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Disposal of Coal Combustion Residuals from Electric Utilities Rulemakings

Federal Permit Program Proposal

EPA is proposing a federal permitting program for the disposal of coal combustion residuals (CCR) in surface impoundments and landfills.

[Learn more about this proposal.](#)

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The First National Regulations

Additional Resources for the April 2015 Final Rule

- [Fact sheet](#)
- [Frequent questions about implementing the final rule](#)
- [Frequent questions about the 2015 coal ash disposal rule](#)

The EPA Administrator signed the Disposal of Coal Combustion Residuals from Electric Utilities final rule on December 19, 2014, and it was published in the *Federal Register* (FR) on April 17, 2015. This rule finalized national regulations to provide a comprehensive set of requirements for the safe disposal of CCRs, commonly known as coal ash, from coal-fired power plants.

The final rule is the culmination of extensive study on the effects of coal ash on the environment and public health. The rule establishes technical requirements for CCR landfills and surface impoundments under subtitle D of the [Resource Conservation and Recovery Act \(RCRA\)](#), the nation's primary law for regulating solid waste. The final rule makes a number of changes from the proposal including providing greater clarity on technical requirements in response to questions received during the comment period.

These regulations address the risks from coal ash disposal -- leaking of contaminants into ground water, blowing of contaminants into the air as dust, and the catastrophic failure of coal ash surface impoundments. Additionally, the rule sets out recordkeeping and reporting requirements as well as the requirement for each facility to establish and post specific information to a publicly-accessible website. This final rule also supports the responsible recycling of CCRs by distinguishing safe, [beneficial use](#) from disposal.

- [Read the final rule in the *Federal Register* \(April 17, 2015; 80 FR 21301\).](#)
- [Review documents related to the April 2015 rule in the docket](#)
- [View the rule in the *Federal Register* correcting the effective date \(July 2, 2015; 80 FR 37988\).](#)

Extension of Compliance Deadlines and Response to Partial Vacatur

On July 26, 2016, the EPA Administrator signed a direct final rule and a companion proposal to extend for certain inactive CCR surface impoundments the compliance deadlines established by the regulations for the disposal of CCR under subtitle D of the RCRA and it was published in the *Federal Register* on August 5, 2016. These revisions were taken in response to a partial vacatur ordered by the United States Court of Appeals for the District of Columbia Circuit

(D.C. Circuit) on June 14, 2016. The comment period for the direct final rule ended on August 22, 2016. Because no adverse comments were received, the rule became effective on October 4, 2016.

- [Review the direct final rule and companion proposal in the *Federal Register* \(August 5, 2016; 81 FR 51802\).](#)
- [View the docket for this rule](#)

Amendments to the National Regulations Finalized in 2018 (Phase One, Part One)

EPA finalized certain revisions to the 2015 regulations for the disposal of CCR in landfills and surface impoundments to:

1. Provide states with approved CCR permit programs under the Water Infrastructure Improvements for the Nation (WIIN) Act or EPA where EPA is the permitting authority the ability to use alternate performance standards;
2. Revise the groundwater protection standard for constituents which do not have an established drinking water standard (known as a maximum contaminant level or MCL); and
3. Provide facilities which are triggered into closure by the regulations additional time to cease receiving waste and initiate closure.

More specifically, with this final rule, EPA finalized two types of alternative performance standards that were proposed in March 2018. The first one allows a state director (in a state with an approved coal ash permit program) or EPA (where EPA is the permitting authority) to suspend groundwater monitoring requirements if there is evidence that there is no potential for migration of hazardous constituents to the uppermost aquifer during the active life of the unit and post closure care. The second allows issuance of technical certifications in lieu of a professional engineer.

In addition, EPA revised the groundwater protection standards for four constituents in Appendix IV to title 40 of the Code of Federal Regulations (CFR) part 257 for which MCLs under the Safe Drinking Water Act have not been established. EPA also extended the deadline by which facilities must close coal ash units for two situations:

1. Where the facility has detected a statistically significant increase above a groundwater protection standard from an unlined surface impoundment; or
2. Where the unit is unable to comply with the location restriction regarding placement above the uppermost aquifer.

Provisions from the March 2018 proposed rule that are not finalized in this *Federal Register* notice will be addressed in a subsequent rulemaking.

- [View the final rule in the *Federal Register*](#)
- [Review documents related to this rule in the docket on Regulations.gov](#)

Proposed Amendments to the National Regulations (Phase One)

On March 1, 2018, the EPA Administrator signed the first of two rules that proposes to amend the April 2015 final rule. The proposal:

1. Addresses provisions of the final rule that were remanded back to the Agency on June 14, 2016 by the U.S. Court of Appeals for the D.C. Circuit;
2. Provides states with approved CCR permit programs (or EPA where it is the permitting authority) under the WIIN Act the ability to set certain alternative performance standards; and
3. Addresses one additional issue that has arisen since the April 2015 publication of the final rule.

EPA is proposing six provisions that would allow states or EPA the ability to incorporate flexibilities into their coal ash permit programs. These flexibilities would also be available to facilities with U.S. EPA-issued CCR permits.

Additionally, the proposal:

- Clarifies the type and magnitude of non-groundwater releases that would require a facility to comply with some or all of the corrective action procedures set forth in 40 CFR sections 257.96 through 257.98 in meeting their obligation to clean up the release.
- Adds boron to the list of constituents in Appendix IV of 40 CFR part 257 that trigger corrective action.
- Determines the requirement for proper height of woody and grassy vegetation for slope protection.
- Revises the current regulations to allow the use of CCR in the construction of final cover systems for CCR units closing pursuant to 40 CFR section 257.101 that are closing with waste-in-place.
- Adds a new paragraph to 40 CFR section 257.103 to allow facilities to qualify for the alternative closure provisions based on the continued need to manage non-CCR wastestreams in the unit.

EPA accepted written comments on this proposal through [Regulations.gov](https://www.regulations.gov) under Docket ID No. EPA-HQ-OLEM-2017-0286 as well as through the email address CCRPhase1@epa.gov for those commenters who wanted to email their comments to EPA. The comment period ended on April 30, 2018.

- [View the proposed rule in the *Federal Register* \(March 15, 2018; 83 FR 11584\).](#)

On April 24, 2018, EPA held a hearing on this proposed rule at the DoubleTree by Hilton Hotel in Arlington, Virginia. A verbatim transcript of the hearing and written statements were included [in the docket for this action](#).

Proposed Changes - Enhancing Public Access to Information and Reconsideration of Beneficial Use Criteria and Piles

EPA is proposing further changes to the regulations governing the disposal of CCR established in the April 15, 2015 final rule. This proposal is the first of three additional proposed revisions to address matters raised in litigation, legislation, petitions for reconsideration and implementation. The following changes are being proposed:

- Replacing the 12,400-ton threshold that triggers an environmental demonstration with specific location-based criteria (e.g., placement in an unstable area, wetland, floodplain or seismic zone) derived from existing criteria for CCR disposal units.
- Establishing a single approach which would apply to all temporary placement of unencapsulated CCR on the land, regardless of whether the pile is on-site or off-site, or destined for beneficial use or disposal.
- Revising the annual groundwater monitoring and corrective action report requirements to make the data easier to understand and evaluate, including a requirement to summarize the results in an executive summary.
- Establishing an alternative groundwater protection standard for boron using the same methodology used for other CCR constituents, which would be finalized if boron is added to the list of constituents for assessment monitoring.
- Revising the CCR website requirements to ensure that relevant facility information required by the regulations is immediately available to the public.

EPA is soliciting comments and information related to the proposed provisions, alternative approaches to the proposed provisions and other considerations outlined in the notice. The comment period for this proposal was open for 60 days, during which a public hearing was held in Arlington, Virginia on October 2, 2019 and a virtual public hearing was held on October 10, 2019 for interested persons to present information, comments or views concerning EPA's proposal.

- [View this proposal in the *Federal Register*](#)
- [Read through frequent questions about the proposal](#)
- [Learn about the public hearings EPA held on this proposal](#)

Proposed Changes - A Holistic Approach to Closure Part A: Deadline to Initiate Closure

Related Proposal Out for Public Comment

[EPA is proposing revisions](#) to the September 30, 2015 Final Rule for flue gas desulfurization wastewater and for bottom ash transport water applicable to the Steam Electric Power Generating category.

EPA is proposing amendments to the closure regulations for the disposal of coal combustion residuals in response to the court decisions. In particular, the proposal includes:

- Establishing a new deadline of August 31, 2020 for all unlined surface impoundments and those surface impoundments that failed the location restriction for placement above the uppermost aquifer to stop receiving waste and begin closure or retrofit. EPA determined this date after evaluating the steps owners and operators need to take to cease receipt of waste and initiate closure and the time frames necessary for implementation.
- Establishing procedures for facilities to obtain additional time to develop alternate capacity to manage their wastestreams (both coal ash and non-coal ash) before they have to stop receiving waste and initiate closure of their coal ash surface impoundments.
- Changing the classification of compacted-soil lined or clay-lined surface impoundments from “lined” to “unlined”.
- Revising the coal ash regulations to specify that all unlined surface impoundments are required to retrofit or close.

EPA is soliciting comments in a 60-day comment period (ending January 31, 2020), during which a virtual public hearing was held on January 7, 2020 for interested persons to present information, comments or views concerning these proposed changes.

- [View this proposal in the *Federal Register*](#)
- [Learn about the virtual public hearing](#)
- [Read through a fact sheet about this proposal](#)

Proposed Changes - A Holistic Approach to Closure Part B: Alternate Demonstration for Unlined Surface Impoundments and Implementation of Closure

EPA is proposing a number of revisions and flexibilities to the CCR regulations, the last in a set of four planned actions to implement the WIIN Act, respond to petitions, address litigation and apply lessons learned to ensure smoother implementation of the regulations.

Specifically, EPA is proposing the following revisions:

- Procedures to allow facilities to request approval to use an alternate liner for CCR surface impoundments;
- Two co-proposed options to allow the use of CCR during unit closure;
- An additional closure option for CCR units being closed by removal of CCR; and
- Requirements for annual closure progress reports.

EPA accepted comments on this proposal during a 45-day public comment period, during which two virtual public hearings will be held - one on April 7, 2020 and one on April 9, 2020.

- [Review the proposal in the *Federal Register*](#)
- [Read through a fact sheet about this proposal](#)
- [Learn more about the public hearing](#)

Rule History

On December 22, 2008, a [large coal ash spill](#) occurred at the Tennessee Valley Authority (TVA) power plant in Kingston, Tenn. flooding more than 300 acres of land and releasing coal ash into the Emory and Clinch rivers. This catastrophic spill prompted EPA to assess coal ash surface impoundments and gather information from facilities managing coal ash nationwide. On June 21, 2010 (volume 75 to the *Federal Register* starting on page 35128), EPA [proposed regulations](#) under RCRA to address the risks from the disposal of CCRs generated from the combustion of coal at electric utilities and independent power producers.

This proposal contained two regulatory options due to the significant and technical policy issues involved in regulating these wastes.

- Under the first, EPA proposed to list these residuals as special wastes subject to regulation under Subtitle C of RCRA, when they are destined for disposal in landfills or surface impoundments.
- Under the second option, EPA proposed to regulate disposal of such materials under Subtitle D of RCRA by issuing national minimum criteria.

Under both alternatives EPA proposed to establish dam safety requirements to address the structural integrity of surface impoundments to prevent catastrophic releases.

After extensive study and examination of all comments received during the rulemaking process, EPA established regulations under Subtitle D of RCRA.

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