overwhelming influence of the Cooling Pond continues to be present. Comparison of the cross sections included in the Ash Basin Closure Plan and the water level map provided in comments show that the bottom of the ash impoundments is below groundwater elevation, even at a normal river stage. High water events in the river will cause even more of the ash to be below the rising groundwater.

Response to Comment #17:

Please refer to Response to Comments #1 and #3.

Comment #18:

Performance goals for each well are established based on current conditions for each parameter. The control limit used for comparison to individual monitoring concentrations is defined as the mean value plus 4.5 times the standard deviation of baseline values. Setting the control limit to the mean plus 4.5 standard deviations would be exceptionally effective at assuring that releases to the environment are never identified, regardless of whether or not the selected remedy is effective. The proposed closure plan however goes even further to eliminate the possibility of identifying an insufficient closure. The plan indicates that a potential indicator of a departure from remedy effectiveness is four successive goal limits exceeded in a single monitoring well over the scheduled (semi-annual) monitoring frequency. A single well has to exceed its unreasonably high limit during every sampling event over a two year period in order to be identified as exceeding the goal.

Response to Comment #18:

Please refer to Response to Comment #11.

Comment #19:

Review of the analytical data contained in Table 4 of submitted comments show that all of the wells that are currently being monitored show concentrations of ash-related constituents at concentrations above applicable USEPA water quality standards or RMLs. Boron was detected in concentrations above its RML, and Sulfate and TDS were detected in concentrations above their secondary drinking water standards in all 24 of the 24 reported analyses. Despite the fact that monitoring conducted to date shows significant impacts to groundwater quality, the lateral extent of these impacts has not been investigated nor identified.

Response to Comment #19:

Since submittal of the closure/post-closure plan, Duke has continued to gather groundwater quality data on a routine basis through their self-implementation of the Federal CCR requirements. The facility must account for and fulfill obligations under the Federal CCR rule and applicable state requirements for all groundwater data collected for boron and the other constituents noted in the comment. The facility's CCR regulated units cannot exceed the groundwater protection standards found in 40 CFR 257.95(h) without triggering further actions. Furthermore, concerning impacts to the groundwater, the facility must follow 40 CFR 257, Subpart D requirements for detection monitoring, assessment monitoring, and corrective action.

Additional Comments Dated June 10, 2019

Supplemental Comments on the Gibson Generating Station South Ash Basin System Modified Closure & Post-Closure Plan (Comments) dated June 10, 2019 (VFC #82792771) were submitted to IDEM. The Comments essentially agree with IDEM's assertion that coal combustion residuals (CCR) must be separated from groundwater to the maximum extent feasible to satisfy the closure performance standard under 40 CFR 257.102(d). IDEM received the Comments from Citizens Action Coalition, Hoosier Environmental Council, and Earthjustice. The Comments supplement previously submitted public comments dated July 24, 2017 (VFC #80500203). IDEM sent Duke Energy Indiana (DEI) a supplemental Request for Additional Information (RAI) dated June 15, 2018 (VFC #82561369). DEI responded to IDEM's RAI with a letter dated August 15, 2018 (VFC #82600864). The Comments address items from DEI's August 2018 letter.

Comment #20:

The coal ash impoundments at Gibson Generating Station sit below the water table and will continue to contaminate groundwater indefinitely if left in place.

Response to Comment #20:

Please refer to Responses to Comment #1, #3, and #11.

Comment #21:

Duke Energy's argument that closure by removal is not "feasible" after groundwater has been contaminated is belied by statements by EPA and Duke and Duke's conduct.

Response to Comment #21:

Please refer to Responses to Comment #1, #5, and #6.

Additional Comments Dated November 14, 2020

Supplemental Comments on the Gibson Generating Station South Ash Basin System Modified Closure & Post-Closure Plan (Comments) dated November 14, 2020 (VFC #83073055) were submitted to IDEM. The Comments essentially agree with IDEM's assertion that coal combustion residuals (CCR) must be separated from groundwater to the maximum extent feasible to satisfy the closure performance standard under 40 CFR 257.102(d). IDEM received the Comments from Hoosier Environmental Council and Sierra Club. The Comments supplement previously submitted public comments dated July 24, 2017 (VFC #80500203). The Comments follow the public meeting held virtually by Duke Energy on October 14, 2020.

Comment #22:

More evidence of groundwater contamination at the Gibson South Ash Basin has been collected.

Response to Comment #22:

Please refer to Responses to Comment #1, #3, and #11.

Comment #23:

Coal ash is sitting in groundwater beneath the South Ash Basin.

Response to Comment #23:

Please refer to Response to Comments #1, #3, and #11.

Comment #24:

The Closure and Post-Closure Plan for the Gibson South Ash Basin does not comply with federal and state coal ash requirements and will not prevent continuing contamination.

Response to Comment #24:

Please refer to Response to Comments #6.

Comment #25:

Duke's plan for closure in place at the Gibson ash ponds fails to provide equal protection for Indiana residents.

Response to Comment #25:

Please refer to Response to Comments #1, #3, #6, and #11.

Comment #26:

As described in detail in our previous comments, Duke's proposed Closure Plan does not comply with applicable closure requirements of 40 CFR 257 Subpart D, nor with Indiana's rules at 329 IAC 10-9. In addition, the Closure Plan's provisions related to use of CCR as structural fill to form the subgrade of the final cover fails to comply with the 40 CFR 257. More specifically, this use of CCR constitutes "overfill" as defined by 40 CFR 257.53, which must meet the location restrictions and design requirements for a new CCR landfills pursuant to 40 CFR 257.60 and 257.70. The proposed use of CCR as overfill in the Closure Plan does not comply with these requirements. Also, the Closure Plan violates 40 CFR 257.101 because it allows placement of CCR in a surface impoundment that does not comply with the liner requirements or location standards of the CCR Rule.

Response to Comment #26:

Duke will install a geomembrane cover to minimize releases from the structural fill. Also,

this pond has groundwater monitoring to monitor for releases from the pond.
In addition, EPA has approved structural fill over existing ponds for grading purposes.

From: Poe, Diane L
To: classifieds@pdclarion.com
Bcc: OAKES, GLYNDA; Mishel, Anna
Subject: Duke Gibson Generating Station Ash Basin System Permit Closure Plan Approval
Date: Wednesday, February 10, 2021 8:42:00 AM
Attachments: 021021 26-UP-12 NOD_only_COVID_newspaper.docx
image002.png
image004.png
image005.png
image006.png
image007.png
image008.png

To Whom It May Concern:

Please insert for one time only the enclosed legal notice, in The Princeton Daily Clarion, on Friday, February 12, 2021 (or earliest possible date).

If there is an additional charge to post this notice on your web site, please DO NOT post.

Starting January 2019, we are asking all newspapers to provide us an estimated invoice prior to publishing this notice. You may email it to my attention. Please include **Account Number 145463** on all billing correspondence.

As we understand it, you will provide us with a notarized form (publishers claim) and clippings showing the date on which the advertisement appeared in your paper. This information should be mailed to Diane Poe at the following address:

dpoe@idem.IN.gov or

Indiana Department of Environmental Management
Office of Land Quality
Permits Branch
IGCN Room 1101
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Please contact Diane Poe at (317) 232-4473 or dpoe@idem.IN.gov or Anna Mishel at (317) 233-6725 or amishel@idem.in.gov if you have any questions. Thank you for your cooperation.

COVID-19 Resources:

- **Indiana State Dept. of Health (ISDH) COVID-19 Call Center:** Call 877-826-0011 (available 8:00 am-5:00 pm daily).
- **Anthem NurseLine:** Call 800-337-4770 or visit the Anthem NurseLine online for a FREE symptom screening. Available to anyone with an Anthem health plan (this includes State of IN employees)
- **Anthem Employee Assistance Program (EAP)**: Available to full-time state employees and adults in household regardless of health plan participation. Call 800-223-7723 or

visit anthemeap.com (enter State of Indiana) for crisis counseling, help finding child/elder care, legal/financial consultation and much more.



Diane Poe, Administrative Assistant
Permits Branch | Office of Land Quality
Indiana Department of Environmental Management

(317) 232-4473 | dpoe@idem.IN.gov

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Eric J. Holcomb
Governor

Bruno L. Pigott
Commissioner

February 10, 2021

Owensville Carnegie Public Library
110 South Main Street
Owensville, Indiana 47665-0218

Re: Documents for Public View

Dear Sir/Madam:

A copy of a permit decision for the Gibson Generating Station South Ash Basin System is enclosed. Also enclosed is a copy of the public notice announcing this permit decision and indicating the documents' availability at your library. This public notice will appear in a local newspaper soon. Please make these documents available to the public for the next 20 days since this permit can be appealed.

Please date and sign the enclosed verification of receipt form and mail it to our office in the envelope provided.

If you have any questions or comments about the permit notice, please contact me by dialing (317) 233-6725 or by e-mail at AMishel@idem.IN.gov.

Sincerely,

Anna Mishel
Solid Waste Permits Section
Office of Land Quality

Enclosures: Notice of Decision
Permit Letter
Verification of Receipt Form
Agency Addressed Envelope

cc with enclosures: Gibson County Health Department
Gibson County Commissioners
Gibson County Solid Waste Management District
Director, Southwest IDEM Regional Office
Mayor, City of Owensville

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

AEP GENERATION RESOURCES, INC., APPALACHIAN POWER COMPANY, INDIANA MICHIGAN POWER COMPANY, KENTUCKY POWER COMPANY, OHIO POWER COMPANY, PUBLIC SERVICE COMPANY OF OKLAHOMA, SOUTHWESTERN ELECTRIC POWER COMPANY, WHEELING POWER COMPANY, COLETO CREEK POWER, LLC, DYNEGY MIDWEST GENERATION, LLC, ELECTRIC ENERGY, INC., ILLINOIS POWER GENERATING COMPANY, ILLINOIS POWER RESOURCES GENERATING, LLC, KINCAID GENERATION, L.L.C., LUMINANT GENERATION COMPANY LLC, MIAMI FORT POWER COMPANY LLC, ZIMMER POWER COMPANY LLC, DUKE ENERGY CAROLINAS, LLC, DUKE ENERGY PROGRESS, LLC, DUKE ENERGY INDIANA, LLC, THE LOWER COLORADO RIVER AUTHORITY, and TALEN ENERGY SUPPLY, LLC,	)	
Petitioners,	)	
v.	)	
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, United States Environmental Protection Agency,	)	**Case No. 24-1275**
Respondents.	)	

STANDING DECLARATION OF DALE E. LEBSACK, JR.

1. My name is Dale Lebsack, and I am the Chief Fossil Officer at Talen Energy Corporation. I am over the age of 18 years, and I am competent to testify concerning the matters in this declaration. I have personal knowledge of the facts set forth in this declaration, and if called and sworn as a witness, could and would competently testify to them.

2. Petitioners Talen Generation, LLC and Talen Montana Holdings, LLC (the "Talen Entities") are wholly owned subsidiaries of Talen. Talen is an independent power producer that owns and operates approximately 10.7 gigawatts of power infrastructure in the United States. Talen produces and sells electricity, capacity, and ancillary services into wholesale U.S. power markets, including PJM Interconnection, LLC ("PJM") and the Western Electricity Coordinating Council ("WECC"), with Talen's generation fleet principally located in the Mid-Atlantic and Montana. Talen's generation fleet includes wholly owned and partially owned assets that use nuclear, coal, oil, and natural gas as fuels. The Talen Entities are petitioners in this case, and I am submitting this declaration in support of the Talen Entities' statement regarding standing in this case.

3. In my current position as Chief Fossil Officer at Talen, I am responsible for asset management and operations for Talen's fossil generating assets in PJM, WECC, and ISO New England. In that capacity, I also serve as President of Talen Generation, LLC, which indirectly owns the fossil generating assets in PJM and is

an affiliate of Talen. I have worked for Talen and its predecessor companies for over 19 years. Over that time, I have held roles of increasing responsibility in multiple aspects of fossil power generation, including asset management, plant operations, engineering, environmental, health and safety, and project development. I have directly managed merchant generating assets in ERCOT, PJM, ISO-NE, NYISO, WECC, and SERC. The plants that I managed have utilized a wide range of technologies, including coal, gas, oil, and biomass-fired boilers; combined cycle units of varying configurations; and simple cycle gas turbines of differing designs.

4. Based on these responsibilities, I have knowledge regarding the regulations and requirements imposed on coal combustion residuals ("CCR") units by the U.S. Environmental Protection Agency ("EPA") and respective State environmental agencies.

5. The Talen Entities own, operate, and/or previously operated coal-fueled power plants in Pennsylvania, Maryland, and Montana, that, when generating electricity, resulted in the production of various types of CCR. The majority of the CCRs from these facilities are beneficially used in the wallboard and concrete industries. However, a portion is placed in landfills or surface impoundments that are regulated both at the state and federal level. In April 2015, EPA issued regulations that contained criteria for "existing and new CCR landfills and existing and new CCR surface impoundments." 80 Fed. Reg. 21,302 (April 17, 2015). Under

the new criteria (contained in 40 C.F.R. Part 257 Subpart D), "CCR units" became subject to specific location restrictions, design and operating criteria, groundwater monitoring and corrective action, closure requirements and post closure care, and recordkeeping, notification, and internet posting requirements. *Id.* The Talen Entities' power plants contained many "CCR units"—*i.e.*, landfills and impoundments that had not already been closed—that became subject to EPA's 2015 regulations and that have complied with the new requirements since the regulations became effective.

6. The 2015 regulations operate prospectively only, and applicability of the new requirements is based on a unit's status as of the effective date of the rule, October 19, 2015. That is, the regulations did not apply to any "CCR units that closed prior to October 19, 2015" (the effective date of the rule) in accordance with then-existing requirements. 88 Fed. Reg. at 32,034. As EPA explained in 2015, the regulations did not "require 'closed' surface impoundments to 'reclose'" or provide that the "literally hundreds of previously closed . . .surface impoundments—many of which were properly closed decades ago under state solid waste programs, have changed owners, and now have structures built on top of them—would be considered active CCR units." 80 Fed. Reg. at 21,343. As discussed below, prior to October 19, 2015, the Talen Entities had previously closed multiple CCR landfills and impoundments

in accordance with State and federal requirements at the time, at substantial effort and expense.

7. In addition, CCR outside of landfills and surface impoundments was not regulated by the new Subpart D regulations, but remained subject to State solid waste requirements and EPA's general solid waste criteria in 40 C.F.R. Part 257, Subpart A.

8. On May 8, 2024, EPA published a final rule that establishes new regulatory requirements for inactive CCR surface impoundments at inactive facilities (called "legacy CCR surface impoundments") and a new category of CCR areas that EPA called "CCR management units." 89 Fed. Reg. 38,950 (May 8, 2024) (the "Legacy Rule"). In the Legacy Rule, EPA defines a "legacy CCR surface impoundment" as "a CCR surface impoundment that no longer received CCR but contained both CCR and liquids on or after October 19, 2015, and that is located at an inactive electric utility or independent power producer." *Id.* at 39,100 (revising 40 C.F.R. § 257.53). A "CCR management unit" is "any area of land on which any noncontainerized accumulation of CCR is received, is placed, or is otherwise managed, that is not a regulated CCR unit." *Id.* at 39,100 (revising 40 C.F.R. § 257.53).

9. EPA's new regulations state that a "CCR management unit" "includes inactive CCR landfills and CCR units that closed prior to October 19, 2015[.]" *Id.* The new regulations further define "closed prior to October 19, 2015" to mean "the

CCR landfill or surface impoundment completed closure of the unit in accordance with State law prior to October 19, 2015." *Id.*

10. When it issued the new regulations, EPA identified multiple areas at plants owned and/or operated by certain of the Talen Entities that EPA believes to be "CCR management units" or "legacy CCR surface impoundments." *See, e.g.*, Universe of CCR Management Units, EPA Dock. ID EPA-HQ-OLEM-2020-0107-1032 (Apr. 2024); Universe of Legacy CCR Surface Impoundments, EPA Dock. ID EPA-HQ-OLEM-2020-0107-1030 (Apr. 2024). Specifically, EPA has identified seven areas at Colstrip, one area at the JE Corette Plant, and one area at Brunner Island on its list of coal combustion residual management units (CCRMUs). And EPA has identified two areas at the JE Corette Plant on its list of legacy CCR surface impoundments.

11. When EPA proposed the Legacy Rule in 2023, Talen submitted information to EPA that described how certain CCR units at its plants had been closed in accordance with State law prior to October 19, 2015, and have been complying with the state permitted or approved groundwater monitoring plans.

12. One of the areas identified by EPA as a "CCR management unit" was Ash Basin 5 at Brunner Island Steam Electric Station in Pennsylvania, which was operated from 1968 through 1997. The basin was closed in place in 2000 in accordance with Pennsylvania Residual Waste Regulations and a soil cover system was installed in accordance with the State program. The State of Pennsylvania

approved a Groundwater Monitoring Plan at the site, which included an abatement plan for groundwater protection. Despite its prior closure in accordance with State law and monitoring pursuant to State obligations, Ash Basin 5 would now also apparently be subject to regulation as a CCR management unit according to EPA and potentially the obligation to "re-close" under EPA's Legacy Rule. This is further complicated by the presence of a modern lined and regulated CCR landfill that sits on top of Basin 5. Current work plans anticipate the expansion of the landfill to assist with the closure of an onsite CCR regulated surface impoundment along with the need to manage future wastes.

13. Montour Steam Electric Station in Pennsylvania is an example of a facility that includes an inactive landfill that was closed in accordance with State law prior to October 19, 2015, but would apparently now be subject to regulation as a "CCR management unit." Ash Area 2 at Montour was taken out of service in 1994, and was closed under the Pennsylvania Residual Waste Program with a soil cap. The landfill has an existing state approved groundwater network, which is monitored quarterly, that demonstrates compliance with the Pennsylvania groundwater monitoring plan. In 2017, Montour amended their prior closure permit and received state approval to close Ash Area 2 by removal of material for offsite beneficial use. Overall, Ash Area 2 is currently conducting closure under state guidance, and groundwater sampling has shown compliance since the initiation of the groundwater

monitoring program almost 40 years ago. Nonetheless, Ash Area 2 would apparently be subject to new regulation—and potentially more stringent timelines, requirements, and additional groundwater monitoring requirements under EPA's Legacy Rule.

14. Additionally, at the Martins Creek Steam Electric Station, also in Pennsylvania, there is an impoundment that was previously closed under state residual waste regulations, Ash Basin 4. Ash Basin 4 was closed with significant oversight from state regulators and received a closure approval letter on July 02, 2013. Furthermore, in the 2015 Rule, EPA used Ash Basin 4 as an example to illustrate the appropriate timelines it would take to *close* an impoundment, which was expressly used to set timelines for closure at the federal level. 80 Fed. Reg. at 21,420. By doing this, EPA implicitly acknowledged that Martins Creek Ash Basin 4 was closed appropriately under the CCR Rule. Nonetheless, this area would apparently now also be subject to regulation under EPA's Legacy Rule.

15. Additionally, EPA identified in the list of Legacy Surface Impoundments two bottom ash ponds at JE-Corette in Montana. JE Corette retired prior to October 19, 2015, and therefore the ponds were not regulated under the 2015 rule. In 2019, the bottom ash ponds were closed by removal and currently there are no indications of releases to groundwater, because CCR is no longer there. Nonetheless, this area would apparently now also be subject to regulation under EPA's Legacy Rule.

16. In their recent comments to EPA and through previous comments, Talen submitted information about these sites that have been previously closed in accordance with State law.

17. In addition, EPA's new regulations would impose monitoring, corrective action, and closure obligations on the beneficial use of CCR. Beneficial use is encouraged under State laws and under EPA's 2015 regulations because it displaces the use of virgin materials in uses like road, structural fills, and general site construction and maintenance and is thus a positive for the environment. Under 40 C.F.R. §257.50(g) (issued in 2015), the requirements of 40 C.F.R. Part 257 Subpart D do "not apply to practices that meet the definition of a beneficial use of CCR." These uses are also not considered disposal of CCR under State law in Pennsylvania. See 25 Pa. Code Chapter 290. However, with the new definition of "CCR management unit," EPA now claims that this exclusion does not apply to certain practices that meet the definition of beneficial use or were considered beneficial uses under State law.

18. The Talen Entities (and its predecessors) have relied on the exclusion in 40 C.F.R. §257.50(g) and State laws to beneficially reuse CCR at their facilities for a variety of purposes in lieu of virgin material. In many cases, and when required, these uses were expressly authorized by State regulatory bodies. For example, Pennsylvania began regulating the beneficial use of CCR in 1992. Following this,

the state adopted an extensive permitting program for beneficially using CCR as structural fill, which allowed several of Talen's operational facilities to market and beneficially use CCR materials, if they received prior state approval. The state had set strict requirements that had to be met before a beneficial use project began; these included conducting chemical analysis of the material to ensure the CCR did not exceed the state-mandated maximum acceptable leachate levels, ensuring the material is not placed within a certain distance of the water table, ensuring that the material will not cause water pollution, proving the CCR material has the appropriate physical characteristics for the intended use, and, if the size permits, installing a groundwater monitoring system and implementing a groundwater monitoring program. Talen (or its predecessors) beneficially used CCR materials primarily as structural fill under the state permitting program starting in 1997. In 2005, Talen's predecessor created a guideline with oversight from the state for the beneficial use of structural fill and continued to beneficially use the material until 2014. Before a project began, the facility had to receive written approval from the state and show that the leachate that would be generated from the material was under the maximum acceptable leachate levels, and therefore would be extremely unlikely to cause water pollution. Notwithstanding these state regulations, they would apparently now be subject to additional federal regulation under the EPA's Legacy Rule.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct. Executed this 18th day of September 2024.

Dale E. Lebsack, Jr.

On Behalf of Talen Generation, LLC and Talen Montana Holdings, LLC

IN THE UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

AEP GENERATION RESOURCES, INC., APPALACHIAN POWER COMPANY, INDIANA MICHIGAN POWER COMPANY, KENTUCKY POWER COMPANY, OHIO POWER COMPANY, PUBLIC SERVICE COMPANY OF OKLAHOMA, SOUTHWESTERN ELECTRIC POWER COMPANY, WHEELING POWER COMPANY, COLETO CREEK POWER, LLC, DYNEGY MIDWEST GENERATION, LLC, ELECTRIC ENERGY, INC., ILLINOIS POWER GENERATING COMPANY, ILLINOIS POWER RESOURCES GENERATING, LLC, KINCAID GENERATION, L.L.C., LUMINANT GENERATION COMPANY LLC, MIAMI FORT POWER COMPANY LLC, ZIMMER POWER COMPANY LLC, DUKE ENERGY CAROLINAS, LLC, DUKE ENERGY PROGRESS, LLC, DUKE ENERGY INDIANA, LLC, THE LOWER COLORADO RIVER AUTHORITY, and TALEN ENERGY SUPPLY, LLC,	)	
Petitioners,	)	
v.	)	
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, United States Environmental Protection Agency,	)	**Case No. 24-1275**
Respondents.	)	

STANDING DECLARATION OF GARY O. SPITZNOGLE

1. My name is Gary O. Spitznogle, and I am the Vice President of Environmental Services, with responsibility to lead the support for environmental compliance associated with assets owned,

maintained, and operated by AEP Generation Resources, Inc., Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company, Public Service Company of Oklahoma, Southwestern Electric Power Company, and Wheeling Power Company, (collectively, "Operating Companies"). The Operating Companies are petitioners in this case, and I am submitting this Declaration in support of the Operating Companies' statement regarding standing in this case.

2. In my role, I am responsible for providing insight and direction into development of environmental policy and compliance strategies, assuring implementation of those strategies and ongoing compliance programs, as well as overseeing environmental support for all AEP generation and energy delivery facilities. In my prior role, I was Managing Director of Coal Combustion Residual Management. Based on my experience and current role, I am familiar with and have been responsible for implementing the regulations and requirements imposed on coal combustion residuals ("CCR") units by the U.S. Environmental Protection Agency ("EPA") and respective State environmental agencies.

3. The Operating Companies own, operate, and/or previously operated coal-fueled power plants in Arkansas, Indiana, Kentucky, Ohio, Oklahoma, Texas, Virginia and West Virginia that, when generating electricity, resulted in the production of various types of CCR materials. For decades, the CCR byproduct at these power plants was handled in a variety of ways, including being sold to third-parties for beneficial use (for example, to be used as an ingredient to manufacture concrete, paint, roofing materials and wallboard or for other beneficial uses); beneficially used on-site as a substitute for virgin material; or, as a last resort, disposed of in accordance with applicable state and federal laws.

4. In April 2015, EPA issued regulations that defined criteria for "existing and new CCR landfills and existing and new CCR surface impoundments." 80 Fed. Reg. 21,302 (April 17, 2015). Under the new criteria (contained in 40 C.F.R. Part 257 Subpart D), "CCR units" became subject to specific location restrictions, design and operating criteria, groundwater monitoring and corrective action, closure and post-closure care requirements, along with recordkeeping, notification, and internet posting obligations. *Id*. The Operating Companies owned power plant assets with many "CCR units"—*i.e.*, landfills and impoundments that had not already been closed—that became subject to EPA's 2015 regulations and have implemented compliance programs to meet the associated requirements. In Oklahoma and Texas, the Oklahoma Department of Environmental Quality ("ODEQ") and Texas Commission on Environmental Quality ("TCEQ"), respectively, have adopted state regulations that incorporate the 2015 CCR Rule requirements. ODEQ and TCEQ have been approved by EPA to administer regulation of the 2015 CCR Rule requirements.

5. The 2015 regulations operate prospectively only, and applicability is based on a generating unit's operational status as of the effective date of the rule, October 19, 2015. That is, the regulation did not apply to any "CCR units that closed prior to October 19, 2015" (the effective date of the rule) located on properties with active electric generating units. 88 Fed. Reg. at 32,034. As EPA explained in 2015, the regulations did not "require 'closed' surface impoundments to 'reclose'" or provide that the "literally hundreds of previously closed . . .surface impoundments—many of which were properly closed decades ago under state solid waste programs, have changed owners, and now have structures built on top of them—would be considered active CCR units." 80 Fed. Reg. at 21,343. As discussed below, prior to October 19, 2015, the Operating Companies

had previously closed multiple CCR landfills and impoundments in accordance with State and federal requirements at the time, at substantial effort and expense.

6. In addition, CCR not contained in landfills and surface impoundments was not regulated by the new Subpart D regulations, but remained subject to State solid waste requirements and EPA's general solid waste criteria in 40 C.F.R. Part 257, Subpart A.

7. On May 8, 2024, EPA published a final rule that establishes new regulatory requirements for inactive CCR surface impoundments at inactive facilities (called "legacy CCR surface impoundments") and a new category of CCR areas that EPA calls "CCR management units." 89 Fed. Reg. 38,950 (May 8, 2024) (the "Legacy Rule"). In the Legacy Rule, EPA defines a "legacy CCR surface impoundment" as "a CCR surface impoundment that no longer received CCR but contained both CCR and liquids on or after October 19, 2015, and that is located at an inactive electric utility or independent power producer." *Id.* at 39,100 (revising 40 C.F.R. § 257.53). A "CCR management unit" is "any area of land on which any noncontainerized accumulation of CCR is received, is placed, or is otherwise managed, that is not a regulated CCR unit." *Id.* at 39,100 (revising 40 C.F.R. § 257.53).

8. EPA's new regulations state that a "CCR management unit" ("CCRMU") "includes inactive CCR landfills and CCR units that closed prior to October 19, 2015[.]" *Id.* The new regulations further define "closed prior to October 19, 2015" to mean "the CCR landfill or surface impoundment completed closure of the unit in accordance with State law prior to October 19, 2015." *Id.*

9. When it issued the new regulations, EPA identified multiple areas at properties owned, operated, and/or maintained by certain of the Operating Companies that EPA believes to be "CCR management units" or "legacy CCR surface impoundments." *See, e.g.*, Universe of CCR

Management Units, EPA Dock. ID EPA-HQ-OLEM-2020-0107-1032 (Apr. 2024); Universe of Legacy CCR Surface Impoundments, EPA Dock. ID EPA-HQ-OLEM-2020-0107-1030 (Apr. 2024). Specifically, EPA has identified potential CCRMU'S at the AEP Breed and Clinch River plant properties, and potential legacy surface impoundments located at the inactive AEP Glen Lyn and Kanawha River plant properties.

10. In addition to the sites expressly identified by EPA, the Operating Companies anticipate that once the facility evaluations required by the Legacy Rule are complete, several additional sites will be subject to regulation under the Legacy Rule as either Legacy Surface Impoundments or CCR Management Units.

11. When EPA proposed the Legacy Rule in 2023, the Operating Companies submitted comments to EPA explaining how the proposed rule failed to account for the fact that regulation of closed units by state environmental agencies reduced or eliminated the risks that EPA seeks to address through the Legacy Rule.

12. For example, the Operating Companies told EPA about two locations subject to regulations by the State of Virginia. In Virginia, the Solid Waste Regulations (9VAC20-81-800) and Virginia State Law §10.1402.04 both apply, and the latter expressly mandates closure by removal of CCR material and provides specific requirements that must be satisfied as a matter of state law. Virginia requires groundwater and surface water monitoring, a plan for management of CCR that is removed during closure, transportation plans and several other requirements.

13. EPA has not evaluated the efficacy of the Virginia state program, let alone found it not to be protective of public health and the environment. Yet, EPA ignores the requirements imposed by state law and subjects these same sites to regulation under the Legacy Rule, subjecting the units to different deadlines and different requirements. EPA's requirement that these sites close

pursuant to the Legacy Rule – meaning in EPA's way and on EPA's timeline – rather than pursuant to Virginia Law that has the same objectives, is a waste of both time and money.

14. Additionally, the Operating Companies explained in comments to EPA on the proposed Legacy Rule why the Rule's timelines are unreasonable. The Operating Companies noted that site-specific conditions at various sites would require significantly more time than the Rule allows and provided specific case examples and explanations for each, based not on hypotheticals but based on actual experience.

15. For example, the Operating Companies noted that a former plant site that has not be in operation for decades is overgrown with vegetation and has limited historical documents available for review. At that site, physical site investigations, including borings, to determine whether CCR and liquids are present and to delineate the footprint of the site, would be required. This would require site clearing, which can only be done during certain times of the year due to the potential presence of endangered or threatened species. The Operating Companies explained that the work required to even identify if the site is subject to the Legacy Rule would take much longer than the rule allows; yet EPA failed to address this very real and practical problem with the Rule.

16. The Operating Companies also explained that several former ash management units that were closed under a state program would be subject to the Legacy Rule as CCR Management Units, subject to additional requirements, despite being regulated by the state's more stringent solid waste program and having gone through a public participation process.

17. The Operating Companies' comments also explained that a closed landfill would be considered a CCR Management Unit under the Legacy Rule and subject to additional, redundant and/or unnecessary requirements under the Legacy Rule, despite having been closed pursuant to

state solid waste management regulations. EPA's Legacy Rule ignores the protections afforded by state law in such instances.

18. In addition, EPA's new regulations impose monitoring, corrective action, and closure obligations on the beneficial use of CCR, despite the fact that beneficial use is and has been encouraged and authorized under State laws and under EPA's 2015 regulations. Beneficial use displaces the use of virgin materials in uses like roads, structural fills, and general site construction and maintenance and is thus a positive for the environment. Under 40 C.F.R. §257.50(g) (issued in 2015), the requirements of 40 C.F.R. Part 257 Subpart D do "not apply to practices that meet the definition of a beneficial use of CCR." However, EPA's new definition of "CCR management unit" includes uses that – before the Legacy Rule – were exempt as beneficial use under State law.

19. The Operating Companies have relied on the exclusion in 40 C.F.R. §257.50(g) and State laws to beneficially reuse CCR at their facilities for a variety of purposes in lieu of virgin material. For example, at one location, approximately 3,400 cubic yards of fly ash was used as structural fill during the construction of a coal blending system. The state approved the beneficial use of the CCR following a demonstration required by the state beneficial use regulations. That structural fill now apparently would be considered a CCR Management Unit under the Legacy Rule.

20. For the foregoing reasons, and additional reasons that will be explained in the course of this litigation, the Operating Companies are directly and significantly harmed by this rule.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct. Executed this 18th day of September 2024.

Gary O. Spitznogle
Vice President, Environmental Services, American Electric Power Service Corporation

On Behalf of AEP Generation Resources, Inc., Appalachian Power Company, Indiana Michigan Power Company, Kentucky Power Company, Ohio Power Company, Public Service Company of Oklahoma, Southwestern Electric Power Company, and Wheeling Power Company

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AEP GENERATION RESOURCES, INC., APPALACHIAN POWER COMPANY, INDIANA MICHIGAN POWER COMPANY, KENTUCKY POWER COMPANY, OHIO POWER COMPANY, PUBLIC SERVICE COMPANY OF OKLAHOMA, SOUTHWESTERN ELECTRIC POWER COMPANY, WHEELING POWER COMPANY, COLETO CREEK POWER, LLC, DYNEGY MIDWEST GENERATION, LLC, ELECTRIC ENERGY, INC., ILLINOIS POWER GENERATING COMPANY, ILLINOIS POWER RESOURCES GENERATING, LLC, KINCAID GENERATION, L.L.C., LUMINANT GENERATION COMPANY LLC, MIAMI FORT POWER COMPANY LLC, ZIMMER POWER COMPANY LLC, DUKE ENERGY CAROLINAS, LLC, DUKE ENERGY PROGRESS, LLC, DUKE ENERGY INDIANA, LLC, THE LOWER COLORADO RIVER AUTHORITY, and TALEN ENERGY SUPPLY, LLC, **Petitioners,** **v.** **UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, United States Environmental Protection Agency,** **Respondents.**	**Case No. 24-1275**

STANDING DECLARATION OF THE LOWER COLORADO RIVER AUTHORITY

1. My name is Andrew Valencia, and I am the Senior Vice President of Generation at the Lower Colorado River Authority ("LCRA"). I oversee LCRA activities related to electric power generation. LCRA is a petitioner in this case, and I am submitting this Declaration in support of LCRA's statement regarding standing in this case. This declaration is based upon my personal knowledge of facts and analyses conducted by LCRA staff.

2. My responsibilities for LCRA include operation and compliance of LCRA's fleet of electric generating units, including the Fayette Power Project ("FPP"). I have been responsible for LCRA's activities related to electric power generation since 2011. Based on these responsibilities, I have knowledge regarding the regulations and requirements imposed on coal combustion residuals ("CCR") units by the U.S. Environmental Protection Agency ("EPA") and Texas Commission on Environmental Quality ("TCEQ").

3. LCRA is a Texas conservation and reclamation district. It has no taxing authority and operates solely on utility revenues and fees generated from supplying energy, water, and community services. LCRA and its affiliates supply wholesale electricity to more than 42 retail utilities, including cities and electric cooperatives that serve more than one million people in 77 counties in Texas. LCRA's well-rounded generation portfolio includes FPP, a coal-fired power plant; combined-cycle

gas-fired power plants; a traditional natural gas-fired power plant; a gas peaker plant; and renewable energy from hydroelectric, solar, and wind resources.

4. LCRA owns and operates FPP, an approximately 1,640 MW coal-fired steam-electric plant located near La Grange, Texas. The City of Austin co-owns FPP Units 1 and 2. The operation of FPP, when generating electricity, results in the production of various types of CCR. For decades, the CCR byproduct at FPP has been handled in a variety of ways, including being sold to third-parties for beneficial use (for example, to be used as an ingredient in cement, wallboard, or for other beneficial uses); beneficially used on-site as a substitute for virgin material (for example, as roadbeds and railroad embankments); or, as a last resort, disposed of in accordance with applicable State and federal laws.

5. In April 2015, EPA issued regulations that contained criteria for "existing and new CCR landfills and existing and new CCR surface impoundments" and "inactive CCR surface impoundments (i.e., units not receiving CCR after the effective date of the rule)" at active power-generating facilities. 80 Fed. Reg. 21,302, 21,303 (April 17, 2015). Under the new criteria (codified in 40 C.F.R. Part 257, Subpart D), "CCR units" became subject to specific location restrictions, design and operating criteria, groundwater monitoring and corrective action, closure and post-closure care requirements, and recordkeeping, notification, and internet posting requirements. *Id.*

FPP has one "CCR unit"—*i.e.*, an existing CCR landfill—that is subject to EPA's 2015 CCR regulations.

6. In Texas, the TCEQ adopted State CCR regulations, and, effective July 28, 2021, TCEQ received a partial approval from EPA to administer the CCR program in Texas. *See* 86 Fed. Reg. 33892 (June. 28, 2021).

7. EPA's 2015 CCR regulations operate prospectively only, and applicability of the new requirements is based on a unit's status as of the effective date of the rule, October 19, 2015. That is, the 2015 CCR regulations do not apply to CCR units that closed prior to October 19, 2015 (the effective date of the rule) in accordance with then-existing requirements or to CCR landfills that ceased receiving CCR prior to October 19, 2015. *See* 40 C.F.R. §§ 257.50(b), (d), 257.53; 80 Fed. Reg. at 21,343. The 2015 CCR regulations "[do] not impose any requirements on any CCR surface impoundments that have in fact 'closed' before the rule's effective date." 80 Fed. Reg. at 21,343. According to EPA, surface impoundments that had been dewatered and capped were "analogous to inactive CCR landfills, which are not subject to the final rule." *Id.* at 21,342. As EPA explained in 2015, it did not intend for units that had previously closed under state law to reclose. *Id.* at 21,343. As discussed below, prior to October 19, 2015, LCRA closed a coal ash impoundment, the "Ash Pond," in accordance with then-existing State and federal requirements, at substantial effort and expense. Units that closed prior to October 19, 2015, still remained subject to

State solid waste requirements and EPA's general solid waste criteria in 40 C.F.R. Part 257, Subpart A.

8. On May 8, 2024, EPA published a final rule that establishes new regulatory requirements for inactive CCR surface impoundments at inactive facilities (labeled "legacy CCR surface impoundments") and a new category of CCR units that EPA labeled "CCR management units." 89 Fed. Reg. 38,950 (May 8, 2024) (the "Legacy Rule").

9. LCRA was one of many entities that requested a comment-period extension for the proposed Legacy Rule, which EPA denied. LCRA submitted timely comments on the Legacy Rule on July 20, 2023 (EPA Document Id. EPA-HQ-OLEM-2020-0107-0119).

10. Prior to issuance of the final Legacy Rule, EPA also released a Notice of Data Availability ("NODA") and requested comment on a supplemental risk assessment. LCRA was one of many entities that requested a comment-period extension for the NODA, which EPA denied. LCRA timely submitted comments on the NODA on December 14, 2023 (EPA Document Id. EPA-HQ-OLEM-2020-0107-0781).

11. In the Legacy Rule, EPA defines a "legacy CCR surface impoundment" as "a CCR surface impoundment that no longer received CCR but contained both CCR and liquids on or after October 19, 2015, and that is located at an inactive electric utility or independent power producer." 89 Fed. Reg. at 39,100 (revising 40 C.F.R.

§ 257.53). A "CCR management unit" is "any area of land on which any noncontainerized accumulation of CCR is received, is placed, or is otherwise managed, that is not a regulated CCR unit." *Id.*

12. EPA's new regulations state that a "CCR management unit" "includes inactive CCR landfills and CCR units that closed prior to October 19, 2015…" *Id.* The new regulations further define "closed prior to October 19, 2015" to mean "the CCR landfill or surface impoundment completed closure of the unit in accordance with State law prior to October 19, 2015." *Id.*

13. Closure of the FPP Ash Pond occurred in two principal phases. Both phases were completed pursuant to State law, with the review and approval of TCEQ or its predecessor agencies.

14. The Texas Water Commission ("TWC"), a predecessor agency to the TCEQ, approved LCRA's closure plan for the southern half of the Ash Pond on November 1, 1988. LCRA certified completion of closure of the southern half of the Ash Pond on August 9, 1990, in accordance with TWC Technical Guidance No. 3 and applicable TWC rules.

15. TCEQ approved LCRA's closure plan for the northern half of the Ash Pond on July 9, 2010. LCRA certified completion of closure of the northern half of the Ash Pond on October 5, 2012, in accordance with TCEQ Technical Guideline No. 3 and applicable TCEQ rules.

16. During and after its closure, the Ash Pond was and continues to be subject to groundwater monitoring under the terms and conditions of FPP's Texas National Pollutant Discharge Elimination System ("TPDES") permit. Further, the Ash Pond has been subject to the State remediation program, the Texas Risk Reduction Program ("TRRP"), since 2010. TRRP has required corrective action, groundwater monitoring, plume delineation, deed recordation, risk assessment of on-site and off-site receptors, including ecological receptors, and TCEQ review and approval of Response Action Plans and periodic Response Action Effectiveness Reports.

17. Despite prior monitoring and closure in accordance with State law, the closed Ash Pond is now, apparently, subject to regulation as a "CCR management unit" under EPA's Legacy Rule, which potentially includes the obligation to "re-close" under the Legacy Rule.

18. EPA's Legacy Rule would also impose monitoring, corrective action, and closure obligations on the on-site beneficial use of CCR. Beneficial use of CCR is encouraged under State laws and under EPA's 2015 regulations because it displaces virgin materials in uses like roadbeds and embankments, structural fills, and general site construction and maintenance, and is thus a positive for the environment. Under 40 C.F.R. § 257.50(g) (codified in 2015), the requirements of 40 C.F.R. Part 257 Subpart D do "not apply to practices that meet the definition of a beneficial use of

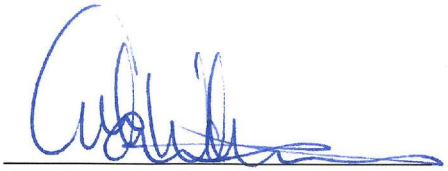
CCR." Additionally, EPA's 2015 CCR regulations do "not affect past beneficial uses (*i.e.*, uses completed before the effective date of the rule."). 80 Fed. Reg. at 21,302.

19. The Texas CCR program also exempts from regulation uses of CCR that meet the federal "beneficial use of CCR" definition. *See* 30 Tex. Admin. Code § 352.1(b)(6). Additionally, CCR that are used beneficially in accordance with criteria under Texas law are not "solid waste" and, therefore, such beneficial uses do not constitute "disposal." *See* 30 Tex. Admin. Code §§ 335.1(160)(H), 335.1(54).

20. However, with the Legacy Rule's new federal definition of "CCR management unit," EPA now claims that the beneficial use exclusion under 40 C.F.R. § 257.50(g) does not apply to certain on-site uses of CCR that meet the federal definition of beneficial use or to on-site uses of CCR that predated EPA's 2015 CCR regulations, that were exempt from regulation under EPA's 2015 CCR regulations, and that met the criteria for beneficial uses under State law.

21. LCRA has relied on the beneficial use exclusion under 40 C.F.R. § 257.50(g) and State law to beneficially use CCR at FPP for a variety of purposes in lieu of virgin material. These on-site beneficial uses were exempt from federal and State CCR regulation and from regulation as solid waste disposal prior to EPA's promulgation of the Legacy Rule. These on-site beneficial uses are now subject to regulation under EPA's Legacy Rule according to EPA.

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct. Executed this 20th day of September 2024.



Andrew Valencia
Senior Vice President of Generation

On Behalf of the Lower Colorado River Authority

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FOR THE DISTRICT OF COLUMBIA CIRCUIT

AEP GENERATION RESOURCES, INC., APPALACHIAN POWER COMPANY, INDIANA MICHIGAN POWER COMPANY, KENTUCKY POWER COMPANY, OHIO POWER COMPANY, PUBLIC SERVICE COMPANY OF OKLAHOMA, SOUTHWESTERN ELECTRIC POWER COMPANY, WHEELING POWER COMPANY, COLETO CREEK POWER, LLC, DYNEGY MIDWEST GENERATION, LLC, ELECTRIC ENERGY, INC., ILLINOIS POWER GENERATING COMPANY, ILLINOIS POWER RESOURCES GENERATING, LLC, KINCAID GENERATION, L.L.C., LUMINANT GENERATION COMPANY LLC, MIAMI FORT POWER COMPANY LLC, ZIMMER POWER COMPANY LLC, DUKE ENERGY CAROLINAS, LLC, DUKE ENERGY PROGRESS, LLC, DUKE ENERGY INDIANA, LLC, THE LOWER COLORADO RIVER AUTHORITY, and TALEN ENERGY SUPPLY, LLC,	)	
Petitioners,	)	
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY and MICHAEL S. REGAN, Administrator, United States Environmental Protection Agency,	)	**Case No. 24-1275**
Respondents.	)	

STANDING DECLARATION OF CYNTHIA VODOPIVEC

1. My name is Cynthia Vodopivec, and I am a Senior Vice President responsible for environmental regulatory compliance at the electric generating units operated by Electric Energy, Inc., Luminant Generation Company LLC, Coleto Creek Power, LLC, Miami Fort Power Company LLC, Zimmer Power Company LLC, Dynegy Midwest Generation, LLC, Illinois Power Generating Company, Illinois Power Resources Generating, LLC, and Kincaid Generation, L.L.C. (collectively, "Operating Companies"). The Operating Companies are petitioners in this case, and I am submitting this Declaration in support of the Operating Companies' statement regarding standing in this case.

2. My responsibilities for the Operating Companies include strategic planning, compliance assurance, and environmental and safety program implementation for the companies' fleet of electric generating units. Specifically, I am responsible for improving the environmental performance at their sites and providing the tools to keep their employees and contractors safe. Based on these responsibilities, I have knowledge regarding the regulations and requirements imposed on coal combustion residuals ("CCR") units by the U.S. Environmental Protection Agency ("EPA") and respective State environmental agencies.

3. The Operating Companies own, operate, and/or previously operated coal-fueled power plants in Illinois, Ohio, and Texas that, when generating electricity, resulted in the production of various types of CCR. For decades, the CCR byproduct

at these power plants was handled in a variety of ways, including being sold to a third-party (for example, to be used as an ingredient in cement or for other beneficial uses); beneficially used on-site as a substitute for virgin material; or disposed of in accordance with applicable State and federal laws.

4. In April 2015, EPA issued regulations that contained criteria for "existing and new CCR landfills and existing and new CCR surface impoundments." 80 Fed. Reg. 21,302 (April 17, 2015). Under the new criteria (contained in 40 C.F.R. Part 257 Subpart D), "CCR units" became subject to specific location restrictions, design and operating criteria, groundwater monitoring and corrective action, closure requirements and post closure care, and recordkeeping, notification, and internet posting requirements. *Id*. The Operating Companies' power plants contained many "CCR units"—*i.e.*, landfills and impoundments that had not already been closed—that became subject to EPA's 2015 regulations and that have complied with the new requirements since the regulations became effective. In Texas, the Texas Commission on Environmental Quality ("TCEQ") adopted State regulations that are approved by EPA and operate in lieu of EPA's regulations.

5. The 2015 regulations operate prospectively only, and applicability of the new requirements is based on a unit's status as of the effective date of the rule, October 19, 2015. That is, the regulations did not apply to any "CCR units that closed prior to October 19, 2015" (the effective date of the rule) in accordance with then-existing

requirements. 88 Fed. Reg. at 32,034. As EPA explained in 2015, the regulations did not "require 'closed' surface impoundments to 'reclose'" or provide that the "literally hundreds of previously closed . . .surface impoundments—many of which were properly closed decades ago under state solid waste programs, have changed owners, and now have structures built on top of them—would be considered active CCR units." 80 Fed. Reg. at 21,343. As discussed below, prior to October 19, 2015, the Operating Companies previously closed multiple CCR landfills and impoundments in accordance with State and federal requirements at the time, at substantial effort and expense.

6. In addition, CCR outside of landfills and surface impoundments was not regulated by the new Subpart D regulations, but remain subject to State solid waste requirements and EPA's general solid waste criteria in 40 C.F.R. Part 257, Subpart A.

7. On May 8, 2024, EPA published a final rule that establishes new regulatory requirements for inactive CCR surface impoundments at inactive facilities (called "legacy CCR surface impoundments") and a new category of CCR areas that EPA called "CCR management units." 89 Fed. Reg. 38,950 (May 8, 2024) (the "Legacy Rule"). In the Legacy Rule, EPA defines a "legacy CCR surface impoundment" as "a CCR surface impoundment that no longer received CCR but contained both CCR and liquids on or after October 19, 2015, and that is located at an inactive electric

utility or independent power producer." *Id.* at 39,100 (revising 40 C.F.R. § 257.53). A "CCR management unit" is "any area of land on which any noncontainerized accumulation of CCR is received, is placed, or is otherwise managed, that is not a regulated CCR unit." *Id.* at 39,100 (revising 40 C.F.R. § 257.53).

8. EPA's new regulations state that a "CCR management unit" "includes inactive CCR landfills and CCR units that closed prior to October 19, 2015[.]" *Id.* The new regulations further define "closed prior to October 19, 2015" to mean "the CCR landfill or surface impoundment completed closure of the unit in accordance with State law prior to October 19, 2015." *Id.*

9. When it issued the new regulations, EPA identified multiple areas at plants owned and/or operated by certain of the Operating Companies that EPA believes to be "CCR management units" or "legacy CCR surface impoundments." *See, e.g.*, Universe of CCR Management Units, EPA Dock. ID EPA-HQ-OLEM-2020-0107-1032 (Apr. 2024); Universe of Legacy CCR Surface Impoundments, EPA Dock. ID EPA-HQ-OLEM-2020-0107-1030 (Apr. 2024). Specifically, EPA has identified three areas at Miami Fort, two areas each at Baldwin Energy Complex and Newton Power Station, and one area each at Coffeen, Hennepin Power Station, and Joppa Power Plant on its list of identified CCR management units. And EPA has identified three areas at Vermillion on its list of legacy CCR surface impoundments.

10. When EPA first proposed the Legacy Rule in 2023, the Operating Companies submitted data and information to EPA that showed that CCR landfills and impoundments at their plants had been closed in accordance with State law prior to October 19, 2015, and that such closed units were meeting groundwater protection standards.

11. One of the areas identified by EPA as a "CCR management unit" was the Phase I landfill at Newton Power Station in Illinois, which was operated from 1979 through 1997. The landfill closed in September 1997 in accordance with Illinois solid waste landfill regulations and an engineering cover system was installed in accordance with the State program, utilizing a geomembrane for the low permeability layer. The State of Illinois approved a Groundwater Management Zone at the site, which included a corrective action plan for groundwater protection. Despite its prior closure in accordance with State law and monitoring pursuant to State obligations, the Phase I landfill would apparently now also be subject to regulation as a CCR management unit according to EPA.

12. Havana Power Plant in Illinois is another example of a facility that includes an impoundment that was closed in accordance with State law prior to October 19, 2015, but would apparently now be subject to regulation as a "CCR management unit." Havana Power Plant has one impoundment that consists of a main pond, a secondary pond, and a tertiary pond (the "South Ash Impoundment"). The South

Ash Impoundment was taken out of service in 1993, and materials from the secondary and tertiary ponds were moved to the main pond. The main pond was closed in 1994 in accordance with State requirements and post-closure groundwater sampling was conducted, which demonstrates compliance with Illinois' groundwater protection standards. The State provided a closure approval letter in 2009. Nonetheless, the South Ash Impoundment would apparently be subject to new regulation—and potentially the obligation to "re-close"—under EPA's Legacy Rule.

13. Further, in Texas, which has an approved CCR program that operates in lieu of EPA's regulations, there are areas at the Martin Lake Steam Electric Station, PDP-1, PDP-2, and PDP-3, that were previously closed in accordance with State regulations and received a closure approval letter on March 12, 2015. Nonetheless, these areas would apparently now also be subject to regulation under EPA's Legacy Rule.

14. In their comments to EPA, the Operating Companies submitted data and information about these sites that have been previously closed in accordance with State law.

15. Further, the Legacy Rule's definition of CCR management unit encompasses ash that was beneficially used at facilities, even if such use was authorized by State law. *See* 80 Fed. Reg. at 39,100 (revising 40 C.F.R. § 257.53).

16. Numerous states have beneficial use programs that directly or indirectly address potential risks of using CCR. Often, under these state programs, the proposed use of CCR is authorized if the placement meets specific criteria. The Operating Companies have historically relied upon these programs to facilitate the beneficial use of CCR at their facilities.

17. For example, the Edwards Power Station requested two beneficial use determinations from the Illinois Environmental Protection Agency ("IEPA") in early 1996. On March 1, 1996, the then-owner/operator of the facility, Central Illinois Light Company ("CILCO"), submitted a solid waste determination request to IEPA seeking authorization for the use of CCR for structural fill under a road and warehouse at the facility. On April 29, 1996, IEPA determined that CCR "generated at the facility, when used as structural fill, would be considered a [coal combustion byproduct ("CCB")] in accordance with Section 3.94 of the Illinois Environmental Protection Act." Specifically, IEPA stated that "the [CCW] *would not be a solid waste when used*." IEPA's approval is attached to this declaration as Exhibit 1.

18. The Texas CCR program also exempts from regulation uses of CCR that meet the federal "beneficial use of CCR" definition. *See* 30 Tex. Admin. Code § 352.1(b)(6). Additionally, CCR that are used beneficially in accordance with criteria under Texas law are not "solid waste" and, therefore, such beneficial uses do not constitute "disposal." *See* 30 Tex. Admin. Code §§ 335.1(160)(H), 335.1(54).

Pursuant to 28 U.S.C. § 1746, I declare under penalty of perjury that the foregoing is true and correct. Executed this 20th day of September 2024.

Cynthia Vodopivec

On Behalf of Electric Energy, Inc., Luminant Generation Company LLC, Coleto Creek Power, LLC, Miami Fort Power Company LLC, Zimmer Power Company LLC, Dynegy Midwest Generation, LLC, Illinois Power Generating Company, Illinois Power Resources Generating, LLC, and Kincaid Generation, L.L.C.

EXHIBIT 1

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/524-3300

April 29, 1996

CERTIFIED MAIL
Z 422 917 555

Central Illinois Light Company
Attn: Eva M. Kromphardt
300 Liberty Street
Peoria, Illinois 61602-1404

Re: 1430055003 -- Peoria County
CILCO (Edwards Power Plant)
Log No. S-323
State Permit File
Solid Waste Determination: Coal Combustion Ash

Dear Ms. Kromphardt:

This is in response to the solid waste determination request dated March 1, 1996, submitted by Mary Hagerty, P.E., of Woodward-Clyde Consultants regarding the use of coal combustion waste (CCW) generated by CILCO for beneficial purposes as coal combustion byproduct (CCB).

The Agency has reviewed your submittal, and has determined that CCW generated at the above referenced facility, when used as structural fill would be considered CCB in accordance with Section 3.94 of the Illinois Environmental Protection Act (the Act). The coal combustion waste would not be a solid waste when used as described in your letter for structural fill at the Espinoza property, the Edward Station Road and Warehouse, and the Wallace Station basement in accordance with Section 3.94 of the Act.

While use of this material may be exempt from the permit in accordance with 35 Illinois Adm. Code Subtitle G, Section 807.210, such use cannot violate any other provision of the Illinois Environmental Protection Act (the Act) or any rules and regulations adopted thereunder. Any material not used as described above, is a waste subject to the regulations as they apply. Also if at any time the process which generates the material changes, a new solid waste determination request must be submitted to the Agency for re-evaluation.

Printed on Recycled Paper

If you have any questions concerning this letter, please contact Shashi Goel of my staff at 217/524-3266.

Sincerely,

Edwin C. Bakowski, P.E.
Manager, Permit Section
Bureau of Land

ECB:SG\mls\962578.WPD

cc: Mary Hagerty, P.E.
Woodward-Clyde Consultants

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

EAST KENTUCKY POWER COOPERATIVE, INC.,	)	
Petitioner,	)	
v.	)	
	)	Case No. 24-1267
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY, *et al.*,	)	
Respondents.	)	

DECLARATION OF JERRY PURVIS

I, Jerry Purvis, declare as follows:

1. My name is Jerry Purvis. I am the Vice President of Environmental Affairs at East Kentucky Power Cooperative ("EKPC"). I am over the age of 18 years, and I am competent to testify concerning the matters in this declaration. I have personal knowledge of the facts set forth in this declaration, and if called and sworn as a witness, could and would competently testify to them.

2. I have 30 years of experience in electricity generation. I have been employed at EKPC since 1994. I hold a Bachelor's degree in Chemistry from Morehead State University and in Chemical

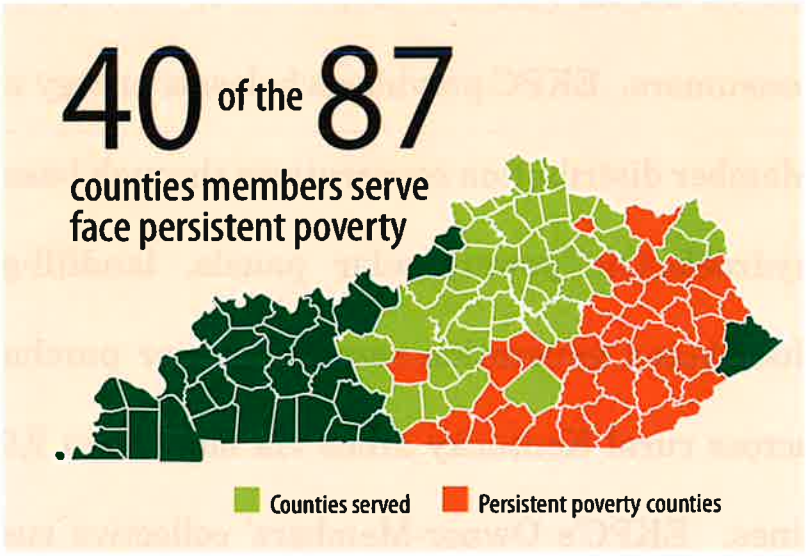
Engineering from the University of Kentucky. I also hold a Master of Business Administration degree from Morehead State University. As Vice President of Environmental Affairs, I am responsible for promoting proactive environmental policies, implementing comprehensive compliance strategies, and supporting EKPC's sustainability goals. I manage EKPC's staff and outside consultants in pursuit of these goals.

3. This declaration is submitted in support of EKPC's Petition for Review and Motion for Stay of EPA's Rule entitled, "Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments," 89 Fed. Reg. 38950 (May 8, 2024) (the "Rule"). I am familiar with EKPC's operations, including generation and transmission, regulatory compliance, workforce management, management and disposal of coal combustion residuals ("CCR"), and electric markets in general. I also am familiar with the Rule, and I am familiar with how the Rule will affect EKPC and its members, customers, and employees.

4. EKPC is a not-for-profit corporation that is owned, operated, and governed by its member cooperatives, who use the energy and

services EKPC provides. These Owner-Member cooperatives provide energy to 520,000 homes, farms, and businesses across 87 counties in Kentucky. EKPC's purpose is to generate electricity and transmit it to the 16 Owner-Member cooperatives that distribute it to retail, end-use consumers. EKPC provides wholesale energy and services to the Owner-Member distribution cooperatives through baseload units, peaking units, hydroelectric power, solar panels, landfill-gas-to-energy units, and distributed generation resource power purchases. It transmits power across rural Kentucky areas via more than 2,900 miles of transmission lines. EKPC's Owner-Members' collective customer base is comprised largely of residential customers (93%). And, in 2019, 57% of EKPC's Owner-Member retail sales were to the residential class. Electricity is the primary method for water heating and home heating for this class of customers.

5. EKPC is the voice for a substantial number of end users of electricity in its service territory who live in impoverished communities. These communities place a high value on affordable energy costs. EKPC's service territory includes rural areas with some of the lowest economic demographics in the United States. In these areas, families are faced with a daily choice between food, electricity, and medicine. Of the counties that EKPC's Owner-Member cooperatives serve, 40 counties experience persistent poverty, as reported by the USDA.



6. Many of these hardworking Americans have been plagued by unemployment from mines, trucking companies, restaurants, and other businesses. The unemployment rate is 60% higher than the national average. They rely on government assistance to survive; anywhere from 30% to 54% of total income in most of the counties that EKPC serves

comes from governmental-assistance programs. Forty-two percent of these electricity users are elderly (65 years or older). Many are on fixed incomes and reside in energy-inefficient mobile homes. Brutally cold weather in recent years has caused their monthly electric bills to skyrocket. EKPC has a strong interest in keeping energy affordable to assist its 16 Owner-Member cooperatives in serving people facing the harsh realities of today's economy.

EKPC'S ENVIRONMENTAL COMMITMENTS

7. EKPC and its Owner-Member cooperatives have a strong commitment to environmental excellence, which is underscored by a record of environmental over-compliance, investments in air quality-control and wastewater-treatment technologies, closure of ash ponds by removal, management of waste, and renewable diversification. EKPC has ensured that its efforts sustain excellent air quality, clean water, and properly disposed waste in accordance with—and beyond—regulatory minimums. EKPC is a leader in environmental stewardship in Kentucky. The Kentucky Energy and Environment Cabinet awarded EKPC its Beacon Award, the highest Environmental Stewardship award

in Kentucky, in 2023. In addition, EKPC has created a Strategic Sustainability Plan with goals and investments through 2035 and 2050. EKPC developed, permitted, and built the first renewable energy sources in Kentucky. Since that time, EKPC launched a 60-acre photovoltaic solar array in Winchester, Kentucky, and EKPC continues to utilize landfill gas generation assets and to support hydroelectricity (Wolf Creek and Laurel Dams) via Southeastern Power Administration ("SEPA") contracts. And EKPC just announced plans to construct an additional 136 MWs of solar capacity.

8. EKPC has one of the cleanest, best environmentally-controlled fleets in the country. EKPC's company-wide commitment to environmental excellence extends to compliance and a financial commitment to pollution-control improvements at its generation facilities. EKPC and its 16 Owner-Member cooperatives **have invested over $1.8 billion** since 2000 to reduce environmental impacts at its fossil generation facilities. Specifically, EKPC installed Best Available Control Technology ("BACT") to control NOx, SO_2, and particulate matter (PM) emissions at its Spurlock and Cooper Plants. Those efforts have

significantly lowered SO_2 (by 95%), NOx (by 78%), PM (by over 98%), and CO_2 (by 5.5%) since 2005. Since 2008, EKPC has devoted substantial resources to ensure compliance with EPA Rules including the stringent Mercury and Air Toxics ("MATS") requirements. In fact, many of the units in its coal-fired fleet have qualified for low-emitting EGU ("LEE") status. EKPC prides itself on installing state-of-the art emissions controls at its generation systems.

EKPC'S PROACTIVE APPROACH TO CCR

9. EKPC has also been on the cutting edge of mitigating and protecting against environmental harm from the disposal of CCR.

10. Historically, EKPC has generated power primarily by burning fossil fuels, particularly coal. Thus, EKPC has a long history of handling and safely disposing of CCR. State oversight of coal ash disposal has been in place for over 30 years under the Kentucky Special Waste statute, KRS 224.50-760.

11. Among its other electricity-generating assets, EKPC presently generates electricity through two coal-fired plants: the H.L.

Spurlock Station near Maysville, Kentucky, and the John Sherman Cooper Station near Burnside, Kentucky.

12. EKPC disposes of CCR produced by the Spurlock and Cooper Stations by depositing it at the following sites:

a. two CCR landfills located at the Spurlock Station.

b. a CCR landfill located at the Cooper Station; and

c. a CCR landfill located at the J.K. Smith Station (which generates electricity using natural-gas-fired turbines), where CCR from the former Dale Station was disposed, and which also serves as a back-up to the CCR landfill operations at the Spurlock and Cooper Stations.

13. EKPC also formerly disposed of CCR at a CCR impoundment located at the Spurlock Station. That impoundment is in the process of closure by removal of all CCR from the impoundment, and the closure is nearing completion.

14. CCR generated by the combustion of coal at the Spurlock and Cooper Stations does not cross state lines when being transported to any of the sites listed above in Paragraphs 12 or 13, nor do any of the sites

listed above in Paragraphs 12 or 13 receive CCR from any out-of-state sources.

15. EKPC has a track record of proactively exceeding regulatory requirements when it comes to the disposal of CCR.

16. Even though it had no obligation to do so, EKPC de-watered and removed all CCR from its former impoundments at the William C. Dale Station, located near Winchester, Kentucky, and disposed of this CCR at a new State-permitted, CCR Rule-compliant landfill at the J.K. Smith Station, which is located in Trapp, KY.

IMPACTS OF THE RULE ON EKPC'S FORMER SURFACE IMPOUNDMENTS AT THE DALE STATION

17. The Dale Station contained three impoundments (Ponds 2, 3, and 4) that were used to store and treat ash sluiced from the on-site coal-fired electricity generation. EKPC began the process of closure by removal for those impoundments (*i.e.*, closing the impoundments by removing all CCR from them) in 2014. At that time, Pond 2 included both the former Pond 1 and Pond 2, which were combined in the mid-1990s by removal of a dike that had separated them previously.

18. The process of closure by removal was overseen by the Kentucky Division of Waste Management ("KDWM"), which is a State agency within the Kentucky Energy and Environment Cabinet. KDWM oversaw this process of closure through field inspections and written correspondence with EKPC, according to a KDWM-approved closure plan. Pursuant to that plan, EKPC:

a. removed all CCR in the impoundments down to the level of the underlying existing soil;

b. had the CCR removal and closure certified by a third-party Professional Engineer and verified by visual inspection performed by KDWM representatives;

c. transported all the removed CCR to the CCR landfill at the J.K. Smith Station for disposal;

d. re-graded the areas in which the former CCR impoundments were previously located to remove any dike or depression after all CCR was removed;

e. submitted Construction Progress Reports to KDWM documenting both the closure of individual cells and the

completion of the closure by removal project as a whole; and

f. received a termination letter from KDWM certifying that the final Construction Progress Reports had been accepted and approved.

See Ex. A & B. A true and accurate copy of KDWM's approval of the closure plan for the former Dale Station impoundments is attached to this Declaration as Exhibit A, and a true and accurate copy of the letter from KDWM noting final acceptance and termination of the work performed by EKPC in accordance with that plan is attached to this Declaration as Exhibit B.

19. KDWM did not require groundwater monitoring as long as complete removal of CCR was verified by visual inspection performed by KDWM representatives and the CCR was properly disposed of off-site in the State-permitted J.K. Smith Landfill.

20. When the 2015 Rule, 80 Fed. Reg. 21302, was finalized, the Dale Station was no longer generating electricity. Because all three former Dale Station impoundments had ceased receiving CCR before the

October 19, 2015, effective date of the rule and were located at a facility that was no longer generating electricity (i.e., not an active facility), they were not subject to the 2015 Rule.

21. Even though the 2015 Rule did not apply to the former Dale Station impoundments, EKPC acted of its own initiative to close those impoundments by removal of the CCR under KDWM oversight. Before the 2015 Rule was even issued, EKPC had voluntarily commenced closure activities at all three former Dale Station impoundments under the oversight of KDWM.

22. On the effective date of the 2015 Rule, the former Dale Station impoundments still contained CCR and some liquids. The former impoundments were fully dewatered shortly after the effective date of the 2015 Rule.

23. KDWM certified by letter in January 2019 that it accepted and approved EKPC's final Construction Progress Reports documenting its activities in closing the former Dale Station impoundments by removal of the CCR. *See* Ex. B.

24. Thus, it has been nearly five-and-a-half years since the Commonwealth of Kentucky certified that EKPC successfully closed the former Dale Station impoundments by removal, and longer than that since any of the former Dale Station impoundments held any liquids or CCR. The former Dale Station impoundments presently contain no CCR, which was excavated and removed to the level of the native soils.

25. EKPC spent approximately $27 million clean-closing the former Dale Station impoundments.

26. The Rule defines a "legacy CCR surface impoundment" as "a CCR surface impoundment that no longer receives CCR but contained both CCR and liquids on or after October 19, 2015, and that is located at an inactive electric utility or independent power producer." 89 Fed. Reg. 39100. The former Dale Station impoundments no longer received CCR on that date, but they contained both CCR and some liquids on or after October 19, 2015. EKPC, therefore, believes that the former Dale Station impoundments are now regulated under the Rule as legacy CCR Surface Impoundments. *See id.*

27. EKPC's closure of the former Dale Station impoundments has long been completed, under State oversight, but the Rule will force EKPC to "re-open" that completed regulatory process and will mandate that EKPC "re-close" the former Dale Station impoundments that no longer exist. It does so even though the former Dale Station impoundments are no longer sites where CCR is disposed of and, further, are sites that do not contain any CCR or liquids.

28. The Rule contains multiple potential compliance pathways for legacy CCR surface impoundments. To satisfy the least burdensome compliance pathway and avoid having to satisfy the full gamut of CCR Rule requirements with respect to the former Dale Station impoundments, EKPC would need to provide a closure certification pursuant to 40 C.F.R. § 257.100(g). Under this option, EKPC would have to install one or more groundwater-monitoring systems at Dale Station that meets the CCR Rule standards and demonstrate compliance with the applicable groundwater-protection standards by November 8, 2024. *See* 89 Fed. Reg. 39107. It is impossible in any practical sense to meet this deadline.

29. There was not enough time between May 8, 2024, and November 8, 2024, to design and install the groundwater-monitoring system and perform the multiple sampling events needed to establish background water quality, as well as identify appropriate statistical methods and perform the sampling and statistical analyses necessary to demonstrate whether the groundwater meets groundwater-protection standards.

30. The next least burdensome compliance option to avoid having to meet the full requirements of the 2015 Rule is found in 40 C.F.R. § 257.100(h). To satisfy this compliance option, EKPC would, among other things, need to install and operate a groundwater-monitoring system (as described in the previous paragraph), satisfy the full gamut of requirements found in 40 C.F.R. §§ 257.90 through 257.95, and demonstrate no exceedances of the groundwater-protection standards by May 8, 2028. *See* 89 Fed. Reg. 39107. This option would require EKPC to engage qualified environmental professionals to perform hydrogeologic studies of the site, prepare reports of the results of those studies, perform investigatory drilling, design, install, develop and certify the

groundwater-monitoring system, and perform the sampling and statistical analyses necessary to demonstrate that there are no exceedances of the groundwater-protection standards by May 8, 2028. EKPC has already begun work to satisfy these requirements. Completing this extensive series of activities by the May 2028 deadline will, in the absence of a stay, require EKPC to begin construction activities no later than March 2025.

31. If EKPC cannot satisfy either of the foregoing compliance options, it will need to satisfy the full requirements of the Rule for the former Dale Station impoundments. Those requirements include, among other things, performing groundwater monitoring (including detection and assessment monitoring), preparing closure and post-closure plans, performing corrective action (if needed), and re-closing the impoundments. EKPC would also then be required to evaluate the Dale Station site for the presence of CCRMUs and comply with the Rule's CCRMU requirements for any CCRMUs identified.

32. The Rule will thus subject the former Dale Station impoundments to numerous and burdensome requirements even though

those former impoundments have not contained either CCR or liquids for several years. *See, e.g.*, 89 Fed. Reg. 39105–08.

33. If EKPC had known when it initially closed the former Dale Station impoundments that EPA would subsequently force it to install groundwater-monitoring systems for those former impoundments, it would have performed the closure work differently. Among other things, it would have performed the grading and earth-moving work in ways that would be more conducive to the future installation of groundwater-monitoring systems. If it is forced to install such systems as a result of the Rule, it will have to undo, and then redo, much of the work that it performed nearly a decade ago when it initially closed those former impoundments.

34. The Rule thus directly harms EKPC.

IMPACT OF THE RULE ON EKPC AND CONSUMERS

35. The Rule will have significant negative impacts on EKPC. These impacts will ultimately fall most heavily on rural Kentucky ratepayers, many of whom cannot afford to pay more for energy.

36. EKPC estimates that compliance with the Rule as to the Dale Station will cost in excess of $16.5 million. This is in addition to the

approximately $27 million that EKPC previously spent to clean-close the former Dale Station impoundments.

37. Costs to comply with the Rule ultimately would be borne by the Owner-Members in the form of ultimately higher electricity costs. Many of their ratepayers live in poverty and cannot afford higher energy costs.

38. All the near-term costs associated with the Rule will begin flowing immediately to EKPC's members and, ultimately, to its end-users in rural communities and communities of poverty, who depend on EKPC for reliable, affordable power.

39. These costs cannot be deferred or delayed until the courts reach a final determination on the merits of the Petition for Review. EKPC expects that could take several years. If the Rule remains in effect while EKPC's challenge is pending, EKPC will have no choice but to incur significant non-refundable compliance costs as well as to shoulder the many other substantial, immediate, and irreparable harms described above. Even if the Rule is overturned, the direct costs to EKPC, its

member cooperatives, and end users cannot be recouped once spent. These damages are permanent.

* * *

I declare under penalty of perjury under the laws of the United States of America, pursuant to 28 U.S.C. § 1746, that the foregoing is true and correct to the best of my knowledge.

Executed on this 19th day of August, 2024, in Winchester, Kentucky.

Jerry B. Purvis, Vice President
Environmental Affairs

EXHIBIT A

Steven L. Beshear
Governor

Leonard K. Peters
Secretary

ENERGY AND ENVIRONMENT CABINET
Division of Waste Management
200 Fair Oaks, 2nd Floor
FRANKFORT, KY 40601
TELEPHONE: 502-564-6716
FACSIMILE: 502-564-3492
waste.ky.gov

July 14, 2014

Mr. Jerry Purvis, Environmental Affairs Director
East Kentucky Power Co-operative, Inc.
P.O. Box 707
Winchester, Kentucky 40392-0707

Certified Mail No. 7013 1090 0000 6758 2443

RE: Closure Coal Combustion By-Product Surface Impoundments (Ash Ponds 1, 2, 3 and 4)
William C. Dale Station
Agency Interest No. 809
Clark County, Kentucky

Dear Mr. Purvis:

Based on our meeting at the facility on June 27, 2014, the Kentucky Division of Waste Management (DWM) is in agreement with East Kentucky Power Co-operative's (EKPC) approach for conducting closure of existing Coal Combustion By-Product Surface Impoundments 1, 2, 3 and 4 at Dale Station. Per discussion with Tammi Hudson, P.E. and myself, EKPC intends to pursue clean closure of the four surface impoundments by removing all waste for disposal at J.K. Smith Station Landfill. To summarize our discussions, the closure will consist of the following elements:

1. Remove all fly ash and bottom ash materials in the surface impoundments to the level of underlying existing soils. A permit is not required from the DWM to remove coal combustion residuals from the Dale Station Coal Combustion By-Product Surface Impoundments.

2. For compliance with KRS 224.50-760, utility waste is considered to include incidental soil, rock, or other materials excavated as part of coal combustion residuals removal. Incidental material may remain comingled during transportation and disposal.

3. Ash removal will be certified by a third party Professional Engineer, and verified by visual inspection performed by DWM representatives. No sampling will be required.

4. The removed utility waste will be transported to J.K. Smith Station Landfill for disposal.

5. Groundwater monitoring will not be required if waste is verified as removed from the Coal Combustion By-Products Surface Impoundments and properly disposed off-site.

6. The facility will comply with their KPDES permit to control surface water impacts during construction activities.

7. After ash materials have been removed, the impoundments will be re-graded using on-site soils and soils transported from J.K. Smith Station Landfill borrow areas.

8. Upon project completion, EKPC will submit a Construction Progress Report (CPR) documenting the closure construction activities.

9. DWM will issue a termination letter to EKPC once the CPR is accepted and approved.

If you need clarification or additional information, please contact Tammi Hudson, P.E. at (502) 564-6716, extension 4660.

Sincerely,

R. D. Gruzesky

Ronald D. Gruzesky, P.E.
Manager, Solid Waste Branch

RDG/tbh

EXHIBIT B

MATTHEW G. BEVIN
GOVERNOR

CHARLES G. SNAVELY
SECRETARY

ANTHONY R. HATTON
COMMISSIONER

ENERGY AND ENVIRONMENT CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION

300 SOWER BOULEVARD
FRANKFORT, KENTUCKY 40601
TELEPHONE: 502-564-2150
TELEFAX: 502-564-4245

Rec'd
Jan 22, 2019
JBP

January 17, 2019

Mr. Jerry Purvis
East Kentucky Power Cooperative, Inc.
P.O. Box 707
Winchester, KY 40392

Certified Mail No. 7010 1870 0000 9172 9570

RE: Construction Progress Report: Ash Ponds 2, 3 & 4 - Closure by Removal
EKPC - Dale Station
Agency Interest No. 809
Application No. APE20180003
Clark County

Dear Mr. Purvis:

The Kentucky Division of Waste Management (DWM), Solid Waste Branch has reviewed the above-referenced report, received on November 16, 2018 and the addendum received January 10, 2019. DWM hereby accepts the report. The permit-by-rule activities pursuant to 401 KAR 45:060 are hereby terminated and are known as Ash Ponds 2, 3, and 4 (ACTV0003, ACTV0005, and ACTV0006).

Be advised that if you consider yourself aggrieved by the issuance of this action, you have the right, pursuant to KRS 224.10-420(2) to file a petition demanding a hearing with the Cabinet. This right shall be limited to a period of thirty (30) days from the issuance of this action. The petition should be filed with The Office of Administrative Hearings located at 211 Sower Blvd., Frankfort, KY 40601. See http://oah.ky.gov for additional information. Should you have any questions, please contact me at (502) 782-6305 or Ken Melton at (502) 782-6325 or Jamie Nielsen at (502) 782-6426.

Sincerely,

Danny Anderson

Danny Anderson, P.E.
Manager, Solid Waste Branch

DA/jn

c: Mr. Jerry Purvis via email: jerry.purvis@ekpc.coop
Mr. Tim Oakes via email: toakes@kenvirons.com

CERTIFICATE OF SERVICE

I certify that on this 31st day of January, 2025, a copy of the foregoing document was served electronically through the Court's CM/ECF system on all registered counsel.

Dated: January 31, 2025

s/ P. Stephen Gidiere III
P. Stephen Gidiere III