

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 257

[EPA-HQ-OLEM-2019-0172; FRL-10002-02-OLEM]

RIN 2050-AH10

Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; A Holistic Approach to Closure Part A: Deadline To Initiate Closure

AGENCY: Environmental Protection Agency (EPA).

ACTION: Proposed 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 D.C. Circuit Court of Appeals issued its opinion in the case of *Utility Solid Waste Activities Group, et al. v. EPA (USWAG)*. This rule proposes regulations to implement the court's vacatur of the provisions that allow unlined impoundments to continue receiving coal ash unless they leak, and that classify "clay-lined" impoundments as lined, thereby allowing such units to operate indefinitely. In addition, EPA is proposing to establish a revised date by which unlined surface impoundments must cease receiving waste and initiate closure, following its reconsideration of those dates in light of the *USWAG* decision.

DATES: Comments must be received on or before January 31, 2020. *Public Hearing.* The EPA will hold a public hearing on January 7, 2020.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-OLEM-2019-0172. The EPA has previously established a docket for the April 17, 2015, CCR final rule under Docket ID No. EPA-HQ-RCRA-2009-0640, and docket for the CCR Phase One Part One Rule under Docket ID No. EPA-HQ-OLEM-2017-0286. All documents in the docket are listed in the <https://www.regulations.gov> index. Publicly available docket materials are available either electronically at <https://www.regulations.gov> or in hard copy at the EPA Docket Center. The Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding holidays. The telephone number for the Public Reading Room is (202) 566-1744, and the telephone

number for the EPA Docket Center is (202) 566-1742. You may send comments, identified by Docket ID No. EPA-HQ-OLEM-2019-0172, by any of the following methods:

- *Federal eRulemaking Portal:* <https://www.regulations.gov/> (our preferred method). Follow the online instructions for submitting comments.
- *Mail:* U.S. Environmental Protection Agency, EPA Docket Center, Docket ID No. EPA-HQ-OLEM-0172, Mail Code 28221T, 1200 Pennsylvania Avenue NW, Washington, DC 20460.
- *Hand Delivery/Courier:* EPA Docket Center, WJC West Building, Room 3334, 1301 Constitution Avenue NW, Washington, DC 20004. The Docket Center's hours of operations are 8:30 a.m.–4:30 p.m., Monday–Friday (except Federal Holidays).

Instructions: All submissions received must include the Docket ID No. for this rulemaking. Comments received may be posted without change to <https://www.regulations.gov/>, including any personal information provided. For detailed instructions on sending comments and additional information on the rulemaking process, see the "Public Participation" heading of the **SUPPLEMENTARY INFORMATION** section of this document.

A public hearing will be held either virtually or in person in the Washington, DC metro area. The EPA will announce further details on the public hearing on EPA's CCR website (<https://www.epa.gov/coalash>). The hearing will convene at 9:00 a.m. (local time) and conclude at 6:00 p.m. (local time). If necessary, the hearing may go later to accommodate all those wishing to speak. For additional information on the public hearing see the "Public Participation" heading of the **SUPPLEMENTARY INFORMATION** section of this document.

Please note that if this hearing is held at a U.S. government facility, individuals planning to attend the hearing should be prepared to show valid picture identification to the security staff in order to gain access to the meeting room. Please note that the REAL ID Act, passed by Congress in 2005, established new requirements for entering federal facilities. For purposes of the REAL ID Act, EPA will accept government-issued IDs, including driver's licenses, from the District of Columbia and all states and territories except from American Samoa. If your identification is issued by American Samoa, you must present an additional form of identification to enter the federal building where the public hearing will be held. Acceptable alternative forms of identification

include: Federal employee badges, passports, enhanced driver's licenses, and military identification cards. For additional information for the status of your state regarding REAL ID, go to: <https://www.dhs.gov/real-id-enforcement-brief-frequently-asked-questions>. Any objects brought into the building need to fit through the security screening system, such as a purse, laptop bag, or small backpack. Demonstrations will not be allowed on federal property for security reasons.

FOR FURTHER INFORMATION CONTACT: For information concerning this proposed rule, contact Kirsten Hillyer, Office of Resource Conservation and Recovery, Materials Recovery and Waste Management Division, Environmental Protection Agency, 1200 Pennsylvania Avenue NW, MC: 5304P, Washington, DC 20460; telephone number: (703) 347-0369; email address: Hillyer.Kirsten@epa.gov. For more information on this rulemaking please visit <https://www.epa.gov/coalash>.

SUPPLEMENTARY INFORMATION:

I. Executive Summary

A. Purpose of the Regulatory Action

The EPA is publishing this proposed rule to revise portions of the federal CCR regulations in title 40 of the Code of Federal Regulations (CFR) Part 257 so that they accurately reflect the regulations as they now stand in light of the decision by the D.C. Circuit Court of Appeals in the case of *Utility Solid Waste Activities Group, et al. v. EPA*, 901 F.3d 414 (D.C. Cir. 2018) (*USWAG* decision), on August 21, 2018. Specifically, the D.C. Circuit vacated (1) the provisions that permit unlined impoundments to continue receiving coal ash unless they leak (see 40 CFR 257.101(a)); and (2) the provisions that classify "clay-lined" impoundments as lined (see 40 CFR 257.71(a)(1)(i)).

In addition, this proposed rule addresses the October 31, 2020 deadline in §§ 257.101(a) and (b)(1)(i), by which CCR surface impoundments must cease receipt of waste; these regulatory provisions were remanded back to EPA by the D.C. Circuit Court of Appeals for further reconsideration in light of the *USWAG* decision. See, *Waterkeeper Alliance Inc, et al. v. EPA* No. 18-1289 (D.C. Circuit).

B. Summary of the Major Provisions of the Regulatory Action

In this action, EPA is proposing three categories of amendments to the part 257 regulations. First, EPA is proposing to change the classification of compacted-soil lined or "clay-lined" surface impoundments from "lined" to

“unlined” under § 257.71(a)(1)(i). This merely reflects the vacatur ordered in the USWAG decision. Second, EPA is proposing revisions to the initiation of closure deadlines for unlined CCR surface impoundments, and for units that failed the aquifer location restriction, found in §§ 257.101(a) and (b)(1). This section includes revisions to address the USWAG decisions with respect to all unlined and “clay-lined” impoundments, as well as revisions to

the provisions remanded back to the Agency for further reconsideration by the court in the *Waterkeeper* decision. Specifically, EPA is proposing a new deadline of August 31, 2020 to replace the current deadline of October 31, 2020 for CCR units to cease receipt of waste and initiate closure because the unit either (1) is an unlined or formerly “clay-lined” CCR surface impoundment (§ 257.101(a)) or (2) failed the aquifer location standard (§ 257.101(b)(1)).

Lastly, EPA is proposing revisions to the alternate closure provisions, §§ 257.103(a), (b), (e), and (f). These revisions will grant facilities additional time to develop alternate capacity to manage their wastestreams (both CCR and non-CCR), to achieve cease receipt of waste and initiate closure of their CCR surface impoundments. The table below summarizes the deadlines proposed in this action.

Proposed Compliance Deadlines for CCR Surface Impoundments	Deadline Date
New cease receipt of waste deadline for unlined and formerly clay-lined surface impoundments (§ 257.101(a)(1)).	August 31, 2020.
New cease receipt of waste deadline for surface impoundments that failed the minimum depth to aquifer location standard (§ 257.101(b)(1)(i)).	August 31, 2020.
New short-term alternate to initiation of closure (up to 3-month extension to cease receipt of waste deadline) (§ 257.103(e)).	No later than November 30, 2020.
New site specific alternate to initiation of closure due to lack of capacity (§ 257.103(f)(1)).	No later than October 15, 2023 (maximum of 5 years after USWAG decision mandate date).
New site specific alternate to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain (§ 257.103(f)(2)).	No later than October 17, 2023 for surface impoundments 40 acres or smaller. No later than October 17, 2028 for surface impoundments larger than 40 acres.

C. Costs and Benefits

Several developments have changed the estimated costs of the CCR program since the publication of the final rule in 2015. First, reporting data show that the affected universe of surface impoundments is composed of more unlined units, and that more surface impoundments regardless of liner type are leaking than was modeled in the 2015 RIA. The affected universe is therefore incurring higher closure costs sooner, which increases the overall cost of the program. Second, the D.C. Circuit Court vacated provisions of the rule that allowed certain classes of impoundments to continue operating until they leaked. This decision will force these units to close next year, sooner than they were modeled to close in the 2015 RIA. This also increases the overall cost of the CCR program. The absolute costs of the CCR program have increased since they were estimated in 2015. For the sake of accuracy and transparency this cost increase is estimated and shown in the RIA. This increase in costs is attributable solely to the existing provisions of the CCR rule. The provisions of the proposed rule decrease costs by extending certain existing compliance deadlines. The proposed rule is therefore considered a cost savings rule. This action is expected to result in net cost savings amounting to an annualized \$39.5 million per year when discounting at 7%. Further information on the

economic effects of this action can be found in Unit VI of this preamble.

II. Public Participation

A. Written Comments

Submit your comments, identified by Docket ID No. EPA-HQ-OLEM-2019-0172, at <https://www.regulations.gov> (our preferred method), or the other methods identified in the ADDRESSES section. Once submitted, comments cannot be edited or removed from the docket. The EPA may publish any comment received to its public docket. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute. Multimedia submissions (audio, video, etc.) must be accompanied by a written comment. The written comment is considered the official comment and should include discussion of all points you wish to make. The EPA will generally not consider comments or comment contents located outside of the primary submission (i.e. on the web, cloud, or other file sharing system). For additional submission methods, the full EPA public comment policy, information about CBI or multimedia submissions, and general guidance on making effective comments, please visit <https://www.epa.gov/dockets/commenting-epa-dockets>.

B. Participation in Public Hearing

The EPA will begin pre-registering speakers for the hearing upon publication of this document in the **Federal Register**. To register to speak at the hearing, please use the online registration form available on EPA’s CCR website (<https://www.epa.gov/coalash>) or contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to register to speak at the hearing. The last day to pre-register to speak at the hearing will be January 3, 2020. On January 6, 2020, the EPA will post a general agenda for the hearing on EPA’s CCR website (<https://www.epa.gov/coalash>).

The EPA will make every effort to follow the schedule as closely as possible on the day of the hearing; however, please plan for the hearings to run either ahead of schedule or behind schedule. Additionally, requests to speak will be taken the day of the hearing at the hearing registration desk or through the virtual hearing platform. The EPA will make every effort to accommodate all speakers who arrive and register, although preferences on speaking times may not be able to be fulfilled.

Each commenter will have 5 minutes to provide oral testimony. The EPA encourages commenters to provide the EPA with a copy of their oral testimony electronically (via email) or in hard copy form. If EPA is anticipating a high attendance, the time allotment per testimony may be shortened to no

shorter than 3 minutes to accommodate all those wishing to provide testimony and have pre-registered. All comments and materials received at the public hearing will be placed in the docket for this rule, as well as a transcript from this hearing.

The EPA may ask clarifying questions during the oral presentations but will not respond to the presentations at that time. Written statements and supporting information submitted during the comment period will be considered with the same weight as oral comments and supporting information presented at the public hearing. Verbatim transcripts of the hearings and written statements will be included in the docket for the rulemaking.

Please note that any updates made to any aspect of the hearing is posted online on EPA's CCR website (<https://www.coalash.gov/coalash>). While the EPA expects the hearing to go forward as set forth above, please monitor our website or contact the person listed in the **FOR FURTHER INFORMATION CONTACT** section to determine if there are any updates. The EPA does not intend to publish a document in the **Federal Register** announcing updates.

If you require the service of a translator please pre-register for the hearing and describe your needs by December 23, 2019. If you require special accommodations such as audio description or closed captioning (if the hearing is held virtually), please pre-register for the hearing and describe your needs by December 30, 2019. We may not be able to arrange accommodations without advanced notice. Commenters should notify the person listed in the **FOR FURTHER INFORMATION CONTACT** section and indicate on the registration form of any such needs when they pre-register to speak.

III. General Information

A. Does this action apply to me?

This proposed rule applies to all CCR generated by electric utilities and independent power producers that fall within the North American Industry Classification System (NAICS) code 221112 and may affect the following entities: Electric utility facilities and independent power producers that fall under the NAICS code 221112. This discussion is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This discussion lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not described here could also be

regulated. To determine whether your entity is regulated by this action, you should carefully examine the applicability criteria found in § 257.50 of Title 40 of the Code of Federal Regulations. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the **FOR FURTHER INFORMATION CONTACT** section.

B. What action is the Agency taking?

The EPA is proposing to revise certain provisions of the CCR regulations at 40 CFR part 257 in response to the decisions issued by the United States Court of Appeals for the D.C. Circuit on August 21, 2018, in *Utility Solid Waste Activities Group, et al. v. EPA* 901 F.3d 414 (D.C. Cir. 2018), and on March 13, 2019 in *Waterkeeper Alliance Inc. et al. v. EPA*.

This proposed rule addresses the vacatur of the regulatory provisions that permitted unlined impoundments to continue receiving waste unless they leak, 40 CFR 275.101(a), and that classified "clay-lined" impoundments as lined, thereby allowing such units to operate 40 CFR 257.71(a)(1)(i). The *USWAG* decision also vacated the exemption from the 2015 rule for inactive surface impoundments at inactive power plants. This will be addressed in a subsequent rulemaking.

This proposed rule also addresses the date by which unlined CCR surface impoundments and CCR units that failed the aquifer location standard must cease receiving waste, and initiate closure which the D.C. Circuit Court remanded to EPA on March 13, 2019 in the *Waterkeeper* decision.

EPA intends that the provisions of this rule would be severable. In the event that any individual provision or part of this rule is invalidated, EPA intends that this would not render the entire rule invalid, and that any individual provisions that can continue to operate will be left in place.

C. What is the Agency's authority for taking this action?

These regulations are established under the authority of sections 1008(a), 2002(a), 4004, and 4005(a) and (d) of the Solid Waste Disposal Act of 1970, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA), the Hazardous and Solid Waste Amendments of 1984 (HSWA), and the Water Infrastructure Improvements for the Nation (WIIN) Act of 2016, 42 U.S.C. 6907(a), 6912(a), 6944, and 6945(a) and (d).

D. What are the incremental costs and benefits of this action?

This action is expected to result in net cost savings amounting to an annualized \$39.5 million per year when discounting at 7%. Further information on the economic effects of this action can be found in Unit VI of this preamble.

IV. Background

A. The "2015 CCR Rule"

On April 17, 2015, EPA finalized national minimum criteria for the disposal of CCR as solid waste under Subtitle D of RCRA titled, "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities," (80 FR 21302) (2015 rule). The 2015 rule regulated existing and new CCR landfills and existing and new CCR surface impoundments and all lateral expansions of CCR units. It is codified in subpart D of part 257 of Title 40 of the CFR. The criteria consist of location restrictions, design and operating criteria, groundwater monitoring and corrective action requirements, closure and post-closure care requirements, and recordkeeping, notification and internet posting requirements. The rule also required any existing unlined CCR surface impoundment that is contaminating groundwater above a regulated constituent's groundwater protection standard to stop receiving wastes and either close or retrofit, except in certain circumstances. This closure requirement applied only to unlined CCR surface impoundments; units with either a composite liner or "clay-lined" that met the requirements of section 257.71(a) were allowed to operate indefinitely.

The rule was challenged by several parties, including a coalition of regulated entities and a coalition of environmental organizations ("Environmental Petitioners"). See *USWAG et al. v. EPA*, 901 F.3d 414 (D.C. Cir. 2018). The Environmental Petitioners raised two challenges¹ that are relevant to this proposed rule: First, they challenged the provision that allowed existing, unlined surface impoundments to continue to operate until they cause groundwater

¹ Environmental Petitioners also challenged the provisions exempting inactive surface impoundments at inactive power plants from regulation. The court also ruled for the Petitioners on these claims, vacating and remanding these provisions back to EPA. However, in contrast to the other provisions addressed in this rule, additional rulemaking is necessary to effectuate the court's order, as the court's vacatur alone did not subject these units to regulation. This aspect of the decision will be addressed in a subsequent proposal.

contamination. See 40 CFR 257.101(a)(1). They contended that EPA failed to show how continued operation of unlined impoundments met RCRA's baseline requirement that any solid waste disposal site pose "no reasonable probability of adverse effects on health or the environment." See 42 U.S.C. 6944(a). The Environmental Petitioners also challenged the provisions that allowed impoundments lined with two-feet of clay to continue operating even when they leak, requiring only that they remediate the resulting contamination. The petitioners pointed to record evidence that "clay-lined" units are likely to leak and contended that the EPA's approach "authorizes an endless cycle of spills and clean-ups" in violation of RCRA.

B. USWAG Decision

The U.S. Court of Appeals for the D.C. Circuit issued its decision on August 21, 2018 (*USWAG* decision). The Court upheld most of the rule but ruled for the Environmental Petitioners on these two claims. The court held that EPA acted "arbitrarily and capriciously and contrary to RCRA" in failing to require the closure of unlined surface impoundments and in classifying so-called "clay-lined" impoundments as lined, based on the record supporting the rule. See 901 F.3d at 431–432. The court ordered that "the Final Rule be vacated and remanded with respect to the provisions that permit unlined impoundments to continue receiving coal ash unless they leak, § 257.101(a), [and] classify "clay-lined" impoundments as lined, see 40 CFR 257.71(a)(1)(i)." See *Id.* The Court issued the mandate for this decision on October 15, 2018. Therefore, part of this proposed rulemaking action updates the regulations to reflect the provisions that the Court vacated.

C. Waterkeeper Decision

Prior to the August 21, 2018 decision in *USWAG v. EPA*, EPA issued a final rule in July 2018. In this rulemaking EPA extended the deadlines for two categories of CCR surface impoundments to cease receipt of waste and to initiate closure: (1) Unlined CCR surface impoundments with a groundwater protection standard (GWPS) exceedance of an Appendix IV constituent² and (2) units that failed to

² A groundwater protection standard (GWPS) is established using the methods in § 257.95(h). For constituents with a maximum contaminant level (MCL), the GWPS is the MCL for that constituent. For the constituents that do not have an established MCL, the GWPS is the health-based levels EPA established in the July 2018 rule. If the background level is higher than the MCL or the health-based

meet the location criteria in 257.60(a) (requiring either a minimum five feet between the unit base and the uppermost aquifer or a demonstration that there will not be an intermittent, recurring, or sustained hydraulic connection between any portion of the base of the unit and the uppermost aquifer). These deadlines were extended until October 31, 2020.

The July 2018 final rule was challenged by Waterkeeper Alliance, who also requested an expedited review of the October 31, 2020 deadline. See *Waterkeeper Alliance Inc, et al. v. EPA*, No. 18–1289 (D.C. Cir. 2018) (*Waterkeeper* decision). On March 13, 2019 the court granted EPA's request to remand the July 2018 rule, "to allow the agency to reconsider that rule in light of th[e] court's decision in [*USWAG*]." This proposed rulemaking action reflects EPA's reconsideration to date of the current deadline of October 31, 2020 for unlined surface impoundments to cease receiving waste. EPA will address its reconsideration of other aspects of the July 2018 rule in subsequent rulemaking actions.

D. Reconsideration of October 31, 2020 Deadline To Cease Receipt of Waste

EPA is proposing to require that facilities cease placement of all wastes (both CCR and non-CCR) as soon as technically feasible. To determine what is technically feasible, EPA reviewed currently available construction and engineering data for each step that owners and operators need to take to cease the receipt of waste and initiate closure of the unit. Based on this review, EPA is proposing to establish a new deadline of August 31, 2020 for unlined surface impoundments to cease receiving waste.

However, the information that EPA reviewed also indicated that some of these facilities will not be able to complete all of the construction and/or engineering needed to cease receiving waste into their unlined impoundment(s) by this deadline. In addition, the *USWAG* decision brought in a new group of units that are required to close under § 257.101(a); specifically, "clay-lined" impoundments and unlined impoundments that were not leaking and were in compliance with all location restrictions. Facilities with such units did not anticipate having to cease using their surface impoundments prior to the *USWAG* decision. A number of these facilities only have the capacity to manage their CCR and/or non-CCR wastes in their existing unlined CCR

level, then background should be used as the GWPS.

surface impoundment(s) and will not be able to complete all of the construction and/or engineering necessary to stop using the unlined surface impoundment by the new deadline. Consequently, EPA is also proposing to establish procedures by which such facilities may obtain additional time to complete construction.

V. What is EPA proposing to amend?

This action proposes to amend the regulatory language to accurately reflect the aspects of the *USWAG* decision relating to compacted soil "clay-lined" CCR surface impoundments and the continued operation and closure of unlined CCR surface impoundments. It also presents the proposals resulting from EPA's reconsideration of the July 30, 2018 rule in light of the decision in *USWAG*. See *Waterkeeper Alliance Inc, et al. v. EPA* (*Waterkeeper* decision).

A. Definition of Compacted Soil Liner

The *USWAG* decision affected the regulatory definition of a "lined" CCR surface impoundment. The court vacated the provisions at § 257.71(a)(1)(i) that defined existing CCR surface impoundments constructed with a clay liner (*i.e.*, a compacted soil liner that met certain criteria) to be "lined," and, therefore, excluded from mandated closure under § 257.101(a). To reflect this decision, EPA is proposing to amend the CFR to delete subparagraph § 257.71(a)(1)(i). The EPA is also making conforming revisions to § 257.71(a)(3)(i) and § 257.71(a)(3)(ii), by deleting the references to subparagraph (a)(1)(i). In the remainder of this preamble the term "unlined CCR surface impoundment" is inclusive of the units that were formerly considered "clay-lined". Based on the data on the CCR publicly accessible websites there are 28 active surface impoundments that certified as "clay-lined". Of these 28, seven failed at least one location restriction and therefore would have been to close irrespective of the court decision.

B. Closure of CCR Surface Impoundments

As noted previously, the *USWAG* court held that EPA acted "arbitrarily and capriciously and contrary to RCRA" in failing to require the closure of all unlined surface impoundments and ordered that "the Final Rule be vacated and remanded with respect to the provisions that permit unlined impoundments to continue receiving coal ash unless they leak." See 901 F.3d at 449. The EPA interprets this as only a partial vacatur of section 257.101(a). The EPA interprets the court as having

vacated only the following phrase in § 257.101(a)(1): “if at any time after October 19, 2015 an owner or operator of an existing unlined CCR surface impoundment determines in any sampling event that the concentrations of one or more constituents listed in appendix IV to this part are detected at statistically significant levels above the groundwater protection standard established under § 257.95(h) for such CCR unit.” EPA does not interpret this as a vacatur of the entire provision because that would remove the requirement for such units to close and would be inconsistent with the holding that it was arbitrary and capricious for EPA not to have required unlined impoundments to close. With the vacatur of that phrase, § 257.101(a)(1) required owners and operators to cease placement of both CCR and non-CCR wastestreams into all unlined CCR surface impoundments, including those that were formerly “clay-lined”, no later than October 31, 2020.

The October 31, 2020 timeframe was established by the rule published on July 30, 2018 at 83 FR 36435, rather than by the original 2015 final rule. The July 2018 amendment had not yet been challenged when the USWAG court rendered its decision. Since the USWAG decision, however, the Waterkeeper Alliance challenged the EPA’s July 2018 rule, requesting expedited review of the October 31, 2020 deadline. In response, EPA requested a remand of the July 2018 rule, which the court granted on March 13, 2019 “to allow the agency to reconsider that rule in light of this court’s decision in [USWAG].”

1. EPA’s Reconsideration

The USWAG court faulted EPA for failing to fully estimate the risks associated with the continued operation (and leakage) of unlined impoundments and for failing to address the risks from allowing these units to continue to operate until they leak, holding that RCRA requires the Agency to determine that such risks would be acceptable under the § 4004(a) standard in order to authorize the continued operation of such units during this time. In the absence of such an assessment, the D.C. Circuit stated that, based on the record before the court, all unlined surface impoundment must cease receiving waste, whether or not the unit is leaking.

Further, any assessment to support continued operation likely would need to address the more recent information developed since 2015. For example, more recent data suggest that a greater number of units are leaking than EPA originally estimated during the

rulemaking. The EPA has also learned that some units were constructed such that the base of the unit is located within the underlying aquifer, conditions that were not evaluated in the 2014 risk assessment. Unfortunately, this new information is not presented in a form that can be readily incorporated into a nationwide risk assessment. Additionally, given the expedited timeframe needed to complete the reconsideration of the deadline for a unit to cease receiving waste and initiate closure, EPA was unable to develop a nationwide risk assessment of continued operation of these units.

However, many utilities currently could not immediately cease the placement of wastestreams into their surface impoundments without causing potentially significant disruptions to plant operations and thus the provision of electricity to their customers, as they lack additional capacity to manage these wastes elsewhere as laid out in their filings to the *Waterkeeper* court, as discussed further in the following section of this preamble. The *Waterkeeper* court recognized this, declining to vacate the July 2018 Rule partly because “EPA and the intervenors have shown that the consequences of vacatur would be disruptive.”

To address these competing considerations in a manner consistent with the statute and the D.C. Circuit’s decisions, EPA is proposing to require that facilities cease placement of all wastes (both CCR and non-CCR) as soon as technically feasible, and below describes what the agency considers this to mean. EPA considers that such a requirement would meet the RCRA § 4004(a) standard because it requires the facility to do what is possible in the shortest achievable time. The EPA cannot impose more protective measures than can be technically feasibly implemented, as the law cannot compel the impossible. See *USWAG* at 448; *Hughey v. JMS Development Corp.*, 78 F.3d 1523 (11th Cir 1996); *Cherry-Burrell Corp v. US*, 367 F.2d 669 (8th Cir 1966). The EPA also considers that requiring facilities to expedite the initiation of closure of unlined surface impoundments is consistent with the court’s finding that further evidence is needed to permit such units to continue to operate. See *Id.* at 429–430. The EPA currently lacks such evidence on a national level, and it does not anticipate being able to develop such information in the near-term.

To determine what is technically feasible, EPA evaluated the steps that owners and operators need to take to cease receipt of waste and initiate closure. For each surface impoundment,

the precise steps and the actual time needed to complete each step are unique. However, each unit must undertake the same fundamental steps in order to cease receipt of waste and initiate closure. The first and most important step to cease receipt of waste in an unlined CCR surface impoundment is that the CCR and/or non-CCR wastestreams need to be diverted to another unit (*i.e.*, alternate disposal capacity). Based on information from industry stakeholders, EPA understands that alternate capacity will need to be developed for these wastestreams at a number of these facilities. Consequently, EPA began by evaluating the various types of alternate capacity currently available and the processes and time frames necessary for facilities to implement them to be able to cease receipt of waste and initiate closure.

2. Alternate Capacity Approaches

Alternate capacity must be developed for the wastestreams that are being disposed of in the impoundment. The alternate capacity could range from the construction of a new CCR surface impoundment, to a new non-CCR wastewater basin, to the development of a wastewater treatment unit or to the conversion to dry-handling of CCR. These alternate capacities require various times for construction and incorporation into plant operations. In addition, the engineering and design for each of these capacities requires a different timeframe and is highly dependent on the current plant design, complexity of the wastestreams going into the new alternate capacity, and the volume of wastestreams needing to be rerouted.

Industry stakeholders submitted information to EPA on the time needed to develop various types of alternate capacity. The EPA also examined the declarations submitted in the *Waterkeeper* decision briefs and the closure plans on the publicly accessible websites. Few closure plans contained information on the time the facility planned on needing to cease receipt of waste prior to beginning closure. If a closure plan did indicate an amount of time needed to prepare for initiation of closure, it did not discuss the specific processes that were occurring during that amount of time. As a result, EPA relied principally on the industry stakeholder submissions on timing to initiate closure and the declarations from the *Waterkeeper* briefs. The EPA found from examining these sources of information, there are six main approaches for alternate capacity. The main approaches of alternate capacity

and the average time to complete them are:

1. *Conversion to Dry Handling*: 36 months
2. *Non-CCR wastewater basin*: 21 months
3. *Wastewater Treatment Facility*: 16 to 21 months
4. *New CCR surface impoundment*: 27 months
5. *Retrofit of a CCR surface impoundment*: 31.5 months (shorter is possible for small surface impoundments, 4 to 12 months)
6. *Multiple technology system*: 21 to 36 months

Each of these approaches for alternate capacity are discussed further in the subsequent sections of this preamble. The discussion for each approach examines the average time required to complete the approach and have the capacity operational. This average amount of time captures some of the variability due to site-specific needs and provides for a more accurate national benchmark of how long it will take to develop that specific alternate capacity approach.

(a) Conversion to Dry Handling of CCR

Based on information submitted by stakeholders, many facilities are converting to the dry handling of CCR. The conversion to dry handling lowers the amount of water used at the plant and reduces the need for CCR surface impoundments. The conversion process for the various sluiced CCR wastestreams can be complex and lengthy. The conversion to dry handling for some CCR wastestreams has taken 36 months at some facilities.³ Based on information collected in conjunction with the Effluent Limit Guidelines (ELG) rule, EPA believes that the 36-month timeframe is a reasonable central tendency estimate of the time need to complete the conversion to dry handling. Depending on the system installed to transport the bottom ash, it is possible for the conversion process to be completed faster or slower. An engineering firm estimated the following times for each phase for completing the conversion to dry handling of CCR.⁴ The phases to complete the conversion to dry handling includes a planning, design and engineering phase (approximately 6 months), procurement and contractor bid phase (approximately 5 months), fabrication and delivery of new

equipment phase (approximating 16 months), and lastly a construction and transition phase (approximately 21 months). The timeframes for each phase are dependent on the site-specific circumstances of the plant such as plant size, the number of boilers at the plant, number and volume of wastestreams affected by the conversion, and location of the plant.

During the planning, design and engineering phase the facility must conduct a complete water mass balance of the plant and figure out how the water mass balance will change with the implementation of the new dry handling machinery. The water mass balance determines the number and volume of flows going into the plant and produced by the plant. It also analyzes the chemical composition, the flow path, the volumetric flow rate, and temperature of each wastestream. Conversion to dry handling requires an overhaul to the water mass balance of the plant and reconfiguration of water streams in the operation of the plant. To assist in the reconfiguration of the water streams of the plant a new process flow diagram (PFD) and piping and instrument drawing (P&ID) for the plant will need to be developed. A PFD depicts the general flow of the plant processes and the equipment. The P&ID shows more detail than the PFD by including minor flows, control loops, piping details, and instrumentation. The design of the new P&ID and PFD is a critical planning step to properly transition plant operations to dry handling. These diagrams assist engineers in selecting the correct grade, material, and size of piping for the volume and compositions of wastestreams being rerouted during the conversion process.

Once the engineering and design phase is complete, the design can go out for procurement and contractor bidding. This second phase of the conversion process is approximately 5 months. During this phase the project is put out for contractor bid and is awarded. Once a contractor is selected the necessary equipment is ordered, fabricated, and delivered to the site. In the timeline provided by an engineering firm the fabrication and delivery of the equipment phase has approximately 9 months of overlap with the construction phase of the conversion process. The delivery of the equipment is coordinated with the construction schedule. The main process of the construction phase is changing how the bottom ash is removed from the bottom of the boiler. Other steps during the construction phase can also involve the building of a new power house, new

process building, new power supplies and lines, new pneumatic lines and piping, new dry ash storage silos, new filter separators, and new piping.

Facilities currently remove bottom ash from the boiler by letting the bottom ash fall to the bottom of the furnace and then quenching it in a water-filled hopper. Most plants then sluice (using water to transport) the ash from the hopper to a CCR surface impoundment. There are various systems a facility can install to convert to dry handling of bottom ash. The most common systems are remote drag chain systems and dense slurry systems. The remote mechanical drag system requires the installation of a drag chain conveyor that pulls the bottom ash out of the water filled hopper to dewater the ash and transport it to a storage silo or truck. The dense slurry system uses a dry vacuum to transport the ash to a silo where it is then mixed with a small amount of water to be pumped to an onsite landfill. There are other conveyor systems a facility may install in lieu of the two previously mentioned such as a mechanical drag system, dry mechanical conveyor, vibratory belt system, or submerged grind conveyor where the system involves installing a conveyor system directly underneath the boiler. These systems replace the pumping and piping system currently in place to transport the sluiced CCR to the existing CCR surface impoundment. The removal of the sluicing process flows requires modifying the boilers. To capture and transport dry CCR, a conveyer system needs to be installed under the boiler, which cannot be installed while the boiler is online. Duke Energy stated that the installation of a submerged conveyer system required a 12-week outage of the boiler.⁵ Therefore, the construction schedule must be carefully orchestrated with scheduled boiler shutdown.

The facility is required to schedule and agree upon boiler shutdown periods with their Regional Transmission Organization (RTO) to ensure grid reliability. Most plants have regular boiler shutdowns on an annual basis with a more substantial one every few years. Since regular boiler shutdowns are already scheduled, the facility should plan the construction around the already scheduled outage; however, the outage may need to be extended depending on the work needing to be completed for the conversion. The RTOs require various lead times of consultation or notice prior to any retirements, outages, or extended

³ See Southern Company timing to initiate closure information submission and Southern Company comments from Phase 1 proposal in the docket.

⁴ See *What Happens to My non-CCR Streams?* in the docket.

⁵ See Duke Energy timing to initiate closure information submission in the docket.

periods of non-operation. For example: Midcontinent Independent System Operator (MISO) requires at least 26 weeks, Electric Reliability Council of Texas (ERCOT) requires at least 22 weeks, and PJM requires at least 13 weeks.⁶

Once the sluicing process flows are removed and the construction is completed, the plant is fully transitioned to dry handling. At this point in time the facility no longer needs the CCR surface impoundment for CCR wastestreams and can cease receipt of CCR. Information submitted to EPA suggests that the process to complete the conversion to dry handling for a facility requires the most amount of time (36 to 48 months) out of all the alternate capacity methods; however, a majority of coal-fired plants have completed the conversion to dry handling. Based on information collected in conjunction with the ELG rule, approximately 20% of coal-fired plants are still producing bottom ash being sluiced to a CCR surface impoundment. The remaining 80% have either converted to a complete dry handling system or are using a system recycling their wet sluicing bottom ash streams.⁷ The facilities that are managing their CCR dry, are either storing it in silos to be beneficially reused or they are disposing the CCR in a landfill. To accommodate the influx of CCR, new landfills or landfill cells may need to be constructed, in the event off-site disposal options are already at full capacity or otherwise not available. The EPA did not receive any information from stakeholders on the time needed or the process to construct a new landfill. Therefore, the construction of a new landfill is not discussed in this section. However, it is possible a facility may be constructing a new landfill for alternate capacity. The EPA seeks comment on whether landfills are being constructed for alternate capacity and if so, the specifics for the steps and time involved.

Several stakeholders are currently using CCR surface impoundments for disposal of only non-CCR wastestreams, discussed more in the section below, after the conversion to dry handling. For some facilities prior to the *USWAG* decision, it was unnecessary to build a new basin for non-CCR wastestreams

after converting to dry handling or switching to natural gas due to the ease of using the existing disposal unit. Some facilities have indicated they planned to construct a new non-CCR wastestream basin during the conversion process and are able to complete the non-CCR wastestream basin concurrently with the conversion construction. Facilities that are operating a completely dry handling system or who have switched to natural gas may lack alternate capacity for the non-CCR wastestreams disposed of into the CCR surface impoundment.

(b) Non-CCR Wastestream Basins

Some examples of non-CCR wastestreams are coal pile run-off, leachate collection, storm water collection, process recycle water, boiler blow down, and chemical metal cleaning waste. To meet the need for handling non-CCR wastestreams a facility may decide to construct a basin for the non-CCR wastestreams, assuming they have the space to construct the new unit. Since, the CCR design criteria and groundwater monitoring network regulations do not apply to new non-CCR wastestream basins, such units may be constructed faster.

The EPA has received data from stakeholders stating the process of building and transitioning from a unit that comingled CCR and non-CCR wastestreams to a non-CCR wastestream only basin takes 18 to 41 months to complete.⁸ The variation of time needed to complete the basin is often due to permitting processes and site-specific construction factors. The low end of the time range is derived from stakeholder provided information indicating that all the other phases of constructing the basin can happen concurrently with permitting, resulting in completion of the basin in 18 months.⁹ While the high end of the range is derived from information provided by another stakeholder indicating that only limited steps can happen prior to approval of all permits, which made the overall timeframe significantly longer (a high end estimate of 41 months).¹⁰ However, when removing the permitting timeframe considerations from the schedules both stakeholders provided, the average time to design, engineer, and construct a non-CCR wastewater basin is 21 months. This average amount of time captures some of the variability due to site-specific needs and provides for a more accurate national

benchmark. The phases to complete the non-CCR wastestreams basin are an engineering and design phase (approximately four months), a contracting, procurement, and construction phase (approximately 16 months), and a start-up and testing phase (one month).

The engineering and design phase is the first step in construction of the basin. The engineering and design phase takes approximately four months to complete. The engineering phase includes site survey, engineering and design of the basin, design of the new piping to be installed, and designing a new process flow diagram of how the new basin will be connected to plant operations. The basin design is critical to ensure there is proper residence time and the construction materials selected are compatible with the water chemistry of the non-CCR wastestreams. The residence time is the necessary time for any reactions or settling to be completed before the wastewater is recycled back to the facility or discharged. The design of the new piping and the process flow diagram is a critical planning step to properly incorporate the new basin into plant operations. The diagram assists engineers in selecting the correct grade, material, and size of piping for the volume and compositions of wastestreams being routed into and out of the new non-CCR basin.

The next phase of contracting, procurement, and construction occurs after the completion of the engineering and design. This phase takes approximately 16 months to complete. The design from the first phase is put out for contract selection and the necessary equipment is ordered and delivered. During the procurement process the necessary materials, such as the correct type and amount of piping and the materials to construct and line the basin are selected, as well as any equipment or machinery needed to assist in installation and construction are ordered and delivered to the facility. The equipment is commonly delivered in accordance with the construction schedule. The procurement and construction periods typically have a large amount of overlap with each other due to equipment being ordered and delivered to the facility as it is needed during construction. The approximate time to complete construction for a non-CCR wastewater basin is 14 months. This timeframe includes the construction of the new basin, installation of the liner material selected, such as concrete, rerouting and installation of new piping to the new non-CCR wastewater basin, and installation of any mechanical and

⁶ See Cynthia Vodopivec of Vistra Energy Corporation letter in the docket.

⁷ "Supplemental Technical Development Document for the Reconsideration of the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category." See Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category docket (EPA-HQ-OW-2009-0819).

⁸ See Cynthia Vodopivec of Vistra Energy Corporation letter in the docket.

⁹ See Southern Company comments on Phase 1 proposal in the docket.

¹⁰ See TVA timing to initiate closure information submission in the docket.

electrical components such as pumps and valves. The timeframe for construction could be quite variable depending on environmental conditions, the procurement of materials, the site design, and the size of the basin being constructed. For example, if the facility layout requires the new basin to be constructed farther away from the plant than the existing surface impoundment, or if the basin is large in size, or if the site of the new basin requires a large amount of preparation such as leveling or clearing of plants, trees, or other debris, or if the basin is being constructed in an area of the plant with limited ingress and egress, then the speed of construction could be affected. In addition, depending on the location of the facility there could be delays and limitations to the construction schedule due to weather. For example, one stakeholder indicated their site has experienced many delays in construction and delivery of equipment due to the hurricanes in the past year.¹¹ As a result, the facility is now behind schedule and having to redo previously completed work. Similarly, if the plant is located in a cold climate area, the construction schedule will be implemented around the thawing and freezing of the soil.

The startup and testing of the new basin is the final phase. This step takes approximately one month to complete however it may vary depending on the site-specific conditions to achieve proper outfall water chemistry and settling time of the basin. The basin is engineered to have a specific residence time to obtain proper water chemistry and settling time. Both of these design factors are important to obtain the proper water outfall chemistry to meet the National Permit Discharge Elimination System (NPDES) standards. Prior to allowing the basin's outfall to be discharged, the water chemistry needs to be tested to ensure it meets the NPDES standards. If the outfall does not meet the standards, the operating conditions will have to be adjusted, such as flow rate into the basin to adjust residence time and settling time. Alternatively, the water from the basin may not be discharged and may be recycled back to the plant. The recycle stream would need to meet the site-specific standards for the given facility. Additionally, the water could also be treated downstream from the basin prior to discharge, for example a series of basins or in water treatment facility. These factors can lead to a longer

startup phase for the basin. Once proper water chemistry and settling times are achieved, the new basin is fully operational, and the old CCR surface impoundment can cease receiving waste. Once proper water chemistry and settling times are achieved and treatment standards are met, the new basin is fully operational, and the old CCR surface impoundment can cease receiving waste.

Since some facilities have not or will not convert to dry handling, there are some facilities that still require capacity for their wet CCR wastestreams. These facilities most likely will not be able to solely rely on a non-CCR wastestreams basin because the liner usually does not meet the requirements of the CCR rule; therefore, non-CCR wastestream basins are unable to accept CCR. Under the current Part 257 regulations, a facility has two main options for managing wet CCR wastestreams, a wastewater treatment facility and a CCR surface impoundment.

(c) Wastewater Treatment Facility

The development of a wastewater treatment facility would provide one type of alternate capacity for facilities. A wastewater treatment facility is able to remove heavy metals and reduce the amount of Total Dissolved Solids (TDS) and Total Suspended Solids (TSS) from the wastestreams. Wastewater treatment facilities can potentially utilize a vast number of components and methods for treatment. One method of water treatment facility is a chemical precipitation system. Based on information obtained in connection with the development of the Effluent Limit Guidelines (ELG) rule, the development, construction, and implementation of this type of wastewater treatment unit would take on average 16 to 21 months. This range of time is highly dependent on the volumes of the wastewater streams that need to be treated. There are a variety of materials to choose from to construct the treatment tanks. One type of water treatment tank is concrete treatment tanks.¹² A system utilizing concrete tanks is capable of handling large volumes of CCR wastestreams such as bottom ash transport water; however, it greatly increases the amount of time to complete the system. The total time needed to complete construction of concrete treatment tanks is approximately 27 months. The time needed for the concrete treatment tanks

is longer due to a longer start up and transitioning phase.

The water treatment facilities are completed in 5 phases: (1) Initial engineering and design (approximately 3 months), (2) contractor selection (approximately 3 to 5 months), (3) finalization of engineering and design (approximately 2 to 3 months), (4) equipment procurement, and construction (approximately 7 to 8 months), and (5) start up and transitioning (approximately one month).

The initial engineering and design phase mainly focus on the evaluation of the water mass balance of the plant. On average approximately three months are needed complete this first phase of the initial engineering and design. To evaluate the water mass balance of the plant, all the water streams coming into the plant, going out of the plant, and any specific steps that would change the water chemistry need to be evaluated for volumetric flow rate and chemical composition. At large facilities, complex water balances are common, which require more time than three months for the initial engineering evaluation and design. A complex water mass balance contains numerous water streams, with variable composition changes within a stream, and various volumes and flow rates. The more water streams there are, the more complex, and challenging it is to determine the overall water mass balance for the plant. One stakeholder indicated a simple water mass balance at a plant had nine wastestreams; whereas, a significantly more complex water mass balance at a plant had over 50 wastestreams.¹³

After the first phase of the initial engineering and design, the owner or operator is then able to put the project out for contractor bidding, thus beginning the second phase of contractor selection. The bidding and selection of the contractor is typically three to five months. The range in time is driven by the complexity and volume of wastewater. Large volumes and complex flows mean that it will take longer to properly submit an initial design of the wastewater treatment facility. This in turn makes the bidding and selection process longer as well. The initial design of the water treatment facility includes the recommended treatment methods and the order in which they should occur, and the recommended materials for the treatment methods.

After selection of the contractor, the third phase is finalization of engineering

¹¹ See Southern Company timing to initiate closure information submission in the docket.

¹² See declaration of Jeffery Jenkins, Arizona Public Service in the docket.

¹³ See Southern Company comments on Phase 1 proposed rule in the docket.

and design. Two to three months are typically needed to complete this second step of engineering and design phase. The design process could extend past this timeframe if the wastestreams are complex and large in volume. During this phase, the design from the contractor bid and selection is finalized and fine-tuned. This finalization of the design for the wastewater treatment facility ensures the water mass balance was done correctly and selects the necessary technologies, proper equipment, and chemicals needed for each treatment stage. This stage also ensures the materials selected are compatible with the water chemistry, and the order of treatment methods achieve maximum treatment efficiency for the plant's operations.

Once the finalization of engineering and design phase is complete, the necessary materials must be obtained and installed during the fourth phase, procurement and construction. This phase requires approximately seven to eight months to complete. Some necessary materials are treatment tanks, piping, polymer and instrumentation. The procurement period typically can take five months. However, if the wastestreams are large in volume or if the water chemistry is particularly complex, the equipment will need to be custom ordered and require longer fabrication times which could lead to a procurement time of 12 months or longer. For example, one stakeholder indicated for a complex water mass balance system of more than 50 wastestreams with streams that contain a high amount of variability, that the procurement period (procure, fabricate, and deliver to the site) took 13 months.¹⁴ Installation can take approximately two to three months.

The final phase is start up and transitioning the wastestreams to the water treatment facility and conducting system testing to ensure it is running properly and effectively treating the water to meet the discharge levels or recycled water requirements. The discharge of the water treatment facility is required to meet NPDES discharge limits. Such limits may include for example maximum amount of Total Suspended Solids (TSS), oil and grease, and iron and copper for metal cleaning wastes.¹⁵ The treatment system will need to be tuned and periodically checked to ensure the discharge is within the acceptable limits. The treatment is able to be tuned by

adjusting the flow rate, the amount of reactants in the system, and the recycle stream flow rates. This process can be as short as one month, however for the concrete treatment tanks this phase can take 9 months to complete. Once the treatment facility has completed start up testing, the CCR surface impoundment is no longer needed. The owner or operator can then initiate closure because the wastestreams are rerouted to the water treatment facility and waste is no longer being received in the CCR surface impoundment.

(d) New CCR Surface Impoundment

Facilities may have the need to construct a new CCR surface impoundment rather than a water treatment facility. A CCR surface impoundment could be capable of handling a wider variety of CCR and non-CCR wastestreams both in chemical composition and in volume. A new CCR surface impoundment takes on average 27 months to construct. This average was obtained from available data submitted by stakeholders indicating how long it will take to construct a new surface impoundment in compliance with the CCR rule.^{16 17 18}

The construction timeframe includes four phases: (1) Engineering and design, (2) permitting, (3) obtaining contractors, equipment and construction, and (4) system testing. The first phase of engineering and design takes on average six months to complete. During the engineering phase the new surface impoundment is designed to be the proper size, the site survey conducted, the liner materials selected, and designing any necessary methods to transport the wastestreams to the new surface impoundment. The new surface impoundment must be designed to specific dimensions (length, width, and depth) to achieve the necessary residence time for the volume of wastestreams disposed of into the surface impoundment. The residence time is a critical design element of the surface impoundment because it allows the wastestreams to undergo the proper settling time and treatment time to obtain proper water chemistry at the outfall to meet appropriate discharge limits. The residence time assists in determining the necessary size of the surface impoundment.

The second phase, permitting, can take between 6 to 18 months to complete. This phase of construction is

highly variable depending on the type of permit(s) needed and the state's permit application processing time. In some cases, the other phases such as obtaining contractors, equipment and construction can continue and have some overlap with the permitting phase. The EPA acknowledges that in some rare circumstances the permitting process may take significantly longer. For example, one stakeholder indicated that due to the necessary permits for constructing the surface impoundment, they are unable to proceed with the next phases until the permit applications are approved.¹⁹ For this stakeholder, the process of needing the permit to be approved prior to the next step added 19–25 months to time needed to complete a new surface impoundment.

The third phase is obtaining contractors, purchasing materials and equipment, and completing construction. This phase on average takes 14 months to complete. This phase includes contractor selection, material procurement, construction of the surface impoundment, liner installation, and installation of piping, any other machinery, and/or electrical components to transport the wastestreams to the new surface impoundment. Depending on the size of the surface impoundment and the location of the facility it is possible the construction phase may take longer or shorter than 14 months. The average of 14 months was obtained by averaging the timeframes provided by the stakeholders who indicated the need to construct a new surface impoundment. The shortest timeframe to obtain contractors, equipment, and construct the impoundment was 10 months for a small surface impoundment of 7 acres.²⁰ The longest timeframe to construct a new impoundment is approximately 12 months due to the facility being located in a cold climate and is only able to plan on performing construction from late April to late October thus requiring two construction seasons to complete the work.²¹

The new CCR surface impoundment is required to be constructed with the new CCR surface impoundment liner requirements in § 257.72. This requires a composite liner containing an upper component of a 30-mil geomembrane liner (GM) and a lower component of two feet of compacted soil with a

¹⁹ See declaration of Rudy Navarro Jr., Salt River Project Agricultural Improvement and Power District and timing to initiate closure information submission.

²⁰ See declaration of Jeffery Jenkins, Arizona Public Service in the docket.

²¹ See Excel Energy timing to initiate closure information submission in the docket.

¹⁴ See Southern Company comments on Phase 1 proposal in docket.

¹⁵ See "What Happens to my non-CCR Streams?" in the docket.

¹⁶ See Southern Company timing to initiate closure information submission in the docket.

¹⁷ See Excel Energy timing to initiate closure information submission in the docket.

¹⁸ See declaration of Jeffery Jenkins, Arizona Public Service in the docket.

hydraulic conductivity of no more than 1×10^{-7} centimeters per second (cm/sec). A GM consisting of a high density polyethylene (HDPE) must be at least 60 mil thick. An alternate composite liner may be allowed if it follows the requirements outlined in § 257.70(c). During the construction phase, the installation and sampling of the groundwater monitoring system should be completed. The new groundwater monitoring wells must be placed at the unit boundary per § 257.90(a)(2). The new CCR surface impoundment is required to comply with the groundwater monitoring requirements in § 257.90(b)(2). This includes installation of a groundwater monitoring system (see § 257.91), completion of eight background samples, and the first round of detection monitoring. These groundwater monitoring requirements must be concluded prior to placement of waste in the new CCR surface impoundment. In rare scenarios, the installation of the new groundwater monitoring wells may not be able to be done during the construction of the new unit. This process could add a minimum of 14 months to the start-up of a new CCR surface impoundment.²² The minimum of 14 months accounts for two months to install the necessary monitoring wells and 12 months to complete the eight background samples to accurately capture any seasonal variation.

The final phase of construction is the startup and transition phase. This phase can take up to a month to complete. Once the sampling of the new groundwater monitoring system and construction of the surface impoundment is complete, the CCR and non-CCR wastestreams can be diverted to the new CCR surface impoundment from the existing CCR surface impoundment.

(e) Retrofit of Existing Unlined CCR Surface Impoundment

Some stakeholders indicated plans on retrofitting a part or an entire existing unlined CCR surface impoundment at a facility.^{23 24} For some facilities this may be the only option available for developing alternate capacity due to space limitations at the site or being unable to acquire more land to build alternate capacity.

One stakeholder indicated the necessary time to retrofit an impoundment is approximately 64.5

months including a six-month buffer.²⁵ Therefore, the total time minus the six-month buffer is 58.5 months. This stakeholder's submission involves retrofitting four CCR surface impoundments sequentially. The timeline included: 4 months to prepare and select an engineering firm, 7 months to finalize engineering designs and prepare construction bid documents, 5 months to bid and select a construction firm, and 6 months to receive materials and equipment and reroute non-CCR wastestreams. Additionally, the stakeholder indicated the time needed to dewater, remove ash, and reline takes 9 months per surface impoundment. The largest surface impoundment at the facility is approximately 50 acres. Therefore, the total time needed to retrofit a single pond, large in size, including engineering, design, bidding and selecting engineering and construction firms, and retrofit construction would take approximately 31.5 months. This is a reasonable estimate for a complete retrofit for a pond of this size considering the time needed to complete construction for a new surface impoundment. The EPA would expect the retrofit of a surface impoundment to take longer than the construction of a new unit because of the time needed to dewater and remove the CCR.

From data on the CCR publicly accessible websites, a couple of facilities, Keystone Generating Station (PA), Weston Generating Station (WI), and Mt. Storm Power Station (WV), have completed retrofits of CCR surface impoundments.²⁶ These facilities completed retrofitting CCR surface impoundments in 4 to 12 months. However, these ponds were small in size with the largest being 9 acres and the smallest 1.3 acres. The EPA would expect smaller surface impoundments to be able to be retrofitted in less time than larger surface impoundments. There is less water and ash to remove from the surface impoundment and a smaller surface area to reline.

The existing CCR surface impoundment is required to be retrofitted in accordance with § 257.102(k). First, the owner or operator must prepare a written retrofit plan in accordance with § 257.102(k)(2). After the retrofit plan is complete, the first step in retrofitting an existing surface impoundment is to drain the liquids from the impoundment and

remove all the existing CCR from the unit. While the surface impoundment is undergoing retrofit, the owner or operator is required to remain in compliance with the other aspects of the CCR rule including corrective action.

Once the CCR is removed, the new surface impoundment can be constructed. The new surface impoundment is constructed as described previously and must be in compliance with the liner requirements at § 257.72. If the retrofit process changed the waste boundary for the new surface impoundment, then a new groundwater monitoring system will need to be installed. An additional 14 months could be needed for proper installation and sampling of the new groundwater monitoring system. If a new groundwater monitoring system is needed the wastestreams can only be diverted into the newly retrofitted CCR surface impoundment once the initial sampling of the new groundwater monitoring system is complete. If the waste boundary of the retrofitted surface impoundment does not change, then a new groundwater monitoring system may not be needed, eliminating the need for the additional 14 months.

(f) Multiple Technology Systems

Some stakeholders have indicated that they are utilizing multiple alternate capacity technologies,²⁷ such as constructing both a water treatment facility and either a non-CCR wastewater basin or a new CCR surface impoundment. Stakeholders have indicated that the construction of the water treatment facility can occur at the same time as the construction of the new basin or CCR surface impoundment. Therefore, the overall timeframe for implementing a multi-unit system at the facility can take a similar amount of time as implementing just a single technology. However, the design phase could be expected to last a few months longer due to the overall system being more complex. The overall time for constructing a multiple technology system ranges from 16 to 30 months. This is highly dependent on which of the previously discussed alternate capacities are being constructed and how much of the construction can overlap of each system being installed.²⁸ These timeframes do not include the time required for engineering, design, and permitting. The average amount of time for engineering and design for the previously discussed

²² See declaration of Jeffery Jenkins, Arizona Public Service in the docket.

²³ See Duke Energy timing to initiate closure information submission in the docket.

²⁴ See declaration of Jeffery Jenkins, Arizona Public Service in the docket.

²⁵ See Cynthia Vodopivec of Vistra Energy Corporation letter in the docket.

²⁶ See Compiled Retrofit Plans from Keystone Generating Station, Weston Generating Station, and Mt. Storm Power Station in the docket.

²⁷ See declaration of Jeffery Jenkins, Arizona Public Service in the docket.

²⁸ See Duke Energy timing to initiate closure information submission in the docket.

capacities is 5 months. Therefore, the overall time to construct and start up a multiple technology system is approximately 21 to 36 months, assuming permitting can happen concurrently with the other steps. However, there may be instances that permitting cannot be completed concurrently. EPA is unable to estimate the timeframe for this process since it is site specific. EPA requests comment on the timeframe it would take to obtain permits.

3. Establishment of New Cease Receipt of Waste Deadline

(a) Amendments to Closure Due to Groundwater Monitoring (§ 257.101(a))

The time needed to construct alternate capacity for both CCR and non-CCR wastestreams is critical in determining how much time facilities truly need to cease receipt of waste. The previous section of this preamble discussed the various approaches a facility may develop and incorporate alternate capacity into plant operations to enable CCR surface impoundments to cease receipt of waste and initiate closure. The following summarizes the approaches and the average time required for each:

1. *Conversion to Dry Handling*: 36 months
2. *Non-CCR wastewater basin*: 21 months
3. *Wastewater Treatment Facility*: 16 to 21 months
4. *New CCR surface impoundment*: 27 months
5. *Retrofit of a CCR surface impoundment*: 31.5 months (shorter is possible for small surface impoundments, 4 to 12 months)
6. *Multiple technology system*: 21 to 36 months

By using the construction and implementation timeframes summarized above for the various alternate capacity approaches the average amount of time required to obtain alternate capacity is 22.5 months. This timeframe, although an average, would appear to provide enough time for a substantial proportion of facilities to comply. It is only 1.5 months longer than the average time estimated to be needed to construct a non-CCR wastewater basin, as well as the outer bound of the time needed to construct a wastewater treatment facility, and the shortest amount of time needed to construct a multiple technology system. The primary outliers would be facilities converting to dry handling or retrofitting an existing CCR surface impoundment. However, many facilities have already converted to dry handling; EPA estimates that

approximately 80% of coal-fired plants that at one time employed wet handling of CCR waste have already converted to dry handling.²⁹ Furthermore, 22.5 months would be a sufficient amount of time to retrofit most but the largest surface impoundments and smaller surface impoundments with unique design situations or in locations that will require more time. Consistent with ensuring that this transition occurs as quickly as technically feasible, EPA considers that these outliers shouldn't extend the time for the remainder of facilities, as the outliers can be accommodated by the proposed alternative closure provisions discussed in the next section.

The EPA has chosen to rely on a single average construction time to establish the new deadline for several reasons. First, as just discussed, 22.5 months would provide sufficient (but not excessive) time for a substantial proportion of facilities, under a variety of approaches. Second, EPA recognizes that some facilities will need less than the average amount of time to complete construction and some will need more. Each of the averages summarized above reflects ranges of estimated construction times, which can vary depending on site conditions and the specific facility operations. To reliably determine which facilities need less time, EPA would need to make individual facility-specific determinations. The EPA is concerned that trying to craft individualized time frames would ultimately result in longer delays in the initiation of closure for a greater number of facilities than would potentially be caused by reliance on an overall average that most facilities can meet. Based on similar concerns, EPA is proposing to establish an individualized variance process that is intended to be used infrequently to address unusual or unique situations; and to ensure that such requests are infrequent, EPA has attempted to craft a regulatory deadline that most facilities can confidently meet.

Although a single deadline has a number of advantages, EPA recognizes that a single deadline is necessarily less precise; some facilities may in fact be able to construct alternate capacity more quickly than EPA's proposed deadline. Therefore, EPA is considering an alternative under which the deadline would vary according to the technology adopted. For example, a facility that

chose to install a non-CCR wastewater basin would have a different deadline than a facility that constructed a new wastewater treatment facility. The various timeframes could be based on the averages presented earlier in this section. The EPA is concerned that this option could be challenging to implement and track compliance. The EPA is also concerned that this approach may not result in measurably shorter time frames for most facilities, given the range of estimates discussed above, and could lead to a greater number of variance requests. EPA requests comment on this approach, including, for example, whether this more complicated regulatory approach will result in measurably shorter time frames for most facilities.

Accordingly, EPA considers 22.5 months to represent the fastest technically feasible timeframe needed to construct alternate capacity and for CCR surface impoundments to cease receipt of waste.

Therefore, EPA is proposing a new date of August 31, 2020 for facilities to cease placement of CCR and non-CCR wastestreams into unlined surface impoundments. The EPA believes, based on its technical feasibility analysis, that many facilities will be able to meet this date. The court's mandate for the *USWAG* decision was issued on October 15, 2018, and by adding the 22.5 months to that date, the new cease receipt of waste deadline becomes August 31, 2020. The EPA is seeking comment and specifically data, on the time needed to develop alternate capacity at the various facilities that are currently developing alternate capacities for their CCR and non-CCR wastestreams. The data submitted during the comment period will be used to strengthen EPA's analysis of the time needed to develop alternate capacity. Based on this information, EPA could revise its calculations and could potentially change the cease receipt of waste deadline.

The EPA considered that the start of the 22.5 months could instead be from the *Waterkeeper* decision date of March 13, 2019. However, given that the language of the *USWAG* decision was clear that all units that do not have a composite or alternate liner will be required to cease receiving waste and close EPA believes that owners and operators of unlined CCR surface impoundments would have started preparing for such an event upon issuance of the mandate on October 15, 2018. This is consistent with information received from industry stakeholders.

²⁹ "Supplemental Technical Development Document for the Reconsideration of the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category." See Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category docket (EPA-HQ-OW-2009-0819).

Accordingly, EPA is proposing to amend the regulatory language of § 257.101(a)(1) to delete the phrase, “if at any time after October 19, 2015 an owner or operator of an existing unlined CCR surface impoundment determines in any sampling event that the concentrations of one or more constituents listed in appendix IV to this part are detected at statistically significant levels above the groundwater protection standard established under § 257.95(h) for such CCR unit.” The proposed new regulatory language of § 257.101(a)(1) will read “Except as provided by paragraph (a)(3) of this section, no later than August 31, 2020, an owner or operator of an existing unlined CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR surface impoundment and either retrofit or close the CCR unit in accordance with the requirements of § 257.102.”

Additionally, EPA is making a conforming change to § 257.91(d)(2), which contained similar language. Specifically, EPA is deleting all of § 257.91(d)(2), which clarified how the closure requirement applied in the context of a groundwater monitoring system that covers multiple unlined impoundments. Since all unlined CCR impoundments must now close or retrofit, this clarification is no longer relevant.

(b) Amendments to Closure Due to Location Restrictions (§ 257.101(b)(1))

The October 2020 date applied not only to the unlined leaking units subject to § 257.101(a), but also to the units that failed the minimum depth to aquifer location restriction standard subject to § 257.101(b)(1)(i). Therefore, EPA is proposing that the deadline to cease receipt of waste for these units also be amended to August 31, 2020. This new date was selected based on the same rationale explained previously. These units are similarly situated in that these facilities need additional time to develop alternate capacity to transition away from their surface impoundments. As previously discussed, based on the data from and information received from stakeholders, EPA calculated that the average amount of time to take the necessary steps to cease placement of waste into a surface impoundment is approximately 22.5 months. In addition, based on the data on facilities’ public websites regarding compliance with the location restriction standards, the majority of the units that failed the aquifer location restriction are also unlined and must close under § 257.101(a). It is therefore logical to establish the same deadline of August

31, 2020 to cease receipt of waste. The EPA believes it is technically infeasible for a majority of these units in question to be able to cease receipt of waste prior to August 31, 2020 due to the lack of alternate capacities and the immediate initiation of closure that requires units to cease receiving waste that would cause disruptions to operations at the power plants. Therefore, EPA is proposing the date of August 31, 2020 for the cease placement of waste for § 257.101(b)(1)(i) to replace the current date of October 31, 2020 established in the July 2018 Final Rule.

The amended regulatory language of § 257.101(b)(1)(i) would read “Except as provided by paragraph (b)(4) of this section, the owner or operator of an existing CCR surface impoundment that has not demonstrated compliance with the location standard specified in § 257.60(a) must cease placing CCR and non-CCR wastestreams into such CCR unit no later than August 31, 2020, and close the CCR unit in accordance with the requirements of § 257.102.”

C. Alternate Closure Standards

The information that EPA has reviewed indicates that some facilities will be unable to cease receiving waste by the new deadline of August 31, 2020. In some cases, it may be due to circumstances beyond the facility’s control, such as extreme weather. Similarly, delays may result from permitting requirements; as previously discussed some states do not allow construction to begin until all permits have been issued. In addition, the USWAG decision brought in a new group of units that are required to close under § 257.101(a); specifically, “clay-lined” impoundments and unlined impoundments that were not leaking and passed location restrictions. Facilities with such units did not anticipate having to cease using their surface impoundments so rapidly. Therefore, they had not planned for such an event prior to the USWAG decision. A number of these facilities only have the capacity to manage their CCR and/or non-CCR wastes in their existing unlined CCR surface impoundment; therefore, it is not technically feasible or them to stop using the unlined surface impoundment by the new deadline of August 31, 2020. For example, if the facility will continue to burn coal and has decided to convert to dry handling that process can take 36 months. Even if the facility had begun on the day after the USWAG decision, it is possible that, despite best efforts, the conversion would not be complete by August 31, 2020. However, since most facilities (approximately 80%)

have already converted to dry handling,³⁰ EPA will handle such a facility with the proposed alternate cease receipt of waste deadlines (§§ 257.103(e) and (f)), rather than a longer default time frame.

Currently the regulations allow the continued use of CCR units due to the lack of alternate capacity for CCR, under the alternate closure requirements in § 257.103. The current alternate closure provision of § 257.103(a) allows for the continued use of a CCR unit for disposal of CCR if there is no alternate capacity available, on-site and off-site. This provision grants a facility up to 5 years to find alternate capacity for the CCR. Once additional capacity is found, the CCR unit must cease receipt of waste and initiate closure.

Additionally, under § 257.103(b), a facility may continue to operate a CCR unit and receive CCR if they are planning to cease operation of the coal-fired boilers by a date certain. Under this provision, since the boiler is ceasing operation and CCR will no longer be generated after a known date, the facility will not have to find alternate capacity. For surface impoundments 40 acres or smaller the boiler must cease operation and the CCR surface impoundment must complete closure by October 17, 2023. For a surface impoundment larger than 40 acres, the boiler must cease operation and the CCR surface impoundment must complete closure by October 17, 2028. For landfills the coal-fired boiler must cease operation and complete closure no later than April 19, 2021.

However, both provisions only allow for the continued receipt of CCR past the deadline in §§ 257.101(a), (b)(1), and (d). The alternate closure provisions in § 257.103 do not address the situations in which a facility needs alternate capacity for non-CCR wastestreams.³¹ In the record before the Agency many facilities highlighted that not having capacity for non-CCR wastestreams is a critical issue that places the operation of the facility at risk. Evidence suggests that the average time to develop alternative capacity for non-CCR wastestreams is often the primary driver of determining a technically feasible

³⁰ “Supplemental Technical Development Document for the Reconsideration of the Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category.” See Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category docket (EPA-HQ-OW-2009-0819).

³¹ In March 2018 Phase One proposed rule, EPA proposed amendments to 257.103. The EPA received comments on those proposed provisions. Therefore, EPA is still considering those comments from the proposed amendments from March 2018 and may take final action in a future rulemaking.

timeframe for being able to initiate closure of surface impoundments that combine CCR and non-CCR wastestreams.

To address this, EPA is proposing a series of amendments to the alternate closure requirements in § 257.103(a) and (b) that will coordinate with the new regulatory framework governing the closure of CCR surface impoundments. The EPA is proposing two new subparagraphs specific to CCR surface impoundments: § 257.103(e), which would establish a short-term extension to the new cease receipt of waste deadline in § 257.101; and § 257.103(f), which would establish the process and criteria for facilities to obtain a site-specific extension based on one of two demonstrations that additional time is needed to cease receipt of waste in the unit. Rather than amending the alternate cease receipt of waste deadlines for CCR surface impoundments (§§ 257.103(a) and (b)), which could potentially cause complications for the CCR landfills that are also covered under those provisions, EPA is proposing to establish separate provisions to comprehensively address the issues specific to the closure of CCR surface impoundments.

The short-term extension under § 257.103(e) would grant facilities a three-month extension to continue to receive CCR and/or non-CCR wastestreams in order to complete the development of alternate capacity. This short-term alternative is designed to be self-implementing and for units that need three additional months or less to complete the necessary measures to achieve cease receipt of waste into the CCR surface impoundment in question. For units that qualify under this provision, the deadline to cease receipt of waste and initiate closure would be no later than November 30, 2020. The site-specific alternate to initiation of closure (at § 257.103(f)) will allow facilities to submit a demonstration to EPA or the Participating State Director for approval, either requesting the exact amount of time necessary to complete the measures to obtain alternate capacity, with a maximum of 5 years, or requesting an extension based on a showing that the risks of continued operation of the impoundment will be offset by the shorter time to complete closure. The EPA is proposing that facilities could rely on either § 257.103(e) or (f) to obtain additional time to operate a unit but could not rely on both to aggregate the maximum time periods authorized.

1. Applicability of Alternative Timeframes

The EPA is proposing to allow all CCR surface impoundments required to close under § 257.101(a), and (b) to be eligible for these two alternative timeframes to initiate closure. The July 2018 final rule extended the deadlines to cease receipt of waste for all units required to close under § 257.101(a) (unlined leaking impoundments) and for a subset of units required to close under § 257.101(b) (the surface impoundments that failed the aquifer location restriction); therefore, owner or operators of those units anticipated having to cease receipt of waste no later than October 2020. However, some of those facilities have demonstrated that it will not be technically feasible to reroute the non-CCR wastestreams and create alternate capacity within that timeframe. In addition, the *USWAG* decision mandated the closure of a small group of surface impoundments that were either formerly certified as “clay-lined” or that were unlined, but not leaking and compliant with all location standards. This group of CCR surface impoundments, approximately 45 impoundments (based on data from the publicly accessible websites), were not required to close prior to the *USWAG* decision and would not have conducted any preliminary planning for such an activity. Therefore, these units in particular may need more time beyond August 31, 2020. EPA is seeking comment on whether the new alternative closure provisions should apply only to the universe of CCR units affected by *USWAG* decision. Lastly, EPA is also proposing that the CCR surface impoundments which failed location restrictions other than the depth to aquifer location restriction are also eligible to apply for an alternate compliance deadline. The date extension in the July 2018 rule did not apply to the “clay-lined” or the unlined units that were not leaking because as of July 2018 those units were not subject to the closure requirements of the CCR rule under § 257.101. However, EPA is proposing to include them in this new approach to create a consistent regulatory system to move CCR surface impoundments to initiate closure as quickly as possible.

2. Short Term Alternative To Cease Receipt of Waste Deadline (§ 257.103(e))

The EPA acknowledges that the time frames used to develop the August 2020 deadline were estimated average durations and in reality, due to unique circumstances, it may take some facilities slightly longer than others to

cease receipt of waste. To accommodate those facilities that require some additional time to complete construction, EPA is proposing that such facilities demonstrate and certify that they will need additional time before they have the technically feasibility to able to cease receipt of waste and initiate closure. The provision, which is proposed at § 257.103(e), would allow for no more than a three-month extension, which means that the latest that a facility could continue to operate a CCR surface impoundment under this provision would be November 30, 2020. The EPA acknowledges that events can occur which are completely out of the facility’s control, such as extreme weather or a delay in material fabrication. In essence, this would be a limited “force majeure” provision.

The owner or operator would have to certify that the facility continues to lack alternate capacity to manage their CCR and/or non-CCR wastestreams, and that it was technically infeasible to meet the August 31, 2020 deadline to cease receipt of waste and initiate closure. This certification, along with the supporting documentation, would then be placed into the operating record and posted on the facility website, for the unit in question, and sent to EPA as a notification. This process grants the unit up to a three-month extension to allow the unit to continue to operate until construction is complete, or until November 30, 2020, whichever is earlier, without further action by EPA. The requirements of the certification are similar to the requirements of § 257.103(a). The owner or operator would have to certify the following: (1) No alternative disposal capacity is available on-site or off-site (an increase in costs or inconvenience is not sufficient support); (2) The owner or operator has made and continues to make efforts to obtain additional capacity; and (3) The owner or operator is (and must remain) in compliance with all other requirements of part 257. A brief narrative of each component of the certification would be required to explain why a three-month extension is necessary. The certification is to be placed in the facility’s operating record, placed on the facility’s CCR website, and submitted to EPA as a notification of the facility’s intent to comply with the alternate deadline under this provision.

The EPA is proposing to make this extension self-implementing because it is of such short duration. Facilities will need to have fundamentally completed construction in order for a three-month extension to be useful. Moreover, were

EPA to approve each of these limited extensions, it would divert the Agency's resources away from review of requests for more substantial amounts of time. The EPA believes that these requests for longer amounts of time should be subject to a closer review and thus is proposing to devote its resources accordingly.

The EPA is proposing to amend the regulatory language of § 257.103 and add a new paragraph, § 257.103(e), to reflect this proposal. The EPA is seeking comment on whether the short-term alternate cease receipt of waste deadline should be only for non-CCR wastestreams rather than CCR and/or non-CCR wastestreams.

3. Site Specific Alternative To Cease Receipt of Waste Deadline (§ 257.103(f))

The EPA acknowledges that the timeframe used to reach the new deadline of August 31, 2020 was a calculated average and that some facilities will need more time for CCR surface impoundments to cease receipt of waste than a three-month extension. To accommodate the units that will need longer than November 30, 2020 to complete their arrangements, EPA is proposing to establish a site-specific alternative (at § 257.103(f)) that would allow the owner or operator to seek approval from EPA or the Participating State Director to continue to operate the CCR surface impoundment for a specified amount of time. The EPA is proposing two bases on which a facility can obtain a site-specific deadline to cease receipt of waste: (1) A demonstration that development of alternate capacity for CCR and/or non-CCR cannot be completed prior to November 30, 2020; and (2) a demonstration of lack of capacity and permanent cessation of coal-fired boiler(s) by a date certain. These two bases generally mirror the existing provisions at §§ 257.103(a) and (b). As noted, EPA is proposing to consolidate the new procedures applicable to initiating the closure of CCR surface impoundments into separate sections to avoid inadvertently affecting the requirements for CCR landfills.

To obtain approval from EPA or the Participating State Director for the first method, the owner or operator must demonstrate that it is not technically feasible to complete the development/installation of alternate capacity prior to November 30, 2020. In this demonstration, the facility will need to present in detail the specifics of the process they are undertaking to develop alternate capacities for the necessary CCR and/or non-CCR wastestreams to support the claim that additional time is

necessary. To obtain approval from EPA or the Participating State Director for the second method, the owner or operator must demonstrate that the facility will permanently cease operation of the coal fired boiler(s) by a date certain and that there is currently no alternate capacity available on site or off site for the CCR and/or non-CCR wastestreams. In this demonstration the owner or operator will have to provide a plan for mitigating the potential risks from the CCR surface impoundment for the duration of the continued operation of the CCR surface impoundment until the expedited closure of the unit. This alternative would allow the facilities that are currently closing in accordance with § 257.103(b) to continue to receive non-CCR wastestreams, as well as CCR. Neither demonstrations may rely solely on cost considerations as EPA cannot grant additional time on this basis. See *USWAG 901 F.3d at 448–449*.

The EPA is seeking comment on whether the site-specific alternatives to the cease receipt of waste deadline should be only for non-CCR wastestreams rather than CCR and/or non-CCR wastestreams. If the site-specific alternatives only applied for facilities with the need for continued disposal of non-CCR wastestreams in CCR surface impoundments, EPA would not be amending §§ 257.103(a) and (b). As such, EPA is seeking comment on whether the site-specific alternatives should be only for non-CCR wastestreams.

(a) Proposed Demonstration Requirements for Development of Alternate Capacity Infeasible

The EPA is proposing that the owner or operator must demonstrate the time needed to obtain alternate capacity and cease receipt of waste for CCR and/or non-CCR wastestreams to be submitted to EPA or the Participating State Director at § 257.103(f)(1). The demonstration must include a detailed narrative of the plan the facility is implementing to obtain alternate capacity so that their units that must initiate closure can cease receipt of waste. The demonstration must show that it is technically infeasible to manage the CCR and/or non-CCR wastestreams on-site or off-site other than in the CCR surface impoundment in question. The EPA is proposing to require that the demonstration for each unit provide the lines of evidence to document that the facility lacks capacity for CCR or non-CCR wastestreams: (1) A demonstration of the lack of alternate capacity available on-site or off-site; (2) a demonstration that CCR and/or non-CCR wastestreams must continue to be

managed in the CCR surface impoundment due to the technical infeasibility of obtaining alternate capacity prior to November 30, 2020; this demonstration must include an analysis of the adverse impact to plant operations if the CCR surface impoundment in question were to no longer be available for use; (3) a detailed workplan on obtaining alternate capacity for CCR and/or non-CCR wastestreams; and (4) a narrative on how the owner or operator will continue to maintain compliance with all other aspects of the CCR rule.

The first and second lines of evidence are the same lines of evidence required in § 257.103(a). The owner or operator must demonstrate that the CCR and/or non-CCR wastestreams must continue to be managed in the CCR surface impoundment due to the technical infeasibility of alternate capacity being available sooner than November 30, 2020. An increase in costs or the inconvenience of existing capacity is insufficient support to qualify for this alternative. If the owner or operator provides no evidence other than increased cost or inconvenience, EPA will consider the submission incomplete and will return it to the owner/operator without further action. The owner/operator may resubmit the demonstration with the appropriate evidence (*i.e.*, the owner or operator must discuss the site-specific circumstances leading to the continued lack of capacity and technical infeasibility of obtaining capacity for their CCR and/or non-CCR wastestreams prior to November 30, 2020). These discussions will tie into the workplan submitted as the third line of evidence.

The third proposed line of evidence in the demonstration is a detailed workplan on the development and process to achieve alternate handling capacity for CCR and/or non-CCR wastestreams. The EPA is proposing that the workplan include the following elements at § 257.103(f)(1)(i)(D): (1) A narrative discussion of the steps and process that remain necessary to complete development of alternate capacity for the wastestream(s); (2) a visual timeline depicting the remaining steps needed to obtain alternate capacity; (3) a discussion of the timeline and the processes that occur during each step; and (4) a discussion of the steps already taken to achieve alternate capacity including what steps have been completed and what steps remain. The EPA believes facilities should already have most of these workplan elements developed as part of their planning process for CCR surface impoundments to cease receipt of waste.

The narrative discussion of the workplan is designed to explain to the EPA how alternate capacity will be developed with an explanation as to why that method was chosen over others. An owner or operator may choose from several options to obtain alternate capacity, such as building a new disposal unit, construction of a wastewater treatment facility, converting to dry handling, etc. The narrative discussion should describe why the option was selected and explain why other options that could have been implemented sooner were not selected. This discussion should include an in-depth analysis of the site and the site-specific conditions that led to the decision to implement the selected alternate capacity. Inclusion of visuals such as a facility map, facility process flow diagram, the design of the new capacity, etc. would be beneficial to any discussion on the new capacity and of the facility as a whole. The narrative must also explain why the owner or operator needs the amount of time being requested.

The second section of the workplan should include a visual timeline, such as a Gantt chart, depicting the necessary steps required to obtain the alternate capacity discussed in the narrative. A visual timeline clearly indicates how each phase and the steps within that phase interact with each other and the other phases. It will also show any possible overlap of the steps and phases in achieving alternate capacity. This timeline will show the total time needed to obtain the alternate capacity and how long each step is expected to take. For an example of a timeline see Southern Company's comments from the March 2018 Phase One Proposed rule in the docket³² or the sample Gantt chart in the docket.³³ The sample Gantt chart in the docket demonstrates the level of detail that would be required in the workplans submitted for approval. Similarly, as discussed in section B of this preamble on the various alternate capacity technologies, each phase for obtaining the alternate capacity must be broken out for the time they take on the chart. Such phases include engineering and design, contractor selection, equipment fabrication and delivery, construction, and start up and implementation. Then within each phase, the steps to complete that phase must be broken out to show how long each step takes. As shown in the example Gantt chart in the docket, each

phase contains an overarching timeframe and then the time needed for necessary steps to complete the phase. For example, the engineering and design phase is 4 months and the steps to complete the engineering and design phase are shown, site selection and survey, design of the impoundment, process flow diagram edits, piping design, and how long each of those steps take. This level of detail is expected for each phase of obtaining the alternate capacity. The timeline also acts as a visual assistant to the proposed third section of the work plan, a narrative of the timeline.

The proposed third section for the workplan is a detailed narrative of the schedule and a timeline of all the necessary phases and steps in the workplan, in addition to the overall timeframe that will be realistically required to obtain capacity and cease receipt of waste. The owner or operator should identify the time required for each phase and step accurately to obtain alternate capacity. For an example of a good narrative and description of the processes on obtaining alternate capacity, see Declaration of Jeffery Jenkins, Arizona Public Service in the docket.³⁴ The discussion in this declaration is a good starting point for the level of detail EPA is proposing to require for this section of the workplan. In addition, further discussions and more clarity on how the phases and steps interact with each other and an explanation on the amount of time needed would be beneficial for EPA.

This section of the workplan should discuss why the length of time for each phase and step is needed, including a discussion of the tasks that occur during the specific stage of obtaining alternate capacity. The workplan should discuss why each major step shown on the chart is necessary to happen in the order it is occurring, including a justification for the overall length of the phase. It should also discuss the tasks that occur during each of the major steps within the phase; for example, rather than simply stating "order and fabrication of impoundment liner," the workplan would need to discuss what material must be ordered, where the fabrication takes place, and how long it takes to fabricate and deliver the new liner material. Other major discussion items on the overall time of the schedule should include anticipated worker schedule, and any anticipated areas for which the schedule could slip. The anticipated areas of delays could include items outside of the facility's

control, such as severe weather events or delays in fabrication of materials. The schedule should also indicate the time limiting factors in completing the plan, such as having to take boilers off-line or if a certain step can only happen during a specific time of year. The schedule should indicate the fastest technically feasible timeline.

The proposed fourth section of the workplan contains a narrative of the steps already taken to initiate closure and develop alternate capacities for the CCR and/or non-CCR wastestreams. This section would discuss all the steps taken, starting from when the owner or operator started the design phase all the way up to the current steps occurring while the workplan is being drafted and submitted for approval. In addition, this discussion should indicate where the facility currently is on the timeline and the processes that are currently being undertaken at the facility to develop the selected alternate capacity. This section of the workplan assists EPA in determining if the submitted schedule for obtaining alternate capacity is accurate.

The overall workplan would need to document the efforts the owner or operator has put into obtaining alternate capacities, the various methods researched for alternate capacity, and the planning for the alternate capacity for the wastestreams that needs to be redirected from the CCR surface impoundment. The EPA seeks comment on additional elements the workplan should contain.

The fourth line of evidence that would be required in the demonstration is a compliance strategy for the CCR surface impoundment in question. The EPA is proposing that to obtain approval for an extension for the cease receipt of waste date, the CCR surface impoundment in question must remain in compliance with all other aspects of the CCR rule. This includes the requirement to conduct any necessary corrective action and continual groundwater monitoring. This line of evidence also includes compliance with other requirements of the rule. The facilities' CCR compliance website must be completely up-to-date and contain all the necessary notification postings. The strategy would discuss the most recent groundwater monitoring data results, the statistical analysis used to obtain the results, and the next steps for the groundwater monitoring. If the unit has exceeded any of the Appendix IV GWPS, the owner or operator must conduct an assessment of corrective measures followed by selection of a remedy. The current regulations do not permit waiting to implement a remedy

³² Southern Company timing to initiate closure information submissions and public comment on Phase 1 proposed rule in the docket.

³³ See Sample Gantt Chart in the docket.

³⁴ See declaration of Jeffery Jenkins, Arizona Public Service in the docket.

until initiation of closure of the unit. As such, if the facility is undergoing remedy selection, a thorough discussion of the possible remedies for corrective action is vital to obtaining approval for an extension to the cease receipt of waste and initiation of closure deadline. Without a demonstration of a compliance strategy and proper corrective action measures, if necessary, the alternate compliance deadline will not be granted.

Once a complete demonstration is submitted to EPA or the Participating State Director for approval, EPA or the Participating State Director will review the demonstration for completeness and post a tentative approval or denial. The approval and implementation process will be discussed later in this preamble in paragraph (e) of this section.

(b) Proposed Demonstration Requirements for Permanent Cessation of Coal-Fired Boiler(s) by a Date Certain

Currently under § 257.103(b)(1), a CCR unit that would otherwise be required to cease receiving CCR under § 257.101(a), (b)(1), or (d), may continue to receive CCR provided the owner or operator of the facility certifies that the facility will cease operation of the coal-fired boilers within the timeframes specified in paragraphs (b)(2) through (b)(4) and that the CCR generated at that facility (before the plant ceases to operate) must continue to be managed in that unit due to the absence of alternative disposal capacity both on-site and off-site. In such cases, the unit is allowed to continue receiving CCR (and only CCR wastestreams), provided the facility completes closure of the unit by the dates specified: 2023 or 2028 for surface impoundments less than 40 acres or more than 40 acres, respectively. In contrast to subsection (a), under § 257.103(b), the owner or operator does not need to demonstrate any efforts to develop alternative capacity because of the impending closure of the power plant itself. As explained in the 2015 preamble, there are long-term risks to human health and the environment from a leaking CCR unit and those risks justify requiring those units to either meet the federal criteria or close. However, EPA concluded that the risks associated with allowing these units to continue to receive CCR would be mitigated by the requirement that the facility comply with all other requirements of the rule, including initiating groundwater monitoring and corrective action where necessary. Critically, facilities that choose to rely on this alternative must complete closure of their disposal unit in an expedited timeframe; thus, the

risks from these units will be fully addressed sooner. Consequently, EPA concluded that while over the short term the risks will be higher, however, in the long term, the risks may be potentially lower than if the CCR unit had closed in accordance with the normal closure timeframes. See 80 FR 21424 (April 17, 2015). These principles continue to apply. Since the coal-boiler will shortly cease power generation, it would be illogical to require these facilities to construct new capacity to manage CCR and non-CCR wastestreams. The EPA is therefore proposing to adopt a comparable provision in § 257.103(f)(2), which will allow facilities permanently ceasing operation of coal-fired boiler(s) to continue to receive both CCR and non-CCR wastestreams, upon a showing of a continued need to use the surface impoundment.

Specifically, EPA is proposing that facilities would need to submit a demonstration to EPA or the Participating State Director for approval that includes all of the following elements. First, the facility would need to document that no alternative disposal capacity is available on-site or off-site. This is the same showing currently required under § 257.103(b). Consistent with the existing provision, an increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section.

Second, EPA is proposing that the facility submit a plan to mitigate any potential risks to human health or the environment from the CCR surface impoundment. This plan could include: A discussion of the groundwater monitoring data and any found exceedances, the assessment of corrective measures (if necessary from the groundwater monitoring data), steps to keep the public aware of any possible risks from the impoundment, a plan to ensure that drinking water wells are not contaminated and if they are the steps to ensure the public has access to clean drinking water, etc. This would be a new requirement; because the current provision at § 257.103(b) does not authorize continued use of the impoundment for non-CCR wastewaters, and the record for that provision does not account for those risks. As previously explained, EPA lacks the data and time required to develop national estimates of the risks from continued operation of these units over the short term. The EPA is seeking comment on whether the owner or operator should be required to submit a more in-depth site-specific risk assessment of the CCR surface

impoundment as part of their plan to mitigate the risk from the unit.

The remaining elements are the same as those currently found in § 257.103(b). The facility must certify that it remains in compliance with all other requirements of this subpart and must document that the coal-fired boilers and closure of the impoundment will be completed within the timeframes specified in paragraph (f)(2)(ii) of this section. The deadlines of 2023 for surface impoundments less than 40 acres and 2028 for surface impoundments larger than 40 acres, respectively, were selected to ensure (1) that closure of these units will be completed in a measurably shorter timeframe; and (2) that overall the risks will be lower, or at least equivalent to, the level of risk that would be achieved under the rule's "standard" closure timeframes. Unlike the other provisions in this proposal, § 257.103(f)(2) does not establish a specific deadline by which the facility must stop operating the impoundment. Nevertheless, the expedited closure timeframes will effectively work to limit the additional time that facilities can continue to receive waste. Given the length of time needed to dewater an impoundment, EPA expects that in many instances, facilities will not be able to extend operation of the unit substantially and still be able to complete closure by the deadline. The RIA that accompanies this proposed rulemaking action estimates that approximately 37 facilities will apply for an extension under this provision.

(c) Extensions of Alternate Compliance Deadline

The EPA acknowledges that projects can run behind schedule and events may occur outside the facility's control. Therefore, EPA is proposing that in such cases, a facility may request an extension to the approved deadline under § 257.103 (f)(1). However, EPA is proposing a maximum of 5 years that could be authorized under paragraph (f)(1). This means that no extension could extend past the maximum cease receipt of waste deadline of October 15, 2023. If at any point a facility becomes aware that they will not meet the approved deadline, they would need to notify EPA or the Participating State Director. Depending on the severity of the event, additional time may be granted provided it would not extend past the maximum cease receipt of waste deadline of October 15, 2023. The EPA is proposing this potential extension in § 257.103(f)(1)(iii). To obtain an extension of the approved compliance deadline, the facility must

submit updated demonstration materials to EPA or the Participating State Director with a detailed discussion of why an extension is necessary. The owner or operator must also discuss the measures taken to limit the additional amount of time needed. An explanation of any problems that caused this significant delay of schedule would be further discussed in the semi-annual progress report as described in the next section.

(d) Semi-Annual Progress Reports

To provide transparency to the public that the facility is following the approved alternate compliance deadline, EPA is proposing to require posting on the facility's CCR publicly accessible website of semi-annual progress reports on obtaining alternate capacity. Given that these units could be operating and receiving waste for several additional years, it is important to keep the public aware of the facility's progress on obtaining alternate capacity. It is also important for EPA to know if facilities are on track to meet their new alternate compliance deadline.

Currently in § 257.103(c) there is the requirement for annual progress reports for the units who have certified for alternative deadlines under §§ 257.103(a) and (b). The EPA believes that for the site-specific alternate cease receipt of waste deadline, semi-annual rather than annual progress reports are more appropriate. The time allowed under this new alternate in § 257.103(f), will vary site to site and could be shorter than the deadline alternative granted for §§ 257.103(a) and (b). Accordingly, EPA believes the reporting frequency should also be more frequent for the progress reports. Therefore, EPA is proposing a new semi-annual progress report requirement for the units that successfully demonstrate and are approved for the site-specific alternate to cease receipt of waste deadline. The proposed regulation text for the requirement of semi-annual progress reports will be located in § 257.103(f)(1)(ix).

The semi-annual progress report will heavily rely on the workplan and the timeline submitted with the workplan. The EPA is proposing the reports contain the following components: (1) Discussion on progress of obtaining alternate capacity and (2) discussion of any planned operational changes at the facility. The first section of the report would discuss the progress the facility has made since the previous report or if it is the first report, since approval of the alternate compliance deadline.

The first section of the report would be required to discuss the following: (1)

The current stage of obtaining alternate capacity in reference to the timeline required in the workplan; (2) whether the owner or operator is on schedule for obtaining alternate capacity; (3) any problems encountered and a description of the actions taken to resolve the problems; and (4) the goals for the next 6 months and major milestones to be achieved. The first subsection discussion would indicate what phase of the workplan timeline is currently happening at the site and what has been accomplished in the past 6 months. This discussion would include the major milestones that were accomplished over the past 6 months. The second subsection would discuss if the facility is on schedule to obtain alternate capacity by the approved alternate deadline for cease receipt of waste. This section would discuss if the facility is expecting to meet their deadline or if they are anticipating being ahead or behind schedule. If the facility is behind schedule, the discussion would be required to indicate what steps are necessary to either catch up to the approved schedule or if they are expecting to ask for an extension, how much more time is needed. The third subsection would discuss whether any problems were encountered, and a description of the actions taken to resolve those problems. This subsection could potentially tie in to the previous subsection's discussion of if the project is on track. It is possible a problem arose causing a delay in the schedule; such problems would need to be discussed in detail in this section. This could include a delay of delivery of equipment, severe weather, delay of a permit, etc. There would need to be a thorough discussion of what caused the problem, the effects of the problem, and the plan to resolve the problem. It is also possible problems were encountered that did not result in a delay of the schedule; these too should be discussed in this subsection. This demonstrates that the facility is able to resolve problems quickly without affecting the project's deadline. The last subsection would discuss the goals for the next 6 months and major milestones to be achieved. This subsection makes the public and EPA aware of the progress the facility plans on achieving in the coming months, up until the next semi-annual progress report is due.

The EPA is seeking comment regarding whether a facility that is fully on schedule or ahead of schedule with the approved timeline from their demonstration and no significant problems have arisen or changes in operational status, should be afforded a relaxation of the reporting requirements

to complete the first two subsections of the first section of the semi-annual progress reports. In the semi-annual progress reports the facility would indicate the stage they are currently on (as specified in § 257.103(f)(1)(ix)(A)(1)) and they are fully on schedule or ahead of schedule (as specified in § 257.103(f)(1)(ix)(A)(2)). The reports for the facility on schedule or ahead of schedule should be significantly more condensed than the full reporting requirements. The EPA believes facilities should be focusing on obtaining alternate capacity rather than completing progress reports, especially for the facilities that are on schedule with little to report.

The second section of the progress reports would discuss any planned operation changes of the facility. It is possible while the facility is working to achieve alternate capacity, a decision is made to either permanently shut down the plant or switch to an alternate fuel source such as natural gas or biomass. Any such decisions would be indicated in this section of the semi-annual progress report.

The EPA is proposing that the semi-annual reports be completed and placed in the facility's operating record and posted on the facility's CCR web page on April 1st and October 1st of each year until the alternate compliance deadline. The first report will be due on whichever posting deadline is soonest after approval of the alternate compliance deadline is granted. The most current progress report should not replace any previous version of the semi-annual progress report on the facility's website. Therefore, the facility is expected to maintain the previous reports on their website. The EPA seeks comment on whether the dates of April 1 and October 1 are appropriate or whether alternate months should be selected. The RIA which accompanies this proposed rulemaking action estimates the cost associated with the additional documentation required by the rule's provisions in Chapter 3.

(e) Procedures for Approval and Implementation

The EPA is proposing that the demonstrations for further time under § 257.103(f)(1) be submitted to EPA or the Participating State Director for approval no later than June 30, 2020, or 2 months prior to the facility's deadline to cease receiving waste. This deadline would also apply to any extensions requested under § 257.103(f)(1)(iii). Two months should normally provide sufficient time for EPA to evaluate the request and complete its review process. The EPA acknowledges that the review

time is shorter than normal; however, this is a unique circumstance where the Agency needs to establish a new compliance deadline for the facility. Although two months prior to the current deadline is the latest date to submit a request, EPA would encourage submissions at the earliest point at which the facility knows further time to complete its arrangements is needed. By contrast, requests for additional time to operate a CCR surface impoundment under paragraph § 257.103(f)(2) must be submitted to EPA for approval no later than May 15, 2020. The decision to shut down a boiler is not reached quickly and can require approvals from (or at least coordination with) state regulatory officials, among others. The EPA, therefore, expects that facilities know now (or will decide shortly) whether they will seek to rely upon the proposed provisions in § 257.103(f)(2).

Upon receiving the demonstration for an alternate compliance deadline, EPA or the Participating State Director will evaluate the demonstration and could ask for additional information to complete its review and/or discuss the demonstration with the facility. Submission of a complete demonstration will toll, or to suspend, the facility's deadline to cease receipt of waste until issuance of a final decision. This ensures that a facility that has submitted a package in good faith would not be penalized by any inadvertent administrative delays. However incomplete submissions will not toll the facility's deadline; here the equities lie squarely against granting any more time.

When the owner or operator submits the demonstration to EPA or the Participating State Director for approval, the owner or operator must prepare and place into the facility's operating record and on their CCR website a notice of intent of applying for the site-specific alternative to cease receipt of waste. The EPA or the Participating State Director will then post the proposed decision to grant or deny the request in whole or in part on EPA's website for public notice and comment. The public will have 15 days to comment on the proposed decision. If the demonstration is particularly complex, EPA or the Participating State Director will provide a longer comment period of 20 to 30 days. The EPA acknowledges that the comment period is shorter than normal; however, this is a unique circumstance where the Agency needs to establish a new compliance deadline for the facility. The EPA or the Participating State Director will evaluate the comments and amend its decision accordingly. The EPA will post the final

decision on the demonstrations on EPA's website.

The EPA or the Participating State Director will finalize the decision on the alternate compliance deadline no later than 4 months after receiving a complete demonstration. This is the longest amount of time EPA expects it should take to issue a final decision, although as noted above, EPA believes it should normally take less time. If no substantive comments are received on a proposed decision, it will become effective 5 days from the close of the comment period.

The facility must post an approved or denied demonstration and alternate compliance deadline decision on the facility's public CCR website. The EPA is seeking comment on whether a Participating State Director (*i.e.*, a state director with an approved State CCR Permit Program) should also have the authority to grant approvals. If a facility completes the necessary alternate capacity prior to approval from EPA, then the facility should notify EPA and withdraw their demonstration.

4. Conforming Amendments to §§ 257.103(a), (b), and (c)

To create a consistent framework for all CCR impoundments, EPA is also proposing a series of amendments to the § 257.103 introductory paragraph and at §§ 257.103(a), (b), and (c). Amending these sections of § 257.103, will simplify the framework for units that require more time to the cease receipt of waste deadline triggered by either §§ 257.101(a), (b)(1), or (d). Additionally, EPA is proposing to amend §§ 257.103(a) and (b) to only be applicable to CCR landfills.

(a) Amendments to §§ 257.103(a) and (b)

The EPA is proposing to revise the introductory paragraph to § 257.103 to add the phrase "and/or non-CCR wastestreams" and to add references to the proposed new paragraphs (e) and (f) to § 257.103 for the short-term alternative and the alternate compliance deadline respectively. The introductory paragraph would read as: "The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit that is subject to closure pursuant to 257.101(a), (b)(1), or (d) may continue to receive CCR and/or non-CCR in the unit provided the owner or operator meets the requirements of either paragraph (a), (b), (e), or (f) of this section."

The EPA is proposing conforming revisions to §§ 257.103(a) and (b) to reflect the proposals discussed above. The current §§ 257.103(a) and (b) apply to both CCR landfills and CCR surface

impoundments undergoing closure under § 257.101 that need additional time to find alternate capacity only for CCR wastestreams. To be consistent with the proposals in §§ 257.103 (e) and (f), EPA is proposing to amend §§ 257.103(a) and (b) to only apply to CCR landfills. Some facilities have posted certifications under the current § 257.103(a) and (b) to allow continued receipt of CCR into their surface impoundment. For these facilities, EPA will either implement a transition period to allow sufficient time to complete the documentation that may be required under §§ 257.103 (e) or (f) for their CCR surface impoundments, or, for those facilities that need to continue to receive only CCR into the impoundment, a system that would grandfather these units in. The EPA asks for comment on each of these options. To reflect this proposed change the references to § 257.101(a) and (b)(1) are being removed, as those sections apply only to CCR surface impoundments. Additionally, EPA is proposing to revise the term "CCR unit" to "CCR landfill" to ensure clarity that §§ 257.103(a) and (b) apply only to CCR landfills.

(b) Amendments to § 257.103(c)

When EPA amended the cease receipt of waste date in the July 2018 rule in §§ 257.101(a) and (b)(1), EPA neglected to make the conforming changes to the notification requirements in § 257.103(c). Therefore, EPA is proposing to amend the notification requirements in § 257.103(c) with the necessary conforming changes due to the change in the cease receipt of waste date and in light of the *USWAG* decision. The current text of § 257.103(c)(1) requires the owner or operator to prepare a notification within six months of becoming subject to closure pursuant to § 257.101(a), (b)(1), or (d). In light of the *USWAG* decision and the change of date for cease receipt of waste, this language no longer makes sense. The EPA is proposing to amend § 257.103(c)(1) by adding new paragraphs (i) through (iii) for CCR units closing pursuant to §§ 257.101(a), (b)(1), and (d), respectively. Each respective subparagraph then requires the owner or operator to prepare the notification no later than the cease receipt of waste date according to §§ 257.101(a), (b)(1), and (d).

VI. The Projected Economic Impacts of This Action

A. Introduction

The EPA estimated the costs and benefits of this action in an Economic Analysis (EA) which is available in the

docket for this action. The EA estimates the incremental costs and cost savings attributable to the provisions of this action, against the baseline costs and practices in place as a result of the 2015 CCR final rule and, the 2018 CCR Phase 1 final rule.

EPA updates the 2015 CCR final rule baseline to account for two developments. These are the availability of new publicly accessible universe data and the effect of the 2018 court decisions. These updates increase the baseline costs estimated for the CCR program against which the RIA estimates the incremental effects of this proposed rulemaking action.

The RIA estimates that the net annualized impact of this proposed regulation will be annual cost savings of \$39.5 million. This action is not considered an economically significant action under Executive Order 12866.

B. Affected Universe

The proposed rule affects coal fired electric utility plants (assigned to the utility sector North American Industry Classification System (NAICS) code 22). The rule is estimated to potentially impact 522 units at 230 facilities.

C. Costs and Cost Savings of the Proposed Rule

The costs attributable to this proposed rule are reporting and documentation that must be completed by regulated entities and submitted to EPA in order to qualify for some of the closure deadline extension provisions of the rule as well as other reporting requirements related to the closure of CCR units. These costs are estimated to amount to an annualized \$0.204 million per year when discounting at 7%.

The cost savings attributable to this proposed rule include cost savings from extending the deadlines by which units must cease receiving waste and initiate closure. Cost savings also follow from the avoided cost of new unit construction for CCR units associated with qualified coal fired boilers which are closing by 2023 or 2028. Overall, the proposed rule is expected to result in net cost savings of an annualized \$39.5 million when discounting at 7%.

VII. Statutory and Executive Order (E.O.) Reviews

Additional information about these statutes and Executive Orders can be found at <http://www2.epa.gov/laws-regulations/laws-and-executive-orders>.

A. Executive Order 12866: Regulatory Planning and Review and Executive Order 13563: Improving Regulation and Regulatory Review

This is a significant regulatory action that was submitted to the Office of Management and Budget (OMB) for review because it raises novel legal or policy issues. Any changes made in response to OMB recommendations have been documented in the docket. The EPA prepared an analysis of the potential costs and benefits associated with this action. This analysis is available in the docket and is summarized in section VI of this preamble.

B. Executive Order 13771: Reducing Regulation and Controlling Regulatory Costs

This action is expected to be an Executive Order 13771 deregulatory action. Details on the estimated costs of this proposed rule can be found in EPA's analysis of the potential costs and benefits associated with this action.

B. Paperwork Reduction Act (PRA)

The information collection activities in this proposed rule have been submitted for approval to the Office of Management and Budget (OMB) under the PRA. The Information Collection Request (ICR) document that the EPA prepared has been assigned EPA ICR number 1189.32. You can find a copy of the ICR in the docket for this rule, and it is briefly summarized here.

The information to be collected as a part of this rule includes applications for the two alternatives to cease receipt or waste deadlines. These applications are to ensure that the alternatives are used only by facilities for which the August 31, 2020 cease receipt of waste date is technically unfeasible.

Applications for the short term alternative deadline must certify the following: (1) No alternative disposal capacity is available on-site or off-site (an increase in costs or inconvenience is not sufficient support); (2) The owner or operator has made and continues to make efforts to obtain additional capacity; and (3) The owner or operator is (and must remain) in compliance with all other requirements of part 257. A brief narrative of each component of the certification would be required to explain why a three-month extension is necessary.

Applications for the site specific alternative deadline must certify the following: (1) A demonstration of the lack of alternate capacity available on-site or off-site; (2) a demonstration that CCR and/or non-CCR wastestreams must

continue to be managed in the CCR surface impoundment due to the technical infeasibility of obtaining alternate capacity prior to November 30, 2020; this demonstration must include an analysis of the adverse impact to plant operations if the CCR surface impoundment in question were to no longer be available for use; (3) a detailed workplan on obtaining alternate capacity for CCR and/or non-CCR wastestreams; and (4) a narrative on how the owner or operator will continue to maintain compliance with all other aspects of the CCR rule. Facilities that intend to continue to generate electricity from their coal fired boilers must also post semi-annual progress reports on obtaining alternative capacity on their publicly available website, while facilities with coal fired boilers closing by a date certain must submit a plan to EPA to mitigate any potential risks to human health and the environment from their CCR surface impoundment.

Respondents/affected entities: Coal-fired electric utility plants that will be affected by the rule.

Respondent's obligation to respond: The recordkeeping, notification, and posting are mandatory as part of the minimum national criteria being promulgated under Sections 1008, 4004, and 4005(a) of RCRA

Estimated number of respondents: 300.

Frequency of response: The frequency of response varies.

Total estimated burden: 21,476 hours (per year). Burden is defined at 5 CFR 1320.3(b).

Total estimated cost: \$4,257,909 (per year), includes \$21,408 annualized capital or operation & maintenance costs.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The OMB control numbers for the EPA's regulations in 40 CFR are listed in 40 CFR part 9.

Submit your comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the EPA using the docket identified at the beginning of this rule. You may also send your ICR-related comments to OMB's Office of Information and Regulatory Affairs via email to OIRA_submission@omb.eop.gov, Attention: Desk Officer for the EPA. Since OMB is required to make a decision concerning the ICR between 30 and 60 days after receipt, OMB must receive comments no later than January 2, 2020. The EPA will

respond to any ICR-related comments in the final rule.

D. Regulatory Flexibility Act (RFA)

I certify that this action will not have a significant economic impact on a substantial number of small entities under the RFA. In making this determination, the impact of concern is any significant adverse economic impact on small entities. An agency may certify that a rule will not have a significant economic impact on a substantial number of small entities if the rule relieves regulatory burden, has no net burden or otherwise has a positive economic effect on the small entities subject to the rule. This action is expected to result in net cost savings of an annualized \$39.5 million per year. These cost savings will accrue to all regulated entities. We have therefore concluded that this action will relieve regulatory burden for all directly regulated small entities. EPA requests comment on the effect of this rule on regulated small entities.

E. Unfunded Mandates Reform Act (UMRA)

This action does not contain any unfunded mandate of \$100 million or more as described in UMRA, 2 U.S.C. 1531–1538, and does not significantly or uniquely affect small governments. This action imposes no enforceable duty on any state, local or tribal governments or the private sector. The costs involved in this action are imposed only by participation in a voluntary federal program. UMRA generally excludes from the definition of “federal intergovernmental mandate” duties that arise from participation in a voluntary federal program.

F. Executive Order 13132: Federalism

This action does not have federalism implications. It will not have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government.

G. Executive Order 13175: Consultation and Coordination With Indian Tribal Governments

This action does not have tribal implications as specified in Executive Order 13175. For the “Final Rule: Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities” published April 17, 2015 (80 FR 21302), EPA identified three of the 414 coal-fired electric utility plants (in operation as of 2012) as being located on

tribal lands; however, they are not owned by tribal governments. These are: (1) Navajo Generating Station in Coconino County, Arizona, owned by the Arizona Salt River Project; (2) Bonanza Power Plant in Uintah County, Utah, owned by the Deseret Generation and Transmission Cooperative; and (3) Four Corners Power Plant in San Juan County, New Mexico owned by the Arizona Public Service Company. The Navajo Generating Station and the Four Corners Power Plant are on lands belonging to the Navajo Nation, while the Bonanza Power Plant is located on the Uintah and Ouray Reservation of the Ute Indian Tribe. Under the WIIN Act, EPA is the permitting authority for CCR units located in Indian Country. Thus, Executive Order 13175 does not apply to this action.

H. Executive Order 13045: Protection of Children From Environmental Health Risk and Safety Risks

This action is not subject to Executive Order 13045 because it is not economically significant as defined in Executive Order 12866, and because the EPA does not believe the environmental health risks or safety risks addressed by this action present a disproportionate risk to children. This action’s health and risk assessments are contained in the document titled “Human and Ecological Risk Assessment of Coal Combustion Residuals,” which is available in the docket for the final rule as docket item EPA–HQ–RCRA–2009–0640–11993.

As ordered by E.O. 13045 Section 1–101(a), for the “Final Rule: Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities” published April 17, 2015 (80 FR 21302), EPA identified and assessed environmental health risks and safety risks that may disproportionately affect children in the revised risk assessment. The results of the screening assessment found that risks fell below the criteria when wetting and run-on/runoff controls required by the rule are considered. Under the full probabilistic analysis, composite liners required by the rule for new waste management units showed the ability to reduce the 90th percentile child cancer and non-cancer risks for the groundwater to drinking water pathway to well below EPA’s criteria. Additionally, the groundwater monitoring and corrective action required by the rule reduced risks from current waste management units. This action does not adversely affect these requirements and EPA believes that this rule will be protective of children’s health.

I. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution or Use

This action is not a “significant energy action” because it is not likely to have a significant adverse effect on the supply, distribution or use of energy. For the 2015 CCR rule, EPA analyzed the potential impact on electricity prices relative to the “in excess of one percent” threshold. Using the Integrated Planning Model (IPM), EPA concluded that the 2015 CCR Rule may increase the weighted average nationwide wholesale price of electricity between 0.18 percent and 0.19 percent in the years 2020 and 2030, respectively. As the proposed rule represents a cost savings rule relative to the 2015 CCR rule, this analysis concludes that any potential impact on wholesale electricity prices will be lower than the potential impact estimated of the 2015 CCR rule; therefore, this proposed rule is not expected to meet the criteria of a “significant adverse effect” on the electricity markets as defined by Executive Order 13211.

J. National Technology Transfer and Advancement Act (NTTAA)

This rulemaking does not involve technical standards.

K. Executive Order 12898: Federal Actions To Address Environmental Justice in Minority Populations and Low-Income Populations

The EPA believes that this action does not have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898 (59 FR 7629, February 16, 1994). The documentation for this decision is contained in EPA’s Regulatory Impact Analysis (RIA) for the CCR rule which is available in the docket for the 2015 CCR final rule as docket item EPA–HQ–RCRA–2009–0640–12034.

The EPA’s risk assessment did not separately evaluate either minority or low-income populations. However, to evaluate the demographic characteristics of communities that may be affected by the CCR rule, the RIA compares the demographic characteristics of populations surrounding coal-fired electric utility plants with broader population data for two geographic areas: (1) One-mile radius from CCR management units (*i.e.*, landfills and impoundments) likely to be affected by groundwater releases from both landfills and impoundments; and (2) watershed catchment areas

downstream of surface impoundments that receive surface water run-off and releases from CCR impoundments and are at risk of being contaminated from CCR impoundment discharges (e.g., unintentional overflows, structural failures, and intentional periodic discharges).

For the population as a whole 24.8 percent belong to a minority group and 11.3 percent falls below the Federal Poverty Level. For the population living within one mile of plants with surface impoundments 16.1 percent belong to a minority group and 13.2 percent live below the Federal Poverty Level. These minority and low-income populations are not disproportionately high compared to the general population. The percentage of minority residents of the entire population living within the catchment areas downstream of surface impoundments is disproportionately high relative to the general population, i.e., 28.7 percent, versus 24.8 percent for the national population. Also, the percentage of the population within the catchment areas of surface impoundments that is below the Federal Poverty Level is disproportionately high compared with the general population, i.e., 18.6 percent versus 11.3 percent nationally.

Comparing the population percentages of minority and low income residents within one mile of landfills to those percentages in the general population, EPA found that minority and low-income residents make up a smaller percentage of the populations near landfills than they do in the general population, i.e., minorities comprised 16.6 percent of the population near landfills versus 24.8 percent nationwide and low-income residents comprised 8.6 percent of the population near landfills versus 11.3 percent nationwide. In summary, although populations within the catchment areas of plants with surface impoundments appear to have disproportionately high percentages of minority and low-income residents relative to the nationwide average, populations surrounding plants with landfills do not. Because landfills are less likely than impoundments to experience surface water run-off and releases, catchment areas were not considered for landfills.

The CCR rule is risk-reducing with reductions in risk occurring largely within the surface water catchment zones around, and groundwater beneath, coal-fired electric utility plants. Since the CCR rule is risk-reducing and this action does not add to risks, this action will not result in new

disproportionate risks to minority or low-income populations.

List of Subjects in 40 CFR Part 257

Environmental protection, Waste treatment and disposal.

Dated: November 4, 2019.

Andrew R. Wheeler,
Administrator.

For the reasons set out in the preamble, EPA proposes to amend title 40, chapter I, of the Code of Federal Regulations as follows:

PART 257—CRITERIA FOR CLASSIFICATION OF SOLID WASTE DISPOSAL FACILITIES AND PRACTICES

■ 1. The authority citation for part 257 continues to read as follows:

Authority: 42 U.S.C. 6907(a)(3), 6912(a)(1), 6944(a), 6945(d); 33 U.S.C. 1345(d) and (e).

■ 2. Amend § 257.71 by:

■ a. Removing and reserving paragraph (a)(1)(i); and

■ b. Revising paragraphs (a)(3)(i) and (ii).

The revisions read as follows:

§ 257.71 Liner design criteria for existing CCR surface impoundments.

(a) * * *

(3) * * *

(i) The owner or operator of the CCR unit determines that the CCR unit is not constructed with a liner that meets the requirements of paragraphs (a)(1)(ii) or (iii) of this section; or

(ii) The owner or operator of the CCR unit fails to document whether the CCR unit was constructed with a liner that meets the requirements of paragraphs (a)(1)(ii) or (iii) of this section.

* * * * *

■ 3. Amend § 257.91 by removing and reserving paragraph (d)(2).

§ 257.91 [Amended]

■ 4. Amend § 257.101 by revising paragraphs (a)(1) and (b)(1) to read as follows:

§ 257.101 Closure or retrofit of CCR units.

(a) * * *

(1) Except as provided by paragraph (a)(3) of this section, no later than August 31, 2020, an owner or operator of an existing unlined CCR surface impoundment must cease placing CCR and non-CCR wastestreams into such CCR surface impoundment and either retrofit or close the CCR unit in accordance with the requirements of § 257.102.

* * * * *

(b) * * *

(1)(i) *Location standard under § 257.60.* Except as provided by

paragraph (b)(4) of this section, the owner or operator of an existing CCR surface impoundment that has not demonstrated compliance with the location standard specified in § 257.60(a) must cease placing CCR and non-CCR wastestreams into such CCR unit no later than August 31, 2020 and close the CCR unit in accordance with the requirements of § 257.102.

* * * * *

■ 5. Amend § 257.103 by:

■ a. Revising introductory text;

■ b. Revising paragraphs (a)(1) introductory text, (2) and (3);

■ c. Revising paragraph (b)(1) introductory text;

■ d. Removing and reserving paragraphs (b)(2) and (3);

■ e. Revising paragraph (c)(1); and

■ f. Adding paragraphs (e) and (f).

The additions and revisions read as follows:

§ 257.103 Alternate closure requirements.

The owner or operator of a CCR landfill, CCR surface impoundment, or any lateral expansion of a CCR unit that is subject to closure pursuant to § 257.101(a), (b)(1), or (d) may continue to receive CCR and/or non-CCR wastestreams in the unit provided the owner or operator meets the requirements of either paragraph (a), (b), (e), or (f) of this section.

(a)(1) *No alternative CCR disposal capacity.* Notwithstanding the provisions of § 257.101(d), a CCR landfill may continue to receive CCR if the owner or operator of the CCR landfill certifies that the CCR must continue to be managed in that CCR landfill due to the absence of alternative disposal capacity both on-site and off-site of the facility. To qualify under this paragraph, the owner or operator of the CCR landfill must document that all of the following conditions have been met:

* * * * *

(2) Once alternative capacity is available, the CCR landfill must cease receiving CCR and initiate closure following the timeframes in § 257.102(e) and (f).

(3) If no alternative capacity is identified within five years after the initial certification, the CCR landfill must cease receiving CCR and close in accordance with the timeframes in § 257.102(e) and (f).

(b)(1) *Permanent cessation of a coal-fired boiler(s) by a date certain.*

Notwithstanding the provisions of § 257.101(d), a CCR landfill may continue to receive CCR if the owner or operator certifies that the facility will cease operation of the coal-fired boilers within the timeframes specified in

paragraphs (b)(2) through (4) of this section, but in the interim period (prior to closure of the coal-fired boiler), the facility must continue to use the CCR unit due to the absence of alternative disposal capacity both on-site and off-site of the facility. To qualify under this paragraph, the owner or operator of the CCR unit must document that all of the following conditions have been met:

* * * * *

(2) [Reserved]

(3) [Reserved]

* * * * *

(c) * * *

(1) The owner or operator must prepare and place in the facility's operating record a notification of intent to comply with the alternative closure requirements of this section. The notification must describe why the CCR unit qualifies for the alternative closure provisions under either paragraph (a) or (b) of this section, in addition to providing the documentation and certifications required by paragraph (a) or (b) of this section. The deadlines to prepare the notification are specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) If the CCR unit is closing pursuant to § 257.101(a)(1), the owner or operator must prepare the notification no later than August 31, 2020.

(ii) If the CCR unit is closing pursuant to § 257.101(b)(1), the owner or operator must prepare the notification no later than August 31, 2020.

(iii) If the CCR unit is closing pursuant to § 257.101(d)(1), the owner or operator must prepare the notification no later than six months after the date it is determined that the CCR unit is not in compliance with the requirements of § 257.64(a).

* * * * *

(e)(1) *Short-Term Alternate to Initiation of Closure.* Notwithstanding the provisions of § 257.101(a), or (b)(1), a CCR surface impoundment may continue to receive CCR and/or non-CCR wastestreams if the owner or operator of the CCR surface impoundment certifies that the CCR and/or non-CCR wastestreams must continue to be managed in that CCR surface impoundment to allow the facility to complete the measures necessary to provide alternative disposal capacity, either on-site or off-site of the facility. Qualification under this paragraph lasts only until alternative capacity is available or until November 30, 2020, whichever is sooner. To qualify under this paragraph, the owner or operator of the CCR surface impoundment must document that all of the following conditions have been met:

(i) No alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section;

(ii) The owner or operator has made, and continues to make, efforts to obtain additional capacity that will become available no later than November 30, 2020. Once alternative capacity is identified, the owner or operator must arrange to use such capacity as soon as feasible; and

(iii) The owner or operator must remain in compliance with all other requirements of this subpart, including the requirement to conduct any necessary corrective action. The owner or operator at all times bears responsibility for demonstrating qualification under this section. Failure to remain in compliance with any of the requirements of this subpart could result in the automatic loss of authorization under this section.

(2) Once alternative capacity is available, the CCR surface impoundment must cease receiving CCR and non-CCR wastestreams and initiate closure following the timeframes in § 257.102(e) and (f).

(3) If no alternative capacity is identified by November 30, 2020, the CCR surface impoundment must cease receiving CCR and non-CCR wastestreams and close in accordance with the timeframes in § 257.102(e) and (f).

(4) An owner or operator of a CCR surface impoundment that closes in accordance with paragraphs (e) of this section must complete the notices as specified in paragraphs (d) and (e)(4)(i) through (ii) of this section.

(i) No later than August 31, 2020 the owner or operator must prepare and place in the facility's operating record a notification of intent to comply with alternative closure requirements of this section. The notification must describe the factual basis to support the facility's conclusion that the CCR unit qualifies for the alternative closure provisions under this paragraph, in addition to providing the documentation and certifications required by this paragraph.

(ii) An owner or operator of a CCR surface impoundment must also prepare the notification of intent to close a CCR unit as required by § 257.102(g).

(f) *Site Specific Alternate to Initiation of Closure Deadline.* Notwithstanding the provisions of § 257.101(a), and (b)(1), a CCR surface impoundment may continue to receive CCR and/or non-CCR wastestreams if the owner or operator of the CCR surface impoundment demonstrates to the

Administrator or the Participating State Director that the CCR and/or non-CCR wastestreams must continue to be managed in that CCR surface impoundment either: Because it was infeasible to complete the measures necessary to provide alternative disposal capacity on-site or off-site of the facility by November 30, 2020; or because the owner or operator certifies that the facility will permanently cease operation of the coal-fired boilers within the timeframes specified in paragraph (f)(2)(ii) of this section. Authorization under this paragraph is not available for units that have continued operation pursuant to § 257.103(e). The demonstration must be submitted to the Administrator or the Participating State Director no later than the relevant deadline in paragraph (f)(3) of this section and will act on the submission in accordance with the procedures in paragraph (f)(3) of this section.

(1) *Development of Alternative Capacity Infeasible.*

(i) To obtain approval under this paragraph, the owner or operator of the CCR surface impoundment must submit a demonstration that includes documents all of the following:

(A) Documentation that no alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section;

(B) A certification from the owner or operator of the CCR surface impoundment that CCR and/or non-CCR wastestreams must continue to be managed in that CCR surface impoundment because it was infeasible to complete the measures necessary to obtain alternative disposal capacity either on-site or off-site of the facility by November 30, 2020;

(C) A certification from the owner or operator of the CCR surface impoundment that the facility is in compliance with all of the requirements of this Subpart;

(D) A workplan that contains the following elements:

(1) A narrative discussing the approach selected to obtain alternative capacity for CCR and/or non-CCR wastestreams;

(2) A detailed schedule of the fastest feasible time to complete the measures necessary for alternate capacity to be available including a visual timeline representation;

(3) A narrative discussion of the schedule and visual timeline representation; and

(4) A narrative discussion of the progress the owner or operator has made

to obtain alternative capacity for the CCR and/or non-CCR wastestreams;

(5) A narrative discussion of the strategy the owner or operator will utilize to remain in compliance with all other requirements of this subpart, including the requirement to conduct any necessary corrective action;

(ii) Once alternative capacity for a CCR or non-CCR wastestream is available, the existing CCR surface impoundment must cease receiving that CCR or non-CCR wastestream. The new alternate capacity must be utilized as soon as available. Once the existing CCR surface impoundment ceases receipt of all CCR and/or non-CCR wastestreams, the existing CCR surface impoundment must initiate closure following the timeframes in 257.102(e) and (f).

(iii) An owner or operator may seek additional time beyond the time granted in the initial approval by making the showing in paragraph (f)(1)(i) of this section, provided that no facility may be granted time to operate the impoundment beyond October 15, 2023. No later than October 15, 2023, all CCR surface impoundments covered by this section must cease receiving CCR and non-CCR wastestreams and close in accordance with the timeframes in § 257.102(e) and (f).

(iv) The owner or operator at all times bears responsibility for demonstrating qualification under this section. Failure to remain in compliance with any of the requirements of this subpart will result in the automatic loss of authorization under this section.

(v) An owner or operator of a CCR surface impoundment that closes in accordance with paragraph (f)(1) of this section must complete the notices and progress reports as specified in paragraphs (d) and (f)(1)(vi) through (xi) of this section.

(vi) Upon submission of the demonstration to the Administrator or the Participating State Director the owner or operator must prepare and place in the facility's operating record a notification of submitting the demonstration.

(vii) Upon approval or denial from the Administrator or the Participating State Director the owner or operator must prepare and place in the facility's operating record the notification of approval or denial and the approved or denied demonstration required by paragraph (f)(1) of this section.

(viii) If at any time after approval, the owner or operator discovers the need to seek additional time due to infeasibility to achieve cease receipt of waste prior to the granted alternative deadline under paragraph (f)(1)(iii) of this section, the owner or operator must

submit a notification to the Administrator or the Participating State Director as soon as possible. The owner or operator must prepare and place the notification in the facility's operating record.

(ix) The owner or operator must prepare semi-annual progress reports. The semi-annual progress reports are to contain the following:

(A) Discussion on progress obtaining alternative capacity, including:

(1) Discussion on the current stage of obtaining the capacity in reference to the timeline required under paragraph (f)(1)(i)(D)(2) of this section;

(2) Discussion on if the owner or operator is on schedule for obtaining alternative capacity;

(3) Discussion of any problems encountered, and a description of the actions taken to resolve the problems; and

(4) Discussion of the goals for the next 6 months and major milestones to be achieve for obtaining alternative capacity; and

(B) Discussion of any planned operational changes at the facility.

(x) The progress reports are to be completed according to the following schedule:

(A) The semi-annual progress reports are to be prepared and posted on April 1 and October 1 of each year for the duration of the alternate cease receipt of waste deadline.

(B) The first semi-annual progress report is to be prepared and posted by whichever date, April 1 or October 1, is soonest after receiving approval from the Administrator or the Participating State Director; and

(C) The owner or operator has completed the progress reports specified in paragraph (f)(1)(ix) of this section when the reports are placed in the facility's operating record as required by § 257.105(i)(17).

(xi) An owner or operator of a CCR surface impoundment must also prepare the notification of intent to close a CCR unit as required by § 257.102(g).

(2) *Permanent cessation of a coal-fired boiler(s) by a date certain.*

(i) Notwithstanding the provisions of § 257.101(a), and (b)(1), a CCR surface impoundment may continue to receive CCR and non-CCR wastestreams if the owner or operator certifies that the facility will cease operation of the coal-fired boilers and complete closure of the impoundment within the timeframes specified in paragraphs (f)(2)(ii) of this section, but in the interim period (prior to closure of the coal-fired boiler), the facility must continue to use the CCR unit due to the absence of alternative disposal capacity both on-site and off-

site of the facility. To qualify under this paragraph, the owner or operator of the CCR unit must submit a demonstration to the Administrator or Participating State Director that contains all of the following:

(A) Documentation that no alternative disposal capacity is available on-site or off-site. An increase in costs or the inconvenience of existing capacity is not sufficient to support qualification under this section.

(B) A plan to mitigate potential risks to human health and the environment from the CCR surface impoundment;

(C) Certification that the owner or operator remains in compliance with all other requirements of this subpart, including the requirement to conduct any necessary corrective action; and

(D) Documentation that the coal-fired boilers and closure of the impoundment will be completed within the timeframes specified in paragraphs (f)(2)(ii) of this section.

(ii) *Timeframes*

(A) For a CCR surface impoundment that is 40 acres or smaller, the coal-fired boiler must cease operation and the CCR surface impoundment must have completed closure no later than October 17, 2023.

(B) For a CCR surface impoundment that is larger than 40 acres, the coal-fired boiler must cease operation, and the CCR surface impoundment must complete closure no later than October 17, 2028.

(iii) The owner or operator at all times bears responsibility for demonstrating qualification for authorization under section. Failure to remain in compliance with any of the requirements of this subpart will result in the automatic loss of authorization under this section.

(iv) An owner or operator of a CCR surface impoundment that closes in accordance with paragraph (f)(2) of this section must complete the notices and progress reports as specified in paragraphs (d) and (f)(2)(v) through (vii) of this section.

(v) Upon submission of the demonstration to the Administrator or the Participating State Director the owner or operator must prepare and place in the facility's operating record a notification of submitting the demonstration.

(vi) Upon approval or denial from the Administrator or the Participating State Director the owner or operator must prepare and place in the facility's operating record the notification of approval or denial and the approved or denied demonstration required by paragraph (f)(2) of this section.

(vii) The owner or operator must prepare an annual progress report

documenting the continued lack of alternative capacity and the progress towards the closure of the CCR surface impoundment.

(3) *Process to Obtain Authorization*
(i) *Deadlines for Submission*

(A) The owner or operator must submit the demonstration required under paragraph (f)(1)(i) of this section, for an alternative cease receipt of waste deadline for a CCR surface impoundment pursuant to paragraph (f)(1) of this section, to EPA for approval no later than 2 months prior to the unit's deadline to cease receiving waste.

(B) An owner or operator may seek additional time beyond the time granted in the initial approval, as allowed under paragraph (f)(1)(iii) of this section, by submitting a new demonstration, as required under paragraph (f)(1)(i) of this section, to EPA for approval. No facility may be granted time to operate the impoundment beyond October 15, 2023.

(C) The owner or operator must submit the demonstration required under paragraph (f)(2)(i) of this section, for an alternative cease receipt of waste deadline for a CCR surface impoundment under paragraph (f)(2) of this section, to EPA for approval no later than May 15, 2020.

(ii) EPA will evaluate the demonstration and may request additional information to complete its review. Submission of a complete demonstration will toll the facility's deadline to cease receipt of waste until issuance of a final decision under paragraph (f)(3)(iv) of this section. Incomplete submissions will not toll the facility's deadline.

(iii) EPA will publish a proposed decision on EPA's website for a 15-day comment period. If the demonstration is particularly complex, EPA will provide a comment period of 20 to 30 days.

(iv) After consideration of the comments, EPA will issue its decision on the alternate compliance deadline within 4 months of receiving a complete demonstration. If no substantive comments are received, the proposed decision will become effective 5 days from the close of the comment period.

■ 6. Amend § 257.105 by adding paragraphs (i)(14) through (21).

§ 257.105 Recordkeeping requirements.

* * * * *
(i) * * *

(14) The notification of intent to comply with the short-term alternative to initiation of closure as required by § 257.103(e)(4)(i).

(15) The notification of intent to comply with the site-specific alternative to initiation of closure due to development of alternate capacity

infeasible as required by § 257.103(f)(1)(vi).

(16) The approved or denied demonstration for the site-specific alternative to initiation of closure due to development of alternate capacity infeasible as required by § 257.103(f)(1)(vii).

(17) The notification for requesting additional time to the alternative cease receipt of waste deadline as required by § 257.103(f)(1)(viii).

(18) The semi-annual progress reports as for the site-specific alternative to initiation of closure due to development of alternate capacity infeasible as required by § 257.103(f)(1)(ix).

(19) The notification of intent to comply with the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain as required by § 257.103(f)(2)(v).

(20) The approved or denied demonstration for the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain as required by § 257.103(f)(2)(vi).

(21) The annual progress report for the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain as required by § 257.103(f)(2)(vii).

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■ 7. Amend § 257.106 by adding paragraphs (i)(14) through (21).

§ 257.106 Notification requirements.

* * * * *
(i) * * *

(14) Provide the notification of intent to comply with the short-term alternative to initiation of closure as specified under § 257.105(i)(14).

(15) Provide the notification of intent to comply with the site-specific alternative to initiation of closure due to development of alternate capacity infeasible as specified under § 257.105(i)(15).

(16) Provide the approved or denied demonstration for the site-specific alternative to initiation of closure due to development of alternate capacity infeasible as required by as specified under § 257.105(i)(16).

(17) Provide the notification for requesting additional time to the alternative cease receipt of waste deadline as required by § 257.1035(i)(17).

(18) The semi-annual progress reports as for the site-specific alternative to initiation of closure due to development of alternate capacity infeasible as specified under § 257.105(i)(18).

(19) Provide the notification of intent to comply with the site-specific

alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain as specified under § 257.105(i)(19).

(20) Provide the approved or denied demonstration for the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain as required by § 257.105(i)(20).

(21) The annual progress report for the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain as required by § 257.105(i)(21).

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■ 8. Amend § 257.107 by adding paragraphs (i)(14) through (21).

§ 257.107 Publicly accessible internet site requirements.

* * * * *
(i) * * *

(14) The notification of intent to comply with the short-term alternative to initiation of closure as specified under § 257.105(i)(14).

(15) The notification of intent to comply with the site-specific alternative to initiation of closure due to development of alternate capacity infeasible as specified under § 257.105(i)(15).

(16) The approved or denied demonstration for the site-specific alternative to initiation of closure due to development of alternate capacity infeasible as required by as specified under § 257.105(i)(16).

(17) The notification for requesting additional time to the alternative cease receipt of waste deadline as required by § 257.1035(i)(17).

(18) The semi-annual progress reports as for the site-specific alternative to initiation of closure due to development of alternate capacity infeasible as specified under § 257.105(i)(18).

(19) The notification of intent to comply with the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain as specified under § 257.105(i)(19).

(20) The approved or denied demonstration for the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain as required by § 257.105(i)(20).

(21) The annual progress report for the site-specific alternative to initiation of closure due to permanent cessation of a coal-fired boiler(s) by a date certain as required by § 257.105(i)(21).

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