BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
PETITION OF SOUTHERN ILLINOIS POWER COOPERATIVE FOR AN ADJUSTED STANDARD FROM 35 Ill. Adm. Code PART 845 OR, IN THE ALTERNATIVE, A FINDING OF INAPPLICABILITY	)	AS 2021-006 (Adjusted Standard)

NOTICE OF ELECTRONIC FILING

TO: *See* attached Certificate of Service.

PLEASE TAKE NOTICE that I have today electronically filed with the Office of the Clerk of the Illinois Pollution Control Board the Illinois EPA's HEARING EXHIBITS, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: _/s/ Gabriel H. Neibergall_____

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DATED: June 13, 2025

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HEARING EXHIBITS

Pursuant to 35 Ill. Adm. Code Section 101.627, and the Hearing Officer's request, the Illinois Environmental Protection Agency is filing its Exhibits 56, 57, and 58 (*see* attached); which were introduced at the hearing in this matter, which concluded June 12, 2025.

Undersigned counsel, as an attorney for the Agency, hereby certifies that each hearing exhibit being filed is an accurate reproduction of the corresponding exhibit offered at the hearing.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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EXHIBIT

56

Questions From the Board for IEPA

Regarding Agency's consideration of potential presence of CCR within the berm of Former Pond B-3, SIPC states that for defining a CCR surface impoundment, the materials placed within the impoundment and managed under a hydraulic head must be evaluated rather than the makeup of a structural berm surrounding the impoundment. SIPC Resp. to Rec. at 10-11. Please clarify the rationale for considering the composition of the berm rather than focusing on the CCR placed within the impoundment as suggested by SIPC.

The berm that the Agency wanted SIPC to evaluate at Pond B-3 is an internal berm, not a structural berm. In its Amended Pet. at 13, SIPC states that Pond B-3 did receive fly ash. Note in Agency Ex. 4 that a clearly visible delta appears in Pond B-3, but in Agency Ex. 5 an internal berm has been constructed and the delta is gone. SIPC claims that as of 2017 sediments had been removed from the basin, but it still occasionally contains storm water, Second Amended Pet. at 51. The Agency believes the internal berm was constructed of material from the delta which is composed primarily of CCR. The Agency requested that SIPC collect a sample from the internal berm in Pond B-3 and identify the material in the sample. While SIPC did collect a berm sample, they did not identify the material in the sample using PLM, which was SIPC's chosen method to identify the content of sediment and berm samples. Therefore, until SIPC meets its burden of proof and demonstrates that the berm is not composed of CCR, the Agency believes the berm still represents CCR within a CCR surface impoundment.

2. The Agency stated that based on the "berm's length, width, and the reported Pond 3 bottom and surface elevations, measured from aerial photos and depths from Pet. Ex. 29, the Agency estimates that 5,117 cubic yards of materials are contained in the internal berm." Rec. at 11. Please clarify if the Agency considers 5,117 cubic yards of material contained in the berm to be composed predominantly of CCR.

Yes, the Agency believes the material is predominantly CCR. SIPC identifies sample B-3a, collected from the Pond 3 internal berm as 23% fly ash in Pet. Ex. 29, Table 8. The analysis of sample B-3a, 4-6 feet, Pet. Ex. 29, Appendix at 202/542 provides the sample results. The results are 23% fly ash with the remaining portion being listed as "non-fly ash components". This description of sample B-3a <u>does not</u> say the materials are not CCR, only that they are not fly ash. This means that the non-fly ash materials could be bottom ash or slag. The boring log for boring B-3a, Pet. Ex. 29 at 176/542 identifies "Bed Ash" from approximately 0.75 feet to 9.75 the bottom of the boring at 9.75 feet. Further, the listed non-fly ash components are Clay, Misc. Silicates, Opaques and Quartz. SIPC states that "Other" generally includes Quartz, Carbonate, Vermiculite, Perlite, isotropic/glass, organics and opaque particles, Pet Ex. 40, Appendix A. SIPC Ex. 29, Appendix, Table 2 at 205/542 identifies a sample of SIPC Sludge, which is FGD material and is defined as CCR as being composed 100% "Other". As shown in Agency Ex. OO, Pond 3 was placed to allow storm water from the stored sludge pile to

runoff into Pond 3. Therefore, it is the Agency's contention that the internal berm is composed of fly ash, bed ash and sludge, all of which are CCR.

3. SIPC states that for Pond 3 "there is no indication that the permitted volume is a reflection of reality and other historic documentation supports the volume set forth in the bathymetric survey." SIPC Resp. at 11. Therefore, SIPC asserts that the Agency's conclusion that there is 18,327 cubic yard of sediment in Pond 3 based on the difference in volume between the bathometric survey and the permitted volume is incorrect. *Id.* Does the Agency have any evidence to support that Pond 3 was used to its full permitted volume? If not, please explain the rationale used to determine the volume of sediments to be 18,327 cubic yards.

The Agency must assume that information submitted as part of a permit application is accurate. SIPC has provided no as-built drawings demonstrating that construction of Pond 3 was different than permitted. It is SIPC's burden to provide evidence supporting their contentions.

4. SIPC states that after Pond 4 had been cleaned "down to the clay" in 2010, that Pond 4 only contained two materials: "dry and dark materials" that make up approximately 60-70% of the pond that "consisted primarily of coal fines", and "muddy materials high in organic matter". Am Pet. at 13. Does the Agency have any evidence that either of the materials placed in Pond 4 after it was cleaned in 2010 contain more than de minimus amounts CCR or that CCR was deposited in Pond 4 after it was cleaned?

SIPC has provided no data demonstrating that the entire area of Pond 4 was dewatered nor that the entire area of Pond 4 was cleaned to clay in 2010. Under the premise that the entire area of Pond 4 was cleaned to clay in 2010, then the materials placed in Pond 4 should be reflected in sediment samples S-4n, S-4x, S-4gp and S-4gs as presented in Pet. Ex. 29, Table 7 at 15/542. As explained in the Agency's answer to Board Question 2, SIPC Sludge, which is CCR is identified as being 100% "Other". Therefore, when assessing CCR content "Other" must be counted as CCR. The sediment samples from Pond 4 are S-4n 77% CCR (23% coal), S-4x 100% CCR (0% coal), S-4gp 100% CCR (0% coal) and S-4gs 99% CCR (1% coal). Based on the analytical data provided by SIPC, most of the material in Pond 4 is CCR.

5. In its response to the Agency, SIPC states "there are many sources of possible sediment in Pond 4 and the mere existence of deltas in no way supports a contention that the pond contains a 'significant amount of CCR'". SIPC Resp. at 9. SIPC further claims the exposed delta areas could be "due to fluctuating water levels in the pond." *Id.* SIPC also hypothesizes that "the likely source of the sediment in the deltas is coal pile runoff". *Id.*

a. Does the Agency have a response to SIPC's claims that the presence of deltas within Pond 4 may not be due to CCR accumulation?

   Deltas are formed when suspended material in flowing water loses energy and the suspended material drops out of the water which was carrying it. Lowered water levels

simply expose areas where this process has taken place. The presence of CCR is identified by sampling deposited material as explained in Board questions 2 and 4.

b. If there is a lack of information about the composition of the deltas, should SIPC be required to test the material in the deltas to confirm the presence or absence of CCR?

Yes, sampling and identification of the material is the only way to determine if a delta is composed of CCR or another material.

6. The Pond Investigation Report discusses the "typical unburned carbon content in fly ash". Pet. Exh. 29 at 8. SIPC states that before 1990 the typical unburned carbon content in fly ash ranged between 2-12%. *Id.* After the 1990 Clean Air Act Amendments the unburned carbon content in fly ash could be as high as 20%. *Id.* Eight fly ash samples from the Unit 4 boiler were collected between 2012 and 2015. *Id.* The unburned carbon content in these fly ash samples ranged between 1.31 and 5.25% with an average of 2.79%. *Id.* The carbon content from coal at the SIPC facility averages to be around 64.1%. *Id.* at Table 2. The carbon content in sediment samples from Pond 3A were found to be 64.08% and 27.05%. *Id.* The carbon content in sediment samples from Pond 4 ranged between 47.62% and 28.92%. *Id.* Based on the carbon content SIPC concluded the carbon found in Ponds 3/3A and Pond 4 is likely attributable to coal from the facility. *Id.* at 8. Please clarify if there are any factors that should be considered by the Board that may indicate that the high carbon content in the sediment samples for Ponds 3/3A and Pond 4 is due to the presence of CCR and not coal.

The total elemental carbon content of Ponds 3, 3A and 4 could be impacted by the amount of carbonate in the samples. Carbonate is an element composed of one carbon atom bonded with three oxygen atoms. As presented in Pet. Ex. 40, Appendix A, Carbonate is a component of the "Other" category of materials identified in sediment and berm samples. Therefore, the total elemental carbon percentage will be impacted by the carbonate content.

7. The Recommendation cites the Pond Investigation Table 7 to support the statement that a sediment sample collected from Pond 3A was approximately 87% CCR. Rec. at 14. However, in Table 7, the sediment samples from Pond 3A (S-An and S-3Ax) were presented as 20% and 34% CCR (slag+ fly ash+ bottom ash) respectively. Pet. Exh. 29 at Table 7. Please clarify how the Agency determined a sediment sample from Pond 3A is approximately 87% CCR.

SIPC Ex. 29, Appendix, Table 2 at 205/542 identifies a sample of SIPC Sludge as being composed of 100% "Other". SIPC sludge is FGD material. FDG material is defined as CCR in Section 3.142 of the Act. Therefore, any material identified as "Other" meets the definition of CCR. To find the total percentage of CCR slag + fly ash + bottom ash must be added to "Other".

8. In its response to the Agency's Recommendation, SIPC states the Former Landfill Area (Initial Fly Ash Holding Unit, Replacement Fly Ash Holding Unit, Fly Ash Holding Area Extension, and the Former CCR Landfill) was previously regulated by IEPA as a landfill not a CCR surface

impoundment. SIPC Resp. at 3-4. SIPC states the Former Fly Ash Holding Units (the Former Landfill Area minus the Former CCR Landfill) have been "dewatered and closed for decades and serve as structural fill for the areas of the Former CCR Landfill that sit on top of them." *Id.* at 4. SIPC additionally states IEPA requested and received a landfill closure plan for the Former Landfill Area. *Id.* If any parts of the Former Landfill Area were regulated under landfill regulations, please elaborate why it would be more appropriate now to regulate them as CCR surface impoundments.

Each of the Former Fly Ash Holding Units were subject to IEPA regulation as water pollution control facilities (i.e. surface impoundments) by the BOW, before SIPC submitted its IFR to the BOL requesting that these permitted impoundments be considered a permit exempt landfill under Part 815. In so doing, SIPC ignored the definition of a landfill, which clearly states a landfill is not a surface impoundment. SIPC's waste handling practices filled the IFAP and RFAP beyond capacity, allowing dry CCR to spread into the FAE and Pond 6. SIPC has provided no information demonstrating that any of the Former Fly Ash Holding Units were dewatered or closed. In fact, Pet. Ex. 41, 2(c), 2(d) and 2(e) verify that the Former Fly Ash Holding Units continued operation as CCR surface impoundments until at least 2015.

a. SIPC's adjusted standard requests that the Former Landfill Area (Initial Fly Ash Holding Unit, Replacement Fly Ash Holding Unit, Fly Ash Holding Area Extension) and Pond 6 to be closed together as one unit. See Section IV of Appendix A to second Am. Pet. SIPC has requested in its proposed adjusted standard to close the Former Landfill Area and Pond 6 via removal with beneficial reuse of the CCR. See Section IV(g) of Appendix A to second Am. Pet. Is there a reason that the Former Landfill Area and Pond 6 should not be closed together as one unit?

   The Agency would first like to clarify that much of what SIPC calls the Former Landfill is Pond 6, which has been filled with dry placed CCR. However, because dry placement of CCR in the permitted impoundments has overfilled and obscured the berms that formed the impoundments, closing them under a single cover system or closing them by removal would be most practical.

b. Is the Agency averse to these units closing by removal with beneficial reuse of the CCR? If so, why?

The Agency is not generally opposed to closing any CCR surface impoundment by removal, or beneficial use of CCR. However, the adjusted standard proposed by the SIPC is much too vague with regard to how the CCR will be put to beneficial use and the timeframe during which the CCR could be put to beneficial use is too open ended. Further the Agency notes that the available shake test data Pet. Ex. 29, Table 9, for surface impoundment samples provides the results of only 6 of the 24 metals required to meet the requirements for beneficial use of CCR under Section 3.135 of the Act.

9. SIPC asserts that the Agency inappropriately conflates Pond 6 with the Former CCR Landfill. SIPC Resp. to Rec. at 13. SIPC states that "Pond 6 consists only of the runoff [from] pond located

next to the landfill that was built to receive stormwater runoff the landfill." *Id.* Considering SIPC's response, please elaborate on the Agency's position on the classification and use of Pond 6.

Pond 6 was permitted under Permit 1981-EN-2776, See Agency Ex CC. Based on the drawing provided in the permit, the berm of Pond 6 is reported to be constructed to an elevation of 467.5 feet. The closure of the unbermed side of the impoundment is created by the base of the berms of the FAE and Pond 3, with the natural slope forming the southern extent. As can be seen in current aerial photos, the only portion not now filled with CCR is a narrow strip of water next to the permitted berm. The rest of the volume of Pond 6 has been filled with CCR stacked well above berm height.

10. Regarding the "long narrow impoundments" between Pond 6 and the Replacement Fly Holding Area, the Agency states that while dry handling is apparent in the aerial photos, there would be a need for "liquid handling of CCR in cold weather" and "mechanical malfunctions." Rec. at 36-37. Would the intermittent use of liquids in CCR handling be sufficient to meet the "designed to hold an accumulation of CCR and liquids" portion of the definition of a CCR surface impoundment under Part 845?

Yes. The definition of CCR surface impoundment does not include a time factor. Further, the as can be seen in Agency Ex. 4 (1998 photo) – Ex. 14 (2015 photo), the impoundments as discussed in Pet. Ex. 41, are visible for 16 years. These impoundments are also documented for operation under NPDES Permit IL0004316, See Agency Ex. 55 and Ex. PP.

11. SIPC states "the De Minimis Units have a CCR thickness that is less than 99% of all the nationwide surface impoundments modeled as part of the 2014 Risk Assessment." SIPC Resp. 26. SIPC further states that the De Minimis Units "have a sediment depth of less than two feet" and "an amount of CCR that would create a 'depth' of less than one foot." *Id.* SIPC notes that units in the 50th percentile of the 2014 Risk Assessment had a depth of 13.6 feet and units in the 90th percentile had a depth of 36.6 feet. *Id.* The De Minimis Units would be in the 1-2 percentile of the units discussed in the 2014 Risk Assessment. *Id.* at Table 4.4.

a. Does the Agency contest SIPC's claim the amount of CCR present in the sediment of the De Minimis Units would be in the 1-2 percentile of the units evaluated in USEPA's 2014 Risk Assessment?

The USEPA Risk Assessment was conducted for CCR surface impoundments. Therefore, whether the SIPC surface impoundments resemble 1% of the CCR surface impoundments assessed by USEPA or 90% of the CCR surface impoundments assessed by USEPA, the SIPC impoundments are CCR surface impoundments and the USEPA Risk Assessment is applicable.

b. If the Agency does not contest SIPC's claim, are there other factors of the De Minimis Units that make them ineligible to be considered as such?

USEPA does not regulate de-minimis units. Therefore, the 2014 Risk Assessment is applicable as explained in (a). USEPA's updates to Part 257, 89 Fed Reg May 8, 2024, 38979 and 39000, shed additional light on the question of the impact of de-minimis units. The USEPA has found that CCR units with as little as 1,000 tons of CCR have caused exceedances of GWPS. While the cited text refers generally to CCRMUs, the definition of a CCRMU includes inactive CCRSI, 89 Fed Reg May 8, 2024, 39100.

12. The Agency has indicated there are issues with the groundwater monitoring network at Marion Station. Rec. at 47. The Agency also states there are issues specifically around Pond 4 by stating "the actual direction of groundwater flow near Pond 4 cannot be accurately determined." Am. Rec. at 8. Additionally, SIPC has indicated that groundwater well monitoring network may be "enhanced for future monitoring". Pet. Exh. 40 at 18. Regarding the groundwater monitoring requirements under the proposed adjusted standards outlined in Appendix A of the Second Amended Petition:

a. The proposed adjusted standards do not appear to exempt the units from the groundwater or corrective action requirements of Part 845. See Sections I(f), II(e), III(f), and IV(f) of Appendix A to the Second Am. Pet. Could the Agency's concerns about the sufficiency of the groundwater well monitoring network be addressed during the closure of these unit?

The Agency anticipates that the deficiencies in the groundwater monitoring system would be addressed by an operating permit application under Part 845.230(d)(2)(I). The initial operating permit application requires the applicant to submit (i) a site characterization (845.620), (ii) design and construction plans for a groundwater monitoring system (845.630), (iii) sampling and analysis program (845.640) and (iv) the proposed monitoring program include a minimum of eight independent samples. The groundwater monitoring network does not have to be in place to submit an operating permit. Construction of the monitoring wells would be permitted under the closure construction permit, which is why the Agency's Recommendation includes the permit application submission time-line.

b. Is it possible for the Agency to estimate the time period that would be required to establish an adequate or enhanced groundwater well monitoring network and collect sufficient data to evaluate the impact of the units covered by the adjusted standard on groundwater?

The Agency estimates, depending on weather conditions, a monitoring well system could be installed in 3-4 months. Collection of background for statistical analysis should take into consideration seasonal variation and should therefore span at least 12 months but should not extend more than 24 months.

c. Would the Agency be amenable to an interim adjusted standard to allow for the establishment of groundwater monitoring network and collection of sufficient data to better characterize the environmental impacts of the units in the proposed adjusted standards?

While the Agency did recommend an interim adjusted standard AS 2021-005, for the Joppa West CCR surface impoundment, the geology at that location is significantly different than at SIPC. Based on available data there is a relatively thick 35-40 foot thick clay layer near that impoundment, which may significantly slow groundwater migration and impact available treatment options. At SIPC there is a relatively thin sandy clay layer underlain by weather sandstone. The geology at SIPC represents higher potential for migration and groundwater monitoring, and potentially required corrective action, should be addressed more expeditiously.

13. The Agency states that Pond 4 "is not a good candidate for retrofit because of its proximity to other CCR surface impoundments that are contaminating groundwater." Am. Rec. at 9. The Agency further states if SIPC "determines that it may need to keep a CCR surface impoundment at Marion Station, the initial written retrofit plan should be submitted within 30 days of a Board order". *Id.* Please clarify if the Agency intends to explicitly prohibit Pond 4 from being retrofitted and for the retrofit plan to only consider units other than Pond 4.

Section 845.770 only applies to CCRSI. Unless Pond 4 is determined to be a CCRSI, retrofitting is not an option. SIPC specifically mentioned retrofitting Pond 4, therefore the Agency only referenced Pond 4, however the same circumstances hold true if SIPC decides it wants to retrofit any CCRSI at the facility. Since all of the CCRSI at SIPC are unlined, to retrofit, the pond would have to be completely dewatered. Then all CCR, contaminated subsoils and sediments would have to be removed. The closure permit would contain specifications for demonstrating these criteria have been met. Then a composite liner under 845.400 and a leachate collection system under 845.420 would have to be installed.

EXHIBIT

57

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9 and 257

[EPA–HQ–OLEM–2020–0107; FRL–7814–04–OLEM]

RIN 2050–AH14

Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: On April 17, 2015, the Environmental Protection Agency (EPA or the Agency) promulgated national minimum criteria for existing and new coal combustion residuals (CCR) landfills and existing and new CCR surface impoundments. On August 21, 2018, the United States Court of Appeals for the District of Columbia Circuit vacated the exemption for inactive surface impoundments at inactive facilities (legacy CCR surface impoundments) and remanded the issue back to EPA to take further action consistent with its opinion in *Utility Solid Waste Activities Group, et al.* v. *EPA*. This action responds to that order and establishes regulatory requirements for legacy CCR surface impoundments. EPA is also establishing requirements for CCR management units at active CCR facilities and at inactive CCR facilities with a legacy CCR surface impoundment. Finally, EPA is making several technical corrections to the existing regulations, such as correcting certain citations and harmonizing definitions.

DATES: This final rule is effective on November 4, 2024.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–OLEM–2020–0107. All documents in the docket are listed on the *http://www.regulations.gov* website. Although listed in the index, some information is not publicly available, *e.g.*, CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through *http://www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: For questions concerning this proposal, contact Michelle Lloyd, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, Environmental Protection Agency, 1200 Pennsylvania Avenue NW, MC: 5304T, Washington, DC 20460; telephone number: (202) 566–0560; email address: *Lloyd.Michelle@epa.gov*, or Taylor Holt, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, Environmental Protection Agency, 1200 Pennsylvania Avenue NW, MC: 5304T, Washington, DC 20460; telephone number: (202) 566–1439; email address: *Holt.Taylor@epa.gov*. For more information on this rulemaking, please visit *https://www.epa.gov/coalash*.

SUPPLEMENTARY INFORMATION:

Table of Contents

List of Acronyms

ACM Assessment of Corrective Measures
ANPRM Advance Notice of Proposed Rulemaking
ARAR applicable or relevant and appropriate requirements
ASD alternative source demonstration
CAA Clean Air Act
CBI Confidential Business Information
CBR closure by removal
CCR coal combustion residuals
CCRMU coal combustion residuals management unit
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
CIP closure in place
CFR Code of Federal Regulations
COALQUAL U.S. Geological Survey coal quality database
CWA Clean Water Act
DOE Department of Energy
EAP Emergency Action Plan
EIA Energy Information Administration
EIP Environmental Integrity Project
EJ environmental justice
ELG Effluent Limitation Guidelines
EPA Environmental Protection Agency
EPACMTP EPA Composite Model for Leachate Migration with Transformation Products
EPRI Electric Power Research Institute
FER Facility Evaluation Report
FERC Federal Energy Regulatory Commission
FGD flue gas desulfurization
FR Federal Register
GWMCA groundwater monitoring and corrective action
GWPS groundwater protection standard
HQ hazard quotient
HSWA Hazardous and Solid Waste Amendments
ICR Information Collection Request
IRIS Integrated Risk Information System
LEAF Leaching Environmental Assessment Framework
MCL maximum contaminant level
MDE Maryland Department of the Environment
MNA monitored natural attenuation
MODFLOW–USG Modular Three-Dimension Finite-Difference Ground-Water Flow Model
MSW Municipal Solid Waste
MW Megawatts
NAICS North American Industry Classification System
NERC North American Electric Reliability Corporation
NODA notice of data availability
NPDES National Pollution Discharge Elimination System
NPL National Priorities List
NTTAA National Technology Transfer and Advancement Act
OAFU Other Active Facilities
OLEM Office of Land and Emergency Management
OMB Office of Management and Budget
OSHA Occupational Safety and Health Administration

■ b. Adding in alphabetical order the definition of "Closed prior to October 19, 2015";
■ c. Revising the definition of "CCR landfill or landfill";
■ d. Adding in alphabetical order the definition of "CCR management unit";
■ e. Revising the definitions of "CCR surface impoundment or impoundment" and "CCR unit";
■ f. Adding in alphabetical order the definitions of "Critical infrastructure", "Contains both CCR and liquids" and "Inactive CCR landfill";
■ g. Revising the definition of "Inactive CCR surface impoundment";
■ h. Adding in alphabetical order the definitions of "Inactive facility or inactive electric utility or independent power producer", "Infiltration", "Legacy CCR surface impoundment", and "Liquids";
■ i. Revising the definitions of "Operator" and "Owner";
■ j. Adding in alphabetical order the definition of "Regulated CCR unit";
■ k. Revising the definition of "State Director";
■ l. Removing the definitions of "Technically feasible" and "Technically infeasible"; and
■ m. Adding in alphabetical order the definitions of "Technically feasible or feasible" and "Technically infeasible or infeasible".

The revisions and additions read as follows:

§ 257.53 Definitions.

* * * * *

Active facility or *active electric utilities or independent power producers* means any facility subject to the requirements of this subpart that is in operation on or after October 19, 2015. An electric utility or independent power producer is in operation if it is generating electricity that is provided to electric power transmission systems or to electric power distribution systems on or after October 19, 2015. An off-site disposal facility is in operation if it is accepting or managing CCR on or after October 19, 2015.

* * * * *

Closed prior to October 19, 2015 means the CCR landfill or surface impoundment completed closure of the unit in accordance with state law prior to October 19, 2015.

* * * * *

CCR landfill or landfill means an area of land or an excavation that contains CCR and which is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. For purposes of this subpart, a CCR landfill also includes sand and gravel pits and quarries that receive CCR, CCR piles, and any practice that does not meet the definition of a beneficial use of CCR.

CCR management unit means 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. This includes inactive CCR landfills and CCR units that closed prior to October 19, 2015, but does not include roadbed and associated embankments in which CCR is used unless the facility or a permitting authority determines that the roadbed is causing or contributing to a statistically significant level above the groundwater protection standard established under § 257.95(h).

* * * * *

CCR surface impoundment or *impoundment* means a natural topographic depression, man-made excavation, or diked area, designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.

CCR unit means any CCR landfill, CCR surface impoundment, or lateral expansion of a CCR landfill or CCR surface impoundment, or a combination of more than one of these units, based on the context of the paragraph(s) in which it is used. This term includes both new and existing units, unless otherwise specified. This term includes CCR management units and legacy CCR surface impoundments.

Contains both CCR and liquids means that both CCR and liquids are present in a CCR surface impoundment, except where the owner or operator demonstrates that the standard in § 257.102(d)(2)(i) has been met.

Critical infrastructure means physical structures, such as buildings, railways, bridges, or tunnels, that are not readily replaced or relocated and are either:

(1) Necessary for the continued generation of power, or

(2) Vital to the success or continuation of other on-going site activity for the public welfare. Examples of critical infrastructure include high power electric transmission towers, air pollution control or wastewater treatment systems, active CCR units, buildings, or an electrical substation. Buildings or other structures that exclusively provide commercial or financial benefit to private entities are not critical infrastructure.

* * * * *

Inactive CCR landfill means an area of land or an excavation that contains CCR but that no longer receives CCR on or after October 19, 2015 and that is not a surface impoundment, an underground injection well, a salt dome formation, a salt bed formation, an underground or surface coal mine, or a cave. This term also includes sand and gravel pits that contain CCR and CCR piles, which have not received CCR on or after October 19, 2015, and abandoned or inactive CCR piles.

Inactive CCR surface impoundment means a CCR surface impoundment located at an active facility that no longer receives CCR on or after October 19, 2015, and still contains both CCR and liquids on or after October 19, 2015.

Inactive facility or *inactive electric utility or independent power producer* means any electric utility or independent power producer that ceased providing power to electric power transmission systems or to electric power distribution systems before October 19, 2015. An off-site disposal facility is inactive if it ceased accepting or managing CCR prior to October 19, 2015.

* * * * *

Infiltration means the migration or movement of liquid, such as surface water or ground water, into or through a CCR unit from any direction, including from the surface, laterally, and through the bottom of the unit.

* * * * *

Legacy CCR surface impoundment means 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.

* * * * *

Liquids means any fluid (such as water) that has no independent shape but has a definite volume and does not expand indefinitely and that is only slightly compressible. This 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, groundwater, and any other form of water that has migrated into the impoundment, which may be found as free water or standing water ponded above CCR or porewater intermingled with CCR.

* * * * *

Operator means the person(s) responsible for the overall operation of a CCR unit. This term includes those person(s) or parties responsible for disposal or otherwise actively engaged in the solid waste management of CCR. It also includes those responsible for directing or overseeing groundwater

the final cover system, and the estimated timeframes to complete each step or phase of CCR unit closure. When preparing the written closure plan, if the owner or operator of a CCR unit estimates that the time required to complete closure will exceed the timeframes specified in paragraph (f)(1) of this section, the written closure plan must include the site-specific information, factors and considerations that would support any time extension sought under paragraph (f)(2) of this section.

(2) *Timeframes for preparing the initial written closure plan*—(i) *Existing CCR landfills and existing CCR surface impoundments.* No later than October 17, 2016, the owner or operator of the CCR unit must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this section.

(ii) *New CCR landfills and new CCR surface impoundments, and any lateral expansion of a CCR unit.* No later than the date of the initial receipt of CCR in the CCR unit, the owner or operator must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this section.

(iii) *CCR management units.* Except as provided for in paragraph (b)(2)(v) of this section, no later than November 8, 2028, the owner or operator of the CCR management unit must prepare an initial written closure plan consistent with the requirements specified in paragraph (b)(1) of this section.

(iv) *Recordkeeping.* The owner or operator has completed the written closure plan when the plan, including the certification required by paragraph (b)(4) of this section, has been placed in the facility's operating record as required by § 257.105(i)(4).

(v) *Closure documentation for certain CCR management units.* Owners and operators of a CCR management unit that completed closure of the unit in accordance with § 257.102(d) prior to Friday, November 8, 2024 or that meet the requirements in § 257.101(g) must include in the facility evaluation report specified in § 257.75 information on the completed closure, along with supporting documentation to demonstrate that the closure meets the performance standards in § 257.102(d) or the standards specified in § 257.101(g).

(3) *Amendment of a written closure plan.* (i) The owner or operator may amend the initial or any subsequent written closure plan developed pursuant to paragraph (b)(1) of this section at any time.

(ii) The owner or operator must amend the written closure plan whenever:

(A) There is a change in the operation of the CCR unit that would substantially affect the written closure plan in effect; or

(B) Before or after closure activities have commenced, unanticipated events necessitate a revision of the written closure plan.

(iii) The owner or operator must amend the closure plan at least 60 days prior to a planned change in the operation of the facility or CCR unit, or no later than 60 days after an unanticipated event requires the need to revise an existing written closure plan. If a written closure plan is revised after closure activities have commenced for a CCR unit, the owner or operator must amend the current closure plan no later than 30 days following the triggering event.

(4) *Certification or approval.* The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority that the initial and any amendment of the written closure plan meets the requirements of this section.

(c) *Closure by removal of CCR.* An owner or operator that elects to close a CCR unit by-removal of CCR must follow the procedures specified in either paragraph (c)(1) or (2) of this section. Closure by removal is complete when CCR has been removed; any areas affected by releases from the CCR unit have been removed or decontaminated; and groundwater monitoring concentrations of the constituents listed in appendix IV to this part do not exceed groundwater protection standards established pursuant to § 257.95(h). Removal and decontamination activities include removing all CCR from the unit, CCR mixed with soils, and CCR included in berms, liners or other unit structures, and removing or decontaminating all areas affected by releases from the CCR unit.

(1) *Complete all removal and decontamination activities during the active life of the CCR unit.* Within the timeframes specified in paragraph (f) of this section the owner or operator must do all of the following:

(i) Complete removal of CCR and decontamination of all areas affected by releases from the CCR unit;

(ii) Document that the standards in paragraph (c) of this section have been met. Documentation that groundwater protection standards have been met for the constituents listed in appendix IV to this part must consist of groundwater monitoring results that show no constituents were detected at statistically significant levels above the groundwater protection standards for either:

(A) Two consecutive monitoring events; or

(B) Three years, in accordance with § 257.98(c); and

(iii) Obtain the completion of closure certification or approval required by paragraph (f)(3) of this section.

(2) *Complete removal and decontamination activities during the active life and post-closure care period of the CCR unit.* The owner or operator may close a CCR unit by completing all removal and decontamination activities, except for groundwater corrective action, during the active life of the CCR unit and by completing groundwater corrective action during the post-closure care period pursuant to the following procedures:

(i) Within the timeframes specified in paragraph (f) of this section, document that CCR has been removed from the unit and any areas affected by releases from the CCR unit have been removed or decontaminated;

(ii) Within the timeframes specified in paragraph (f) of this section, begin implementation of the remedy selected in accordance with § 257.97 such that all components of the remedy are constructed, or otherwise in place, and operating as intended unless the owner or operator documents both that:

(A) All applicable requirements in §§ 257.96 through 257.98 have been met; and

(B) The active life of the unit could not be extended until implementation of the remedy consistent with § 257.102(f);

(iii) Complete groundwater corrective action as a post-closure care requirement as specified in § 257.104(g);

(iv) Amend the written closure plan required by paragraph (b) of this section and the written post-closure care plan required by § 257.104(d);

(v) Within the timeframes specified in paragraph (f) of this section, obtain the completion of closure certification or approval required by paragraph (f)(3) of this section; and

(vi) Within the timeframes specified in paragraph (f) of this section, record the notation on the deed to the property required by paragraph (i) of this section.

(d) *Closure performance standard when leaving CCR in place*—

(1) *General performance standard.* The owner or operator of a CCR unit must ensure that, at a minimum, the CCR unit is closed in a manner that will:

(i) Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;

(ii) Preclude the probability of future impoundment of water, sediment, or slurry;

(iii) Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;

(iv) Minimize the need for further maintenance of the CCR unit; and

(v) Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

(2) *Drainage and stabilization of CCR units.* The owner or operator of any CCR unit must meet the requirements of paragraphs (d)(2)(i) and (ii) of this section prior to installing the final cover system required under paragraph (d)(3) of this section.

(i) Free liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.

(ii) Remaining wastes must be stabilized sufficient to support the final cover system.

(3) *Final cover system.* If a CCR unit is closed by leaving CCR in place, the owner or operator must install a final cover system that is designed to minimize infiltration and erosion, and at a minimum, meets the requirements of paragraph (d)(3)(i) of this section, or the requirements of the alternative final cover system specified in paragraph (d)(3)(ii) of this section.

(i) The final cover system must be designed and constructed to meet the criteria in paragraphs (d)(3)(i)(A) through (D) of this section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.

(A) The permeability of the final cover system must be less than or equal to the permeability of any bottom liner system or natural subsoils present, or a permeability no greater than 1×10^{-5} cm/sec, whichever is less.

(B) The infiltration of liquids through the closed CCR unit must be minimized by the use of an infiltration layer that contains a minimum of 18 inches of earthen material.

(C) The erosion of the final cover system must be minimized by the use of an erosion layer that contains a minimum of six inches of earthen material that is capable of sustaining native plant growth.

(D) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(ii) The owner or operator may select an alternative final cover system design, provided the alternative final cover system is designed and constructed to meet the criteria in paragraphs (d)(3)(ii)(A) through (C) of this section. The design of the final cover system must be included in the written closure plan required by paragraph (b) of this section.

(A) The design of the final cover system must include an infiltration layer that achieves an equivalent reduction in infiltration as the infiltration layer specified in paragraphs (d)(3)(i)(A) and (B) of this section.

(B) The design of the final cover system must include an erosion layer that provides equivalent protection from wind or water erosion as the erosion layer specified in paragraph (d)(3)(i)(C) of this section.

(C) The disruption of the integrity of the final cover system must be minimized through a design that accommodates settling and subsidence.

(iii) The owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority that the design of the final cover system meets the requirements of this section.

(e) *Initiation of closure activities.* Except as provided for in paragraph (e)(4) of this section and § 257.103, the owner or operator of a CCR unit must commence closure of the CCR unit no later than the applicable timeframes specified in either paragraph (e)(1) or (2) of this section.

(1) The owner or operator must commence closure of the CCR unit no later than 30 days after the date on which the CCR unit either:

(i) Receives the known final receipt of waste, either CCR or any non-CCR waste stream; or

(ii) Removes the known final volume of CCR from the CCR unit for the purpose of beneficial use of CCR.

(2)(i) Except as provided by paragraph (e)(2)(ii) of this section, the owner or operator must commence closure of a CCR unit that has not received CCR or any non-CCR waste stream or is no longer removing CCR for the purpose of beneficial use within two years of the last receipt of waste or within two years of the last removal of CCR material for the purpose of beneficial use.

(ii) Notwithstanding paragraph (e)(2)(i) of this section, the owner or operator of the CCR unit may secure an additional two years to initiate closure of the idle unit provided the owner or operator provides written documentation that the CCR unit will continue to accept wastes or will start removing CCR for the purpose of beneficial use. The documentation must be supported by, at a minimum, the information specified in paragraphs (e)(2)(ii)(A) and (B) of this section. The owner or operator may obtain two-year extensions provided the owner or operator continues to be able to demonstrate that there is reasonable likelihood that the CCR unit will accept wastes in the foreseeable future or will remove CCR from the unit for the purpose of beneficial use. The owner or operator must place each completed demonstration, if more than one time extension is sought, in the facility's operating record as required by § 257.105(i)(5) prior to the end of any two-year period.

(A) Information documenting that the CCR unit has remaining storage or disposal capacity or that the CCR unit can have CCR removed for the purpose of beneficial use; and

(B) Information demonstrating that that there is a reasonable likelihood that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future or that CCR can be removed for the purpose of beneficial use. The narrative must include a best estimate as to when the CCR unit will resume receiving CCR or non-CCR waste streams. The situations listed in paragraphs (e)(2)(ii)(B)(*1*) through (*4*) of this section are examples of situations that would support a determination that the CCR unit will resume receiving CCR or non-CCR waste streams in the foreseeable future.

(*1*) Normal plant operations include periods during which the CCR unit does not receive CCR or non-CCR waste streams, such as the alternating use of two or more CCR units whereby at any point in time one CCR unit is receiving CCR while CCR is being removed from a second CCR unit after its dewatering.

(*2*) The CCR unit is dedicated to a coal-fired boiler unit that is temporarily idled (*e.g.*, CCR is not being generated) and there is a reasonable likelihood that the coal-fired boiler will resume operations in the future.

(*3*) The CCR unit is dedicated to an operating coal-fired boiler (*i.e.*, CCR is being generated); however, no CCR are being placed in the CCR unit because the CCR are being entirely diverted to beneficial uses, but there is a reasonable likelihood that the CCR unit will again be used in the foreseeable future.

(*4*) The CCR unit currently receives only non-CCR waste streams and those

EXHIBIT

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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 9 and 257

[EPA–HQ–OLEM–2020–0107; FRL–7814–04–OLEM]

RIN 2050–AH14

Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: On April 17, 2015, the Environmental Protection Agency (EPA or the Agency) promulgated national minimum criteria for existing and new coal combustion residuals (CCR) landfills and existing and new CCR surface impoundments. On August 21, 2018, the United States Court of Appeals for the District of Columbia Circuit vacated the exemption for inactive surface impoundments at inactive facilities (legacy CCR surface impoundments) and remanded the issue back to EPA to take further action consistent with its opinion in *Utility Solid Waste Activities Group, et al.* v. *EPA*. This action responds to that order and establishes regulatory requirements for legacy CCR surface impoundments. EPA is also establishing requirements for CCR management units at active CCR facilities and at inactive CCR facilities with a legacy CCR surface impoundment. Finally, EPA is making several technical corrections to the existing regulations, such as correcting certain citations and harmonizing definitions.

DATES: This final rule is effective on November 4, 2024.

ADDRESSES: EPA has established a docket for this action under Docket ID No. EPA–HQ–OLEM–2020–0107. All documents in the docket are listed on the *http://www.regulations.gov* website. Although listed in the index, some information is not publicly available, *e.g.*, CBI or other information whose disclosure is restricted by statute. Certain other material, such as copyrighted material, is not placed on the internet and will be publicly available only in hard copy form. Publicly available docket materials are available electronically through *http://www.regulations.gov*.

FOR FURTHER INFORMATION CONTACT: For questions concerning this proposal, contact Michelle Lloyd, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, Environmental Protection Agency, 1200 Pennsylvania Avenue NW, MC: 5304T, Washington, DC 20460; telephone number: (202) 566–0560; email address: *Lloyd.Michelle@epa.gov,* or Taylor Holt, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, Environmental Protection Agency, 1200 Pennsylvania Avenue NW, MC: 5304T, Washington, DC 20460; telephone number: (202) 566–1439; email address: *Holt.Taylor@epa.gov.* For more information on this rulemaking, please visit *https://www.epa.gov/coalash.*

SUPPLEMENTARY INFORMATION:

Table of Contents

List of Acronyms

ACM Assessment of Corrective Measures
ANPRM Advance Notice of Proposed Rulemaking
ARAR applicable or relevant and appropriate requirements
ASD alternative source demonstration
CAA Clean Air Act
CBI Confidential Business Information
CBR closure by removal
CCR coal combustion residuals
CCRMU coal combustion residuals management unit
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
CIP closure in place
CFR Code of Federal Regulations
COALQUAL U.S. Geological Survey coal quality database
CWA Clean Water Act
DOE Department of Energy
EAP Emergency Action Plan
EIA Energy Information Administration
EIP Environmental Integrity Project
EJ environmental justice
ELG Effluent Limitation Guidelines
EPA Environmental Protection Agency
EPACMTP EPA Composite Model for Leachate Migration with Transformation Products
EPRI Electric Power Research Institute
FER Facility Evaluation Report
FERC Federal Energy Regulatory Commission
FGD flue gas desulfurization
FR Federal Register
GWMCA groundwater monitoring and corrective action
GWPS groundwater protection standard
HQ hazard quotient
HSWA Hazardous and Solid Waste Amendments
ICR Information Collection Request
IRIS Integrated Risk Information System
LEAF Leaching Environmental Assessment Framework
MCL maximum contaminant level
MDE Maryland Department of the Environment
MNA monitored natural attenuation
MODFLOW–USG Modular Three-Dimension Finite-Difference Ground-Water Flow Model
MSW Municipal Solid Waste
MW Megawatts
NAICS North American Industry Classification System
NERC North American Electric Reliability Corporation
NODA notice of data availability
NPDES National Pollution Discharge Elimination System
NPL National Priorities List
NTTAA National Technology Transfer and Advancement Act
OAFU Other Active Facilities
OLEM Office of Land and Emergency Management
OMB Office of Management and Budget
OSHA Occupational Safety and Health Administration

concentrations exceeded GWPS by a factor of two for molybdenum. Based on these results, EPA finds that CCRMU fills can meaningfully contribute to groundwater contamination across a facility.

Groundwater concentrations modeled with EPACMTP at 500 and 1,000 feet away from the waste boundary were used calculate risks to individual RME receptors exposed to these concentrations. The 90th percentile concentration of each modeled constituent exceeded at least one risk benchmark at 1,000 feet. This indicates potential for leakage from fills to spread at environmentally significant concentrations. However, because these model runs represent concentrations at a fixed location, they do not provide broader information about the magnitude and extent of the plume. As a result, EPA does not rely primarily on these results to draw direct conclusions about overall risk. Instead, the Agency retained a subset of these model runs for both arsenic V and molybdenum from around the 90th percentile concentrations modeled at 1,000 ft. EPA selected pentavalent arsenic because it is the less mobile species and so provides a reasonable bounding on the high-end concentrations that can result for this contaminant. These runs were retained for further modeling with MODFLOW–USG to characterize the full magnitude and extent of each plume over time.

The MODFLOW–USG runs were designed with the same inputs as corresponding EPAMCTP runs. Altogether, these model runs reflect a range of conditions that collectively resulted in high-end groundwater concentrations 1,000 feet from the fill. These corresponding placements of CCR range from around 3,500 to 70,000 tons placed over areas between 0.15 to 2.0 acres. EPA calculated the midpoint across these runs to define values representative of the 90th percentile model runs. For arsenic V, the model identified a peak risk of 1×10^{-4} averaged over 32 million gallons (Mgal) of groundwater and a peak volume of 147 Mgal with an average risk of 7×10^{-5}. The same leakage of arsenic V would result in a peak GWPS exceedance of three averaged over a plume volume of 1.2 Mgal and a peak plume volume of 8 Mgal with an average exceedance of 2 times GWPS. It would take around 2,300 years from the time of first exceedance for the plume to fully dissipate. For molybdenum, the peak exceedance of both risk benchmark and GWPS was 10 averaged over a plume volume of 27 Mgal and a peak plume volume of 80 Mgal with an average exceedance of 4 times GWPS. It would take around 100 years from the time of first exceedance for the plume to fully dissipate. Plumes of these size and duration could readily sustain exposures for typical residential receptors that are anticipated to use around 80 gallons of water a day for all indoor household needs, resulting in less than 0.8 Mgal of use over 26 years of exposure.

iv. CCRMU Fill Soil Risk

EPA modeled of CCRMU fills to understand the potential risks that could result from CCR present in the soil. Exposure routes initially considered for evaluation were human inhalation of radon gas and direct exposure to gamma radiation emitted from the CCR. However, based on a preliminary review of available data, EPA determined that radon emanation from CCR (*i.e.,* fraction of radon able to escape into the surrounding air) is generally lower than from most soils. Despite the higher overall activity of CCR, the resulting radon emanation from the ash is not distinguishable from that of most surface soils. Therefore, EPA did not retain exposure to radon for further consideration.

Modeling of exposure to gamma radiation was conducted with the EPA PRG calculator. EPA evaluated the potential for direct exposure to gamma radiation from CCR under a soil cover ranging in thickness from 60 to 20 cm (2 to 0.66 feet). EPA compared the combined activity of the uranium-238 and thorium-232 decay chains in the CCR to the health benchmarks for each cover thickness to calculate the risks that could result from receptors living on or near the fill. Both 90th and 50th percentile activities have potential to result in cancer risks at or above 1×10^{-5} with a cover of 40 cm. The 90th percentile activity resulted in a cancer risk of 1×10^{-4} with a cover of 20 cm. This indicated the potential for even higher risk if the cover were to be disturbed and the CCR brought to the ground surface. However, evaluation of this scenario would require additional assumptions about the degree of mixing, which could be a major source of uncertainty on a national scale. Therefore, EPA retained this scenario for further consideration as part of a separate sensitivity analysis.

v. Uncertainty and Sensitivity Analyses

EPA reviewed the models used, as well as the data and assumptions input into the models, to better understand the potential sources of uncertainty inherent in the model results. The Agency qualitatively and, to the extent possible, quantitatively analyzed these sources to understand the potential effects each may have on modeled risks. EPA also conducted further sensitivity analyses to understand how the modeled national risks vary in response to changes in sensitive parameters and to evaluate the potential for risks through exposure pathways that could not be fully modeled on a national scale.

The major source of uncertainty identified for the groundwater model is the potential for greater risk from multiple units located in close proximity. The EPA Surveys did not provide information on the relative location or orientation of different landfills and impoundments at any given facility and so the 2014 Risk Assessment modeled risks from each unit individually. However, the Agency is now aware of many instances where multiple units are located directly adjacent to one another, resulting in a larger total area over which leakage can occur. This could result in greater cumulative risk to offsite receptors than predicted based on contributions from each individual unit. Furthermore, there is potential for legacy impoundments and CCRMU (disposal units and fill) to confound groundwater monitoring programs when located upgradient of a regulated unit. Ongoing leakage from these unregulated units has the potential to skew the characterization of background groundwater quality. Under these circumstances, any leakage from a regulated unit would need to progress even further and faster to be distinguishable from that skewed background. This could delay or entirely prevent a regulated unit from entering into corrective action, resulting in risk to downgradient receptors.

EPA conducted a sensitivity analysis to determine whether there is a unit size below which adverse impacts to groundwater quality are unlikely and monitoring is not warranted. This analysis found exceedances of GWPS are possible for placements below 1,000 tons. Thus, such placements can meaningfully contribute to groundwater contamination at these facilities. It was not possible to identify a limit much lower than this tonnage because of the few model runs conducted at smaller amounts. Extrapolation beyond available model runs could introduce a great deal of uncertainty into any specific limit identified. The extent to which any identified limit could shift higher or lower in response to further modeling around these lowest tonnages is not known. Therefore, the Agency could not identify a lower limit based on the current modeling.

when the compliance date in the final rule falls after the date closure is completed for the impoundment); but as EPA explained in the proposal, the Agency has no basis for concluding that all legacy CCR surface impoundments that are still in the process of closing pose no risk.

The final rule retains the provision under which a facility with a CCR surface impoundment that contained CCR and liquids on October 19, 2015, but that completed closure by removal before the effective date of this rule, would only be required to post documentation on the facility's CCR website that it has met the standards in § 257.102(c) for that unit (*i.e.,* the certification of closure by removal for legacy CCR surface impoundments). To be eligible for the closure certification, the facility must document that it meets the criteria laid out in Unit III.B.2.b.iii. Namely, the facility must demonstrate that consistent with the existing standards, all CCR has been removed from the unit, any areas affected by releases from the CCR unit have been removed, and must have groundwater monitoring data demonstrating that the concentrations of each Appendix IV constituent do not exceed the relevant groundwater protection standard, which would be either the MCL or background concentration, for two consecutive sampling events.

If a facility certifies all of the legacy CCR surface impoundments on-site have met the requirements in § 257.102(c) for closure by removal before the effective date of this rule, the facility would not be subject to any further requirements under this final rule (*i.e.,* neither legacy CCR surface impoundment requirements or CCRMU requirements).

For similar reasons as explained above, EPA cannot accept the commenter's suggestion that EPA establish the same provision for facilities that closed a legacy impoundment prior to the effective date of this final rule in accordance with § 257.102(d) (closure when leaving CCR in place) and allow facilities to simply demonstrate that the closure meets the performance standards in § 257.102(d). The commenters appear to be requesting an exemption from post closure groundwater monitoring and corrective action requirements, but provided no factual basis for such an exemption. Nevertheless, as discussed in Unit III.B.2.g.iii of this preamble, if a facility can document that the closure of its unit meets the performance standards in § 257.102(d), all that would be required is compliance with the groundwater monitoring requirements in §§ 257.90–257.95, and any necessary corrective action throughout the post-closure care period (in addition to recordkeeping and posting).

The documentation requirements, procedures, and compliance deadlines for these various options are discussed further in Unit III.B.2.g of this preamble.

EPA also disagrees with the commenter that 75,000 tons is a *de minimis* amount of CCR. The commenter has misunderstood EPA's findings in 2015; EPA did not conclude that quantities of CCR lower than 75,000 tons used as fill does not pose any risk to human health or the environment. Rather EPA concluded that, while the agency has sufficient information to document that unencapsulated uses can present a hazard, based on the rulemaking record EPA lacked the information necessary to demonstrate that unencapsulated uses in amounts lower than 12,400 tons are likely to present a risk. 80 FR 21352. In any event, as discussed in Unit III.A.4, recent EPA modeling demonstrates that far lower quantities of CCR (1,000 tons) can pose significant risks to human health and the environment.

In the 2015 CCR Rule, EPA provided guidance on which impoundments would not meet the definition of a CCR impoundment because they generally do not contain significant levels of CCR. 80 FR 21357. Specifically, EPA explained that CCR surface impoundments do not include units generally referred to as cooling water ponds, process water ponds, wastewater treatment ponds, storm water holding ponds, or aeration ponds. These units do not meet the definition of a CCR surface impoundment, that is, they are not designed to hold an accumulation of CCR and treatment storage or disposal of accumulated CCR does not occur in these units. Accordingly, EPA considers that such units would also not be legacy impoundments. EPA acknowledges that it mistakenly referred to one of these units as a CCR surface impoundment in the proposal, but that was an error.

c. Legacy CCR Surface Impoundment—Requirement To Be Located at an "Inactive Facility"

EPA proposed to define an "inactive facility" (or inactive electric utility or independent power producer) as one that ceased producing electricity prior to October 19, 2015, which is the effective date of the 2015 CCR Rule. EPA explained that this date is also the same date currently used in the regulation to define "active facility" under § 257.53, and that EPA originally used this date to define the exempted inactive units in the 2015 CCR Rule. The proposal further explained that use of this date would mean that the same universe of units that were subject to the original exemption would be regulated and that this is consistent with the Court's vacatur, as vacatur is intended to restore the status quo ante, as though the vacated provision never existed. 88 FR 31994, 32034.

Commenters supported October 19, 2015, as the operative date to be used in the definition of an inactive facility because any other date would be inconsistent with the existing definition of an "active facility." However, many commenters opposed the proposed substitution of the phrase "regardless of the fuel currently used to produce electricity" with "regardless of how electricity is currently being produced at the facility." According to these commenters, the existing definition of "active facility" does not extend to facilities that do not use fuel, including, for example, facilities that produce solar power, because the plain language of § 257.50(c) makes clear that, to be active, a facility must use a fuel to produce electricity. These commenters cite two preamble statements in the 2015 CCR Rule to support their allegation. The first is the applicability section of 2015 CCR Rule, which only references the NAICS 221112 (Fossil Fuel Power Generation). These commenters speculate that if EPA had intended for the term "active facility" to extend to facilities that do not use fuel to produce electricity, EPA would have included other NAICS codes. The second statement appears in the executive summary and explains that the rule applies to:

> Certain inactive CCR surface impoundments (*i.e.,* units not receiving CCR after the effective date of the rule) at active electric utilities or independent power producers' facilities, regardless of the fuel currently used at the facility to produce electricity (*e.g.,* coal, natural gas, oil), if the CCR unit still contains CCR and liquids.

80 FR 21303.

The commenters contended that EPA's proposal represents a significant change that will subject renewable generation to the CCR regulations (*e.g.,* a former coal-fired power plant that was retired, closed and dismantled well in advance of the 2015 CCR Rule that had new renewable generation built at the facility), creating strong disincentives to renewable repowering at those sites. These commenters further added that such a change in position requires EPA to take reliance interests into account. To address this, the commenters made two suggestions. The first was that EPA should establish an exemption from regulation for inactive facilities that

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:	)	
	)	
PETITION OF SOUTHERN ILLINOIS POWER COOPERATIVE FOR AN ADJUSTED STANDARD FROM 35 Ill. Adm. Code PART 845 OR, IN THE ALTERNATIVE, A FINDING OF INAPPLICABILITY	)	AS 2021-006 (Adjusted Standard)

CERTIFICATE OF SERVICE

I, the undersigned, an attorney, affirm that I have served the attached HEARING EXHIBITS, on behalf of the Illinois EPA, upon the following person(s) by e-mailing it to the e-mail address(es) indicated below:

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I affirm that my e-mail address is gabriel.neibergall@illinois.gov; the number of pages in the e-mail transmission is 20; and the e-mail transmission took place today before 4:30 PM. If you prefer service by mail, please contact me and a copy will be mailed to you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

By: /s/ Gabriel H. Neibergall

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DATED: June 13, 2025

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