

March 25, 2022

Via www.regulations.gov

Attn: Kirsten Hillyer
Materials Recovery and Waste Management Division
Office of Resource Conservation and Recovery
United States Environmental Protection Agency
1200 Pennsylvania Ave., NW
Washington, DC 20460

Re: Comments on Proposed Decision: Proposed Denial of Alternative Closure
Deadline for Clifty Creek Power Station, Docket ID No. EPA-HQ-OLEM-2021-
0587

To whom it may concern:

The Utility Solid Waste Activities Group (“USWAG”)¹ submits these comments to the Environmental Protection Agency on the Agency’s Proposed Decision: Proposed Denial of an Alternative Closure Deadline for Clifty Creek Power Station, posted to the docket on January 25, 2022 (“Proposal”).

USWAG thanks EPA for the opportunity to provide comments on the Proposal. Please contact me if you require further information or have questions about these comments.

Sincerely,



James R. Roewer
Executive Director
Utility Solid Waste Activities Group

¹ USWAG is an association of over one hundred and thirty utilities, utility operating companies, energy companies, and trade associations representing electric companies, utilities, and cooperatives. Many of USWAG’s members generate and store CCR and are subject to EPA’s CCR Part A rule. Any decision of EPA under the Part A rule may impact USWAG members’ interests.

Comments of
The Utility Solid Waste Activities Group on
CCR Part A Rule Demonstrations:

Proposed Decision: Proposed Denial of Alternative Closure Deadline for
Clifty Creek Power Station
Docket ID No. EPA-HQ-OLEM-2021-0587-0023

Proposed Decision: Proposed Denial of Alternative Closure Deadline for
General James M. Gavin Plant
Docket ID No. EPA-HQ-OLEM-2021-0590-0002

Proposed Decision: Conditional Approval of an Alternative Closure Deadline for
H. L. Spurlock Power Station, Maysville, Kentucky
Docket ID No. EPA-HQ-OLEM-2021-0595-0002

Proposed Decision: Proposed Denial of Alternative Closure Deadline for
Ottumwa Generating Station
Docket ID No. EPA-HQ-OLEM-2021-0593-0002

Submitted to
The United States
Environmental Protection Agency

March 25, 2022

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EXECUTIVE SUMMARY

These comments are submitted on behalf of the Utility Solid Waste Activities Group (“USWAG”)¹ in response to the Environmental Protection Agency’s proposed decisions (“Proposed Decisions”) for the Part A Coal Combustion Residuals (“CCR”) rule demonstrations (“Part A Demonstrations”) submitted by Indiana-Kentucky Electric Corporation (“IKEC”), Gavin Power, East Kentucky Power Cooperative, Inc., and Interstate Power and Light Company (“IPL”) (“Part A Applicants”). USWAG’s members include 13 power generation companies, including three of the four Part A Applicants, that have a total of 44 CCR Rule Part A Demonstrations pending with EPA. USWAG has a critical interest in EPA’s evaluation and decision-making process involving the Part A Demonstrations, both with respect to the pending USWAG member Proposed Decisions, as well as the potential precedent these decisions could have on the pending submissions of other USWAG members and the operations generally of all USWAG members subject to the CCR rule.

As detailed in these comments, many of the legal positions advanced by EPA in the Proposed Decisions regarding the construction, implementation, and application of key provisions of the CCR rule are incorrect for a myriad of reasons and cannot serve as the basis for finding that the Part A Applicants are not in compliance with the CCR rule. Moreover, several of these troubling legal positions have never been announced in the seven-year history of the CCR rule, meaning that the Agency failed to provide fair notice of what it believes the rule requires. Only now, after significant (and, in some cases, irreversible) operating decisions have been made to ensure compliance with the CCR rule, has EPA announced legal positions regarding compliance with key provisions of the rule that are at odds with the understanding of virtually the entire regulated community, including the hundreds of CCR compliance certifications of licensed qualified professional engineers (“QPEs”).

USWAG submits that the Part A Applicants (and virtually all the other entities with pending Part A submissions), and their scores of QPEs, all of whom have decades of experience with RCRA’s similar solid and hazardous waste rules, have not misread the plain language of the CCR regulations. This is especially true given EPA’s explicit statement in the preamble to the final CCR rule that it specifically re-evaluated the performance standards throughout the final rule “to ensure that the requirements are sufficiently objective and technically precise [so] that a qualified professional engineer will be able to certify that they have been met.”² Instead, USWAG respectfully suggests that EPA is distorting the regulations to achieve policy objectives not supported by the plain text of the rule or the record underlying the rule.

We summarize certain of our key positions below:³

¹ USWAG is an association of over one hundred and thirty utilities, utility operating companies, energy companies, and trade associations representing electric companies, utilities, and cooperatives. Many of USWAG’s members generate and store CCR and are subject to EPA’s CCR Part A rule.

² 80 Fed. Reg. 21301, 21337 (April 17, 2015).

³ USWAG notes that these comments address the incorrect legal positions articulated by EPA in all four of the Proposed Decisions. USWAG recognizes that certain of EPA’s arguments were only advanced in certain of the Proposed Decisions—*e.g.*, that the term “CCR surface impoundment” includes tank

- **EPA Cannot Evaluate Future Compliance:** A fundamental flaw in the Proposed Decisions is that EPA has proposed to find the Part A Applicants in noncompliance due to their failure to demonstrate that they “will be” in or will “maintain” compliance in the future. But a finding of *future* noncompliance is beyond EPA’s scope of review under the Part A rule. To qualify for an alternative closure schedule under the Part A rule, a facility must demonstrate, among other things, current compliance with the CCR rule. A facility cannot be in noncompliance with the CCR rule based on actions it has yet to take and that are not yet required under the rule.
- **EPA Misreads the Rule’s Closure Requirements:** EPA proposes to find that the closure plans of the Part A Applicants are deficient because they do not provide adequate specificity regarding the steps that will be taken to close the unit, including how the plan will meet the rule’s closure-in-place performance standards when CCR is in contact with groundwater. But the rule requires only that the plan include a specific discussion on how closure will meet the design-specific final cover standard and not the additional detail identified by EPA. While EPA may prefer that more detail be provided, the rule does not *require* that level of detail.

More fundamentally, EPA’s proposed finding is based on new, incorrect interpretations of key terms in the performance standards for units closing-in-place. First, EPA misreads the term “infiltration” in the requirement that the unit be closed in a manner to “[c]ontrol, minimize or eliminate to the maximum extent feasible, post-closure *infiltration* of liquids into the waste.” For the first time that USWAG is aware of under the RCRA program, EPA interprets “infiltration” in this context to encompass liquid entering the unit by any means, including through groundwater intersecting the base of the CCR unit. This position is at odds with the plain meaning of the regulatory text and supporting technical guidance, all of which make clear that this performance standard is addressing the prevention of liquid infiltration through a unit’s cover system, as opposed to the horizontal movement of groundwater through the base of the unit.

Similarly, EPA misreads the meaning of the term “free liquids” in the requirement to eliminate free liquids prior to installing the unit’s cover system. Here too, for the first time to USWAG’s knowledge, EPA is interpreting the term “free liquids” to encompass groundwater. This interpretation is at odds with the plain language of the rule and is more stringent than the identical requirement under RCRA’s hazardous waste closure-in-place performance standard.

EPA’s overly expansive new interpretations of the terms “infiltration” and “free liquids” in the rule’s closure-in-place performance standards conflates these distinct closure provisions with the rule’s separate groundwater corrective action requirements. EPA’s position would require the groundwater corrective action

systems—but USWAG addresses all of these arguments collectively by submitting these “global” comments in response to all four Proposed Decisions to ensure that these issues are adequately addressed in each docket.

program to become part of the rule's distinct closure-in-place provisions. The rule's closure-in-place standards are not designed to require the remediation of contaminated groundwater; rather, this is the role of the rule's comprehensive post-closure care and corrective action programs. The CCR rule's regulatory structure could not be clearer on this point.

- **EPA Did Not Give Fair Notice of its New Interpretations:** Even assuming, for purposes of argument, that there is a valid basis for EPA's legal interpretations regarding how the closure performance standards in 40 C.F.R. § 257.102(d) must be met, the Agency's positions cannot be imposed on the Part A Applicants and other regulated entities because EPA did not provide fair notice to the regulated community regarding these compliance obligations. The test here is whether the regulated community, acting in good faith, should have known with "ascertainable certainty"—*i.e.*, whether there was *no other way* to read the CCR closure performance standard—that the term "infiltration" includes liquids entering the base of the CCR unit from any direction and for the obligation to eliminate free liquids extending to groundwater. Plainly, given the novelty of EPA's new interpretations and the fact that they are at odds with how the regulated community, their respective QPEs, and delegated states have interpreted these key provisions of the CCR rule and the RCRA program over the last several decades, the Agency did not provide fair notice of its new legal interpretations.
- **EPA's New Interpretations Violate the Administrative Procedure Act ("APA"):** EPA's new interpretations of the terms "infiltration" and "free liquids" effectively amend key provisions of the CCR rule's closure performance standards in § 257.102(d). EPA is not simply applying the existing regulations as written to a specific situation. Instead, it has announced new substantive standards and requirements that it is directing all facilities subject to the rule to follow (including facilities that did not even submit a Part A demonstration). EPA cannot impose these new substantive regulations on the regulated community without first following the APA's notice and comment requirements.

Alternatively, assuming for purposes of argument that EPA's new positions do not constitute legislative rulemaking, such pronouncements constitute non-binding "interpretive rules" that cannot be enforced by the Agency. Thus, whether legislative or interpretive, EPA's positions on the closure performance standards cannot serve as the basis for finding that facilities are not in compliance with the CCR rule's closure provisions.

- **EPA Cannot Find Noncompliance with Provisions Certified to be in Compliance by a QPE:** EPA proposes to find the Part A Applicants in noncompliance for a number of CCR rule requirements that a QPE has certified are in compliance with the rule. These include, for example, the implementation of groundwater monitoring systems and the accuracy of alternative source demonstrations. Given the self-implementing nature of the CCR rule, EPA explicitly established a regulatory system in which a facility's compliance with key aspects of the regulations must be

confirmed with a certification of compliance issued by a QPE, who effectively stands in the shoes of a regulator. Nothing in the plain text of the regulations authorizes EPA to simply overrule the compliance certifications of QPEs. While it is possible that resolution of any technical dispute between EPA and a QPE may result in future modifications to a facility's operations, it cannot be the basis for finding that the facility currently is not in compliance with applicable CCR rules and, similarly, cannot serve as the basis for proposing to deny a complete Part A Demonstration.

- **EPA Improperly Reads the Rule's Corrective Action Requirements:** EPA proposes to find noncompliance with a number of the rule's corrective action provisions, including the rule's requirement to characterize the nature and extent of a release and the related requirement to conduct an assessment of corrective measures ("ACM"). EPA does not find that facilities failed to undertake these obligations, but rather that they did not do so in a manner preferred by EPA. While some of EPA's complaints are site-specific, the legal flaw with EPA's position is that the Agency is requiring facilities to do more than is practically achievable under the 180- to 240-day regulatory timeframe allowed to complete these actions. There is no opportunity to go beyond this timeframe. Thus, the "sufficiency" of a characterization is necessarily dependent on site-specific conditions at each individual facility and constrained by the regulatory timeframe for completing the ACM. This time constraint limits the level of analysis that can be incorporated into an assessment of corrective measures. While EPA may wish that more can be done during this limited timeframe, EPA cannot require the impossible.
- **EPA Improperly Precludes MNA as a Remedial Option:** EPA proposes to find noncompliance with a facility's ACM based on the fact that the identification of monitored natural attenuation ("MNA") as a potential remedy does not adequately demonstrate the specific mechanisms of natural attenuation. EPA incorrectly suggests that this demonstration is required by the rule's remedial objective of removing from the environment as much of the contaminated material that was released from the CCR unit as is feasible. But this objective was explicitly added to the rule to apply to non-groundwater releases—*e.g.*, catastrophic failures—and is not applicable to groundwater releases where contaminants have leached from CCR but no "material" has been released. Contrary to EPA's position, the plain language of the rule does not preclude any particular remedy, including MNA, as long as the facility can demonstrate that the remedy is capable of achieving the specific corrective action remedial objectives.
- **EPA Improperly Limits CCR Beneficial Use:** EPA incorrectly asserts that the regulatory exclusion for the beneficial use of CCR is not applicable when CCR is beneficially used to close an impoundment that is subject to forced closure. Despite the fact that the plain language of this regulatory exclusion does not contain any exceptions, EPA attempts to find one by construing the regulatory prohibition on "placing" CCR in units as extending to the beneficial use of CCR in these units. But this position misreads the term "placing" and imposes a limitation on the regulatory

exclusion that does not exist in the regulatory text.

- **EPA Improperly Construes the Term Surface Impoundments to Include Tank Systems:** In a position that is at odds with the plain language of the CCR regulations and that would improperly expand the scope of the CCR program, EPA suggests that concrete tank systems fall within the scope of the definition of CCR surface impoundment. This position is at odds with the plain language of the definition of CCR surface impoundment and is directly at odds with EPA guidance provided to the regulated community following promulgation of the CCR rule that self-supporting concrete tanks are not CCR surface impoundments. This position also is inconsistent with the definition of “surface impoundment” under the Subtitle C hazardous waste program, and EPA cannot interpret the term more broadly under the CCR rule than under the Agency’s hazardous waste program.
- **EPA Must Work With the Regional Transmission Organizations (“RTOs”) in Determining a “Cease Receipt Date”:** Assuming any of the Part A Demonstrations are denied, USWAG agrees with EPA that the regulatory text for issuing a final decision on a Part A Demonstration does not specify a cease receipt deadline and that any timeframe for ceasing receipt of wastes must be reasonable and “tak[e] into account any genuine, demonstrated risks to grid reliability identified through the process established by [the relevant RTO].” Because assessing grid reliability impacts is complex, USWAG urges EPA to work directly with the affected RTO to address these potential issues.

Additionally, the Part A Applicants in EPA’s first tranche of proposed decisions are being unfairly subject to a potential cease receipt deadline that is far shorter than those that will ultimately be imposed under final denials issued at a later point in time. Ceasing the receipt of wastes in the subject CCR impoundments would have significant real-world consequences on the facilities, and those subject to the first-in-time cease receipt dates would be treated differently and unfairly by EPA with no reasoned justification by the Agency. Until the Agency determines a method for treating all the Part A submitters alike in a fair and reasoned manner, the cease receipt deadline should continue to be tolled for the Part A Applicants.

- **EPA Has Authority to Issue Conditional Approvals:** The rule does not preclude EPA from determining that a facility can adequately address any alleged noncompliance issues and should therefore be granted a conditional approval. USWAG encourages the Agency to utilize this approach for the Part A Demonstrations and more broadly going forward as it continues its reviews of the other pending Part A applications.

INTRODUCTION

EPA's compliance assessments for the Part A Demonstrations are the first time in the nearly seven-year history of the CCR rule that the Agency is providing the regulated community with written interpretations of how it views compliance with a significant number of the rule's most critical provisions.

The CCR rule has been a self-implementing regulatory program since it became effective in October 2015. Over the course of the past seven years, members of the regulated community have reached out to EPA to confirm their understanding of key provisions of the rule—including some of those addressed by EPA for the first time in its Part A Proposed Decisions—and received little guidance in response from the Agency.⁴ Instead, EPA has provided only a limited amount of compliance information, mostly through the “Frequent Questions” portion of its CCR webpage, much of which repeats but does not expand on the regulatory text or related preamble language, and none of which reflects the new EPA positions advanced by EPA on January 11, 2022.

Given this limited information, the regulated community has been left to determine compliance adequacy on its own in accordance with the plain language of the regulatory text. Pursuant to the rule's self-implementing regulatory regime, the rule's many complex and technical provisions have been evaluated and implemented by the regulated entities themselves, including through the rule's compliance certifications by QPEs. In fact, EPA specifically designed the rule such that QPEs would know what is required, stating that it “re-evaluated the performance standards throughout the final rule to ensure that the requirements are sufficiently objective and technically precise that a qualified professional engineer will be able to certify that they have been met.”⁵ These QPE certifications (and other compliance demonstrations) are included in operating records, which are provided to the appropriate state or Tribal authorities and posted to publicly accessible internet sites (including EPA's own website) for review by EPA, the states, and the public to evaluate and take appropriate action if a regulated facility is not in compliance with the rule. Yet, while EPA was granted direct enforcement authority over the CCR rule in December 2016 with the enactment of the Water Infrastructure Improvements for the Nation Act (“WIIN Act”), USWAG is not aware of a formal EPA enforcement action brought against a USWAG member or adjudicated by an administrative or judicial tribunal.

⁴ For example, in March 2017, USWAG wrote to EPA to alert the Agency to and to counter arguments of the Southern Environmental Law Center (“SELC”) that the option of closing CCR impoundments under the rule's closure-in-place option under 40 C.F.R. § 257.102(d) was prohibited when CCR was in contact with groundwater. *See* Letter from USWAG Executive Director Jim Roewer to Barnes Johnson, Director, Office of Resource Conservation and Recovery (March 20, 2017) (provided as Attachment A). USWAG set forth a detailed explanation as to why this position was inconsistent with the regulations and made clear that the regulated community was not interpreting the rule in the manner espoused by SELC. EPA never responded to the letter, though the letter made clear how the regulated community was implementing the rule. Now, almost five years later, after regulated entities have developed closure plans and, in many cases, initiated or completed closure, EPA is for the first time concurring with many of the interpretive positions that were advocated by SELC and at odds with the interpretation articulated in USWAG's 2017 letter.

⁵ 80 Fed. Reg. at 21337.

EPA's untimely and retroactive compliance assessments for the Part A Applications come as an unfair surprise to the regulated community. Many of the legal positions set forth in EPA's Proposed Decisions are not reasonably ascertainable from the plain text of the rule or are simply contrary to the rule's plain text, and they are directly at odds with how the regulated community has been certifying compliance with the rule. These positions include, for example: EPA's detailed critique of how it perceives the CCR rule's performance-based closure standards must be met, including its first-time interpretation of key terms in these standards; the level of detail that must be maintained in groundwater reports and closure plans; detailed critiques and rejections of technical groundwater sampling plans and closure plans that have been reviewed and deemed in compliance with the rule by QPEs, as the rule itself prescribes; and disagreements with how facilities have implemented the groundwater monitoring program, including their corrective action assessments and corrective action remedies under the rule's prescribed compliance assessment process, based primarily on the views of EPA staff and their consultants, who are not familiar with the sites in question.

The Part A rule places the burden on the Part A Applicants to submit complete applications containing all the requisite information for EPA review. The Part A Applicants have done so in this case by submitting "complete" applications. Pursuant to the CCR rule, the site-specific information regarding the lack of existing alternative disposal capacity and the expedited schedule to develop alternative disposal capacity is supported by a detailed demonstration developed by the facilities' professional staff most familiar with the operation and configuration of the plants and off-site disposal options. Similarly, and as discussed further below, many elements of the facilities' CCR compliance demonstrations are supported by the compliance certifications issued by QPEs, as contemplated by the rule. Given this, EPA now bears the regulatory burden of developing a technical record that supports a reasoned basis for proposing to deny the complete Part A Demonstrations, including both a technical record and legal basis for rejection of the QPE compliance certifications. But, instead, the Proposed Decisions contain only the unsupported assertions, assumptions, or beliefs of EPA's review of the submissions. Reasoned agency decision-making demands more; otherwise, any EPA final decisions on the Part A Demonstrations risk being invalidated as arbitrary and capricious agency action.

Finally, EPA's process for reviewing and rendering decisions on the Part A Demonstrations unfairly subjects those entities to the prospect of sooner-in-time cease receipt deadlines than other entities with complete Part A submissions still pending before EPA. As discussed further below, this undue prejudice is the result of the apparent randomness of EPA's internal review schedule. EPA has not provided any reasoned basis for treating these similarly situated parties differently. Thus, EPA's actions risk being invalidated as arbitrary and capricious agency action.

The above-identified procedural flaws and erroneous legal interpretations set forth in the Proposed Decisions cannot form the basis for denying the Part A Demonstrations on grounds that the facilities are not in compliance with the identified provisions of the CCR rule. We review below the legal and technical flaws included in EPA's Proposed Decisions.

I. EPA's Scope of Review Under the Part A Rule is Limited to Current Compliance

EPA has proposed to find the Part A Applicants in noncompliance due to their failure to demonstrate that they “will be” in or will “maintain” compliance in the future.⁶ But such findings of *future* noncompliance are beyond EPA’s scope of review under the Part A rule.

To qualify for an extension under § 257.103(f)(1), a facility must: (1) demonstrate that there is no available capacity on or off-site; (2) demonstrate that it was technically infeasible to develop alternative capacity by April 11, 2021; and (3) be in compliance with the CCR rule.⁷ Thus, the regulatory text requires that a facility demonstrate that it “*is in compliance*.”⁸ EPA explained in the preamble to the Part A rule that this requirement was to ensure a facility’s *current* compliance, *not* its compliance in the future.⁹ Nevertheless, EPA has proposed to find the Part A Applicants in noncompliance because they have not demonstrated they will “maintain compliance.”

Contrary to EPA’s contention, a facility is not required to, as a condition of qualifying for a successful Part A extension request, demonstrate that it “will be” in or will “maintain” compliance *in the future*.¹⁰ EPA seems to be incorrectly conflating the requirement to demonstrate current compliance to obtain an extension with the requirement that the facility maintain compliance *after* receiving an extension *in order to maintain the extension*.¹¹ A facility cannot be in noncompliance with the CCR rule based on actions it has yet to take and that are not yet required under the rule (for example, the future obligation to close). Therefore, EPA cannot find noncompliance based on a facility’s future plans or other events that have not happened.

This error in EPA’s analysis is illustrated in EPA’s proposed finding that IKEC’s future plans for closure do not meet the rule’s requirements and that therefore the facility has not met the requirement to “demonstrate that it will maintain compliance” with the rule.¹² But nothing in § 257.103(f)(1) requires a demonstration that the facility’s future closure will be in compliance

⁶ See, e.g., Proposed Decision: Proposed Denial of Alternative Closure Deadline for Clifty Creek Power Station (Docket ID No. EPA-HQ-OLEM-2021-0587-0023) at 30, 33, 41; Proposed Decision: Proposed Denial of Alternative Closure Deadline for General James M. Gavin Plant (Docket ID No. EPA-HQ-OLEM-2021-0590-0002) at 49-50; Proposed Decision: Proposed Denial of Alternative Closure Deadline for Ottumwa Generating Station (Docket ID No. EPA-HQ-OLEM-2021-0593-0002) at 40.

⁷ 40 C.F.R. § 257.103(f)(1).

⁸ *Id.* § 257.103(f)(1)(iii) (emphasis added).

⁹ 85 Fed. Reg. 53156, 53553 (Aug. 28, 2020) (“Finally, note that any determinations made in evaluating compliance aspects of submitted demonstrations will be made solely for the purpose of determining whether an extension of the deadline to cease receipt of waste is warranted. . . . These determinations may not be applicable or relevant in any other context. Should the facility’s compliance status be considered outside of this context in the future, the Agency may reach a contrary conclusion[.]”).

¹⁰ See Proposed Decision for Clifty Creek Power Station at 33, 41; Proposed Decision for Gavin Plant at 49-50; Proposed Decision for Ottumwa Generating Station at 40.

¹¹ See 40 C.F.R. § 257.103(f)(1)(viii) (“Failure to remain in compliance with any of the requirements of this subpart will result in the automatic loss of authorization under this section.”).

¹² Proposed Decision for Clifty Creek Power Station at 33, 41.

with the rule. That provision speaks only in the present tense.¹³ Nor would it even be possible for a facility to demonstrate future compliance with an obligation that is years in the future and subject to future assessments and changing conditions. A facility cannot be “in” or “out” of compliance with an obligation that has not even come into effect.

II. Compliance with the Closure Performance Standard

EPA proposes to find that the closure plans of the Part A Applicants are deficient because they do not provide adequate specificity regarding “the steps that will be taken to close the unit[s] consistent with generally recognized good engineering practices, as required by 40 C.F.R. § 257.102(b).”¹⁴ In particular, because the CCR units in question allegedly are in contact with groundwater, EPA asserts that their closure plans fail to adequately describe how the facilities will meet the closure-in-place performance standard at 40 C.F.R. § 257.102(d)(2)(i), including how the facilities will eliminate free liquids.¹⁵ EPA also asserts that the closure plans are deficient because they do not adequately describe the measures the facilities will take to “control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere” as set forth at 40 C.F.R. § 257.102(d)(1)(i).¹⁶

EPA’s position has several flaws. First, EPA overstates what is required for a closure plan. EPA appears to assert that a facility must describe in detail *how* it will meet each specific closure performance standard in the future. But this is not what the rule states. Instead, § 257.102(b) lays out the specific minimum requirements that the facility must include in the closure plan, including:

(i) A narrative description of how the CCR unit will be closed in accordance with this section.

(ii) If closure of the CCR unit will be accomplished through removal of CCR from the CCR unit, a description of the procedures to remove the CCR and decontaminate the CCR unit in accordance with paragraph (c) of this section.

(iii) If closure of the CCR unit will be accomplished by leaving CCR in place, a description of the final cover system, designed in accordance with paragraph (d) of this section, and the methods and procedures to be used to install the final cover. The closure plan must also discuss how the final cover system will achieve the performance standards specified in paragraph (d) of this section.

¹³ See 40 C.F.R. § 257.103(f)(1)(iii).

¹⁴ Proposed Decision for Clifty Creek Power Station at 39, 41; Proposed Decision for Gavin Plant at 46, 47; Proposed Decision for Ottumwa Generating Station at 41, 43.

¹⁵ See Proposed Decision for Clifty Creek Power Station at 39-41; Proposed Decision for Gavin Plant at 45-46; Proposed Decision for Ottumwa Generating Station at 41-43.

¹⁶ Proposed Decision for Clifty Creek Power Station at 39, 40; Proposed Decision for Gavin Plant at 45, 46; Proposed Decision for Ottumwa Generating Station at 40-41.

(iv) An estimate of the maximum inventory of CCR ever on-site over the active life of the CCR unit.

(v) An estimate of the largest area of the CCR unit ever requiring a final cover as required by paragraph (d) of this section at any time during the CCR unit's active life.¹⁷

Thus, when closing in place, the only specific discussion on meeting the closure performance standard required is that for the final cover system. While EPA may prefer that more detail be provided, the rule does not *require* that level of detail, and the Agency has failed to explain how the Part A Applicants did not meet the minimum closure plan requirements set forth in the rule.

Second, EPA rejects the closure plans as insufficient despite QPE certifications to the contrary, in turn preventing industry reliance on QPE certifications that are allowed and required by the text of the CCR rule. EPA's Proposed Decisions find that elements of the closure plans do not conform to specific portions of the CCR rule, despite those elements having been deemed in compliance by the facilities' QPEs, as is required by the rule itself.¹⁸ These elements include how the Part A Applicants intend to meet the CCR's rules performance standards for infiltration and free liquids.¹⁹

As discussed further in Section III of these comments, the CCR rule is designed to allow industry reliance on QPE certifications because of the rule's self-implementing nature and EPA's recognition that a QPE is required to provide assurance that the rule's technical criteria are being met. The rejections by EPA of the QPE certifications, with no technical support of their own, are inconsistent with the plain text of the rule and the role of QPEs in the CCR rule's self-implementing program.

Finally, and more fundamentally, EPA's Proposed Decisions are based on a misreading of the rule's closure performance standards at 40 C.F.R. § 257.102(d). EPA misreads how the term "infiltration" should be interpreted in § 257.102(d)(1)(i), and how the technical standard for "eliminating free liquids through the removal of liquid wastes" or solidification of remaining wastes must be achieved in § 257.102(d)(2)(i). Given that EPA incorrectly defines what the closure performance standard requires, its proposed findings that the facilities' closure plans do not adequately explain how these standards will be met also are legally flawed and cannot be the basis for denying the Part A Demonstrations.

A. EPA Cannot Substitute the Rule's Corrective Action Requirements with the Closure-In-Place Performance Standards

In EPA's press release announcing the release of its Part A Proposed Decisions, the Agency explains that it is restating "EPA's consistently held position that surface impoundments

¹⁷ 40 C.F.R. § 257.102(b)(1).

¹⁸ See 40 C.F.R. § 257.102(b)(4) (requiring that the owner or operator of the CCR unit must obtain a written certification from a qualified professional engineer that the "initial and any amendment of the written closure plan meets the requirements of this section").

¹⁹ See 40 C.F.R. §§ 257.120(d)(1)(i), 257.120(d)(2)(i).

or landfills cannot be closed with coal ash in contact with groundwater,” and notes that “[l]imiting the contact between coal ash and groundwater after closure is critical to minimizing releases of contaminants into the environment and will help ensure communities near these facilities have access to safe water for drinking and recreation.”²⁰ Apart from the fact that the Agency has *never* articulated this position previously—a fact discussed in more detail below—EPA is conflating the distinct closure design provisions with the rule’s separate groundwater corrective action requirements.

The rule’s closure-in-place performance standards are not designed to remediate groundwater contamination, but rather prescribe the methods for addressing the end of the useful life of a CCR unit. The CCR rule’s regulatory structure could not be clearer on this point. After closure-in-place is complete, the obligation to undertake corrective action to address any groundwater contamination continues during the post-closure periods. This is directly in contrast to the closure-by-removal provisions, where there is no obligation to conduct post-closure groundwater monitoring because groundwater contamination is addressed during the closure process. This structure was established based on EPA’s finding that RCRA’s Subtitle D standard was met through closure-in-place coupled with at least 30 years of post-closure groundwater monitoring and corrective action.

Viewing the rule’s closure provisions in the proper context, including their distinct role in the broader CCR regulatory program, illuminates the magnitude of EPA’s error. The CCR rule’s closure-in-place option directs that, as part of draining and stabilizing CCR in a surface impoundment prior to installation of the cover system, “[f]ree liquids must be eliminated by removing liquid wastes or solidifying the remaining wastes and waste residues.”²¹ This requirement, which is modeled after EPA’s interim status hazardous waste closure standards,²² appears in the CCR rule exclusively in the context of closing a CCR unit in place for purposes of supporting the unit’s final cover system. “Free liquids” are to be removed prior to closure to ensure the waste is in a more stable form suitable for construction of the final cover system.²³ Hence the subheading in § 257.102(d)(2), “Drainage and stabilization of CCR surface impoundments.” Removing free-flowing liquid from an impoundment is undertaken to allow for grading and compaction to provide a more stable base for the construction of the final cover system, not to address groundwater contamination.

²⁰ Press Release, EPA, EPA Takes Key Steps to Protect Groundwater from Coal Ash Contamination (Jan. 11, 2022), <https://www.epa.gov/newsreleases/epa-takes-key-steps-protect-groundwater-coal-ash-contamination>.

²¹ 40 C.F.R. § 257.102(d)(2)(i).

²² See 80 Fed. Reg. at 21409.

²³ As noted above, the obligation to eliminate free liquids through the removal of liquid waste is modeled after and identical to EPA’s hazardous waste surface impoundment closure standards. EPA guidance on those standards make clear that the removal of free liquids is to support the unit’s final cover system. See EPA Office of Solid Waste, Closure of Hazardous Waste Surface Impoundments (SW000873) at 9 (Sept. 1982) (“In addition to eliminating the free liquids from SI’s, other waste preparatory procedures *may be necessary prior to the construction of a landfill cover*. These procedures may consolidate and stabilize the wastes so that the potential for leaching and differential settlement are minimized.”) (emphasis added).

Similarly, the requirement to minimize, control, or eliminate to the maximum extent feasible “post closure infiltration” is directly pointed at the adequacy of the unit’s cover system. This performance standard is speaking to the performance of the final cover system and its effectiveness in preventing liquids from infiltrating the cover and causing contaminants to be released from the unit after closure. In fact, the written closure plan for impoundments closing-in-place requires a “description of the final cover system” and “*how the final cover system will achieve the performance standards specified in paragraph (d).*”²⁴ The performance standards in “paragraph (d)” include the requirement to minimize, control, or eliminate to the maximum extent feasible the post-closure infiltration of liquid into the waste.

That closure-in-place is not intended to address groundwater contamination can be seen in how EPA has implemented closure of waste disposal units throughout the history of RCRA. For example, in 1982, EPA promulgated an interim final rule establishing standards applicable to owners and operators of hazardous waste treatment, storage, and disposal facilities, including the closure-by-removal and closure-in-place options for hazardous waste surface impoundments.²⁵ When comparing the two closure options, EPA acknowledged that if a facility is unable to remove and decontaminate all residues and remaining contaminated saturated and unsaturated soils, it “must close the unit under the [closure-by-leaving-waste-in-place] option and perform post-closure care.”²⁶ EPA explains that “[t]his situation is likely to occur often in the case of existing portions that do not have liners,” in which case “contamination may have migrated a considerable distance from the impoundment and possibly even entered the ground water. This situation necessitates closure under the [closure-by-leaving-waste-in-place] alternative to minimize the rate of migration and monitor for potential ground water contamination.”²⁷

And when amending the hazardous waste interim status closure standards (under 40 C.F.R. Part 265) to mirror the closure standards for permitted facilities (under 40 C.F.R. Part 264), EPA made clear that the closure-by-removal option “requires consideration of potential ground-water contamination in addition to soil contamination,” explaining that “[t]he closure by removal requirements in § 265.228 (a)(1) and (b) require removal or decontamination (*i.e.*, flushing, pumping/treating the aquifer) of ‘underlying and surrounding contaminated soils.’”²⁸ And, similar to its discussion in the CCR rule’s preamble when discussing the closure-by-removal option, EPA stated that it “interprets the term ‘soil’ broadly to include both unsaturated soils and soils containing groundwater. Thus, the closure by removal standard requires consideration of both saturated and unsaturated soils. Uncontaminated groundwater is, therefore, a requirement for ‘clean closure’ under Part 265 (and Part 264)”²⁹ In contrast, and again similar to the CCR closure rules, if a facility does not close-by-removal, the hazardous waste rules require the unit to close under the closure-in-place-option, which necessarily means

²⁴ 40 C.F.R. § 257.102(b)(1)(iii) (emphasis added).

²⁵ 47 Fed. Reg. 32274 (July 26, 1982).

²⁶ *Id.* at 32320.

²⁷ *Id.* at 32320-21.

²⁸ 52 Fed. Reg. 8704, 8705 (March 19, 1987).

²⁹ *Id.*

groundwater contamination that would have been addressed if the unit had closed by removal, must be addressed by post-closure care and groundwater monitoring/corrective action.³⁰

Finally, in a December 1987 letter from EPA's Office of Solid Waste to EPA Region III clarifying issues relating to closure of interim status impoundments, the agency explained that "if the interim status surface impoundment has triggered ground-water assessment . . . and groundwater contamination is evident, *clean closure is probably not a feasible option.*"³¹ Plainly, the only other regulatory alternative in these circumstances is closing the unit with wastes in place with the existing groundwater contamination addressed through the Subtitle C post-closure care and corrective action provisions, just as is the case under the CCR rule.

By interpreting § 257.102(d) to address groundwater corrective action, EPA impermissibly upends the CCR rule's structure by supplanting the stepwise decision-making process in the rule's corrective action process—which itself includes source control measures—with the rule's closure provisions. But this cannot be the case, as the rule's closure provisions are not intended to substitute for the corrective action process, which requires owners and operators to, among other things, assess the most feasible and effective corrective measures related to groundwater contamination; determine what measures meet the rule's strict standards; evaluate the long- and short-term effectiveness and protectiveness of various remedies; and consider the risks that might be posed to the community and the environment during implementation of a particular remedy, including potential threats associated with excavation, transportation, and re-disposal of the CCR. These are the steps to determine how best to implement corrective action on a site-specific basis. A facility may determine that source removal is a necessary component of corrective action, but that is the role of the rule's corrective action provisions, not the separate closure provisions. Instead, the closure-in-place performance standards establish requirements for the end of the useful life of the unit that are intended to prevent further downward infiltration into the unit.

The Agency's record is clear on this point and devoid of any suggestion that CCR units cannot be closed in contact with groundwater. For example, in discussion of the rule's two closure options, EPA stated:

EPA did not propose to require clean closure *nor to establish restrictions on the situations in which clean closure would be appropriate.* As EPA acknowledged in the proposal, most facilities will likely *not* clean close their CCR units given the expense and difficulty of such an operation.³²

Furthermore, EPA never proposed to require closure by removal in any specific circumstances. Nor could EPA have required this, as the Agency's own risk assessment, on which the

³⁰ See 40 C.F.R. § 264.228(b).

³¹ Memorandum from Marcia E. Williams, Director Office of Solid Waste, to Robert E. Greaves, Chief Waste Management Branch, Region III, Closure and Post-Closure Issues (Dec. 17, 1987) (RCRA Online No. 13110) (emphasis added).

³² 80 Fed. Reg. at 21412.

regulations are premised, did not even look at closure of units in contact with groundwater.³³ And the regulatory impact assessment for the CCR rule presumed that units would be closed in place.³⁴ The public clearly was not adequately informed that this requirement—which EPA asserts has been consistently held—was ever proposed or finalized.

EPA cannot now insert different closure requirements based on new policy positions of the Agency. To do so would require a new rulemaking, based on a new risk assessment and new regulatory impact analysis.

B. The Term “Free Liquids” Does Not Encompass Groundwater

1. EPA’s Interpretation of the Phrase “Free Liquids” is Inconsistent with the Regulatory Text

EPA proposes to find the Part A Demonstrations in noncompliance with the closure performance standard by, for the first time, interpreting the term “free liquids” in § 257.102(d)(2)(i) to encompass groundwater. EPA states that “free liquids” include “the freestanding liquid in the impoundment and to all separable porewater in the impoundment, whether the porewater was derived from sluiced water or *groundwater that intersects the impoundment*.”³⁵ The Agency explains that the “definition of free liquids in 40 C.F.R. § 257.53 encompasses all ‘liquids that readily separate from the solid portion of a waste under ambient temperature and pressure,’ regardless of whether the source of the liquids is from sluiced water or *groundwater*.”³⁶ In other words, EPA is saying that porewater derived from groundwater intersecting the base of unit is a “free liquid” that must be eliminated to meet the closure design standard at § 257.102(d)(2)(i).

EPA’s interpretation misreads the plain language of the regulatory text. On its face, nothing in the regulatory text can be read to expand the term “free liquids” to include “groundwater.” “Free liquids” are “liquids that readily separate from the solid portion of a waste under ambient temperature and pressure.”³⁷ “Groundwater,” by contrast, is “water below the land surface in a zone of saturation.”³⁸ They are different things, both from a technical and regulatory perspective. Groundwater flows at various speeds through the tiny pores, fissures, and/or conduits of subsurface rock, clay, and sand. It is hard to make sense of the idea of groundwater

³³ EPA, Human and Ecological Risk Assessment of Coal Combustion Residuals (Docket ID No. EPA-HQ-RCRA-2009-0640-11993) (Dec. 2014).

³⁴ EPA, Regulatory Impact Analysis for EPA’s 2015 RCRA Final Rule Regulating Coal Combustion Residual Landfills and Surface Impoundments At Coal-Fired Electric Utility Power Plants, 2-23 (Dec. 2014).

³⁵ Proposed Decision for Clifty Creek Power Station at 40 (emphasis added). *See also* Proposed Decision for Gavin Plant at 46; Proposed Decision for Ottumwa Generating Station at 41-42.

³⁶ Proposed Decision for Clifty Creek Power Station at 40 (emphasis added). *See also* Proposed Decision for Gavin Plant at 46; Proposed Decision for Ottumwa Generating Station at 42.

³⁷ 40 C.F.R. § 257.53.

³⁸ *Id.*

separating from its surroundings “under ambient temperature and pressure” as the definition of “free liquids” requires.

Given this, it is not surprising that, over the four decades of the implementation of RCRA’s groundwater regulatory programs, USWAG has not found one instance of the term “[f]ree liquids,” which is a well-established definition under RCRA, ever being interpreted as encompassing groundwater, and EPA cites none in its Proposed Decisions. Indeed, EPA uses the defined term “groundwater” 195 times in the CCR rule itself and 724 times in the *Federal Register* notice for its final 2015 rule. Basic rules of regulatory construction make clear that if EPA had intended to somehow include “groundwater” within the scope of the closure provision at § 257.102(d)(2)(i), it would have used that defined term. Instead, this provision only references the elimination of “free liquids” through the removal of liquids wastes or the stabilization of remaining wastes. EPA cannot expand the scope of this provision by redefining the term “free liquids” to encompass the separately defined term “groundwater.”

Apart from ignoring the distinct definitions of “free liquids” and “groundwater,” EPA reads the regulatory text as if it requires only that “free liquids must be eliminated.” But the rule in fact requires that “free liquids must be eliminated *by removing liquid wastes*” or, as an alternative, by “solidifying the remaining *wastes* and *waste residues*.”³⁹ Given this context, “free liquids” is referring only to liquid wastes that remain or separate from solid wastes and not groundwater, which is not a solid waste.

EPA has repeatedly made clear that groundwater (and for that matter, any environmental medium containing contaminants) is not a solid waste.⁴⁰ Because groundwater, even that which is contaminated, is an environmental medium, it is not a solid waste. Therefore, the obligation in § 257.102(d)(2)(i) to “eliminate free liquids” through the removal of “liquid wastes” or “solidifying of remaining wastes” cannot extend to groundwater.

Other tribunals that have looked at this precise question agree. For example, in construing the federal CCR rule as applied to an Indiana power company, an environmental law judge (“ELJ”) rejected arguments by environmental organizations alleging that the contaminated groundwater at the base of a closed CCR impoundment constituted a “free liquid” subjecting the closed unit to regulation under the CCR rule.⁴¹ The ELJ, in agreeing with the Indiana Department of Environmental Management, flatly rejected this argument, reiterating EPA’s

³⁹ *Id.* § 257.102(d)(2)(i).

⁴⁰ *See, e.g.*, 63 Fed. Reg. 28556, 28621 (May 26, 1998) (contaminated media is not waste). *See also* Letter from Michael Shapiro, Director, EPA Office of Solid Waste, to Peter C. Wright, Monsanto Company (Sept. 15, 1995) (RCRA Online No. 11948) (explaining that “contaminated media are not considered solid wastes”); Letter from Sylvia K. Lowrance, Director, EPA Office of Solid Waste, to John E. Ely, Enforcement Director, Virginia Department of Waste Management (Mar. 26, 1991) (RCRA Online No. 11593) (environmental media are not solid wastes).

⁴¹ *In the Matter of Objection to the Issuance of Partial Approval of Closure/Post Closure Plan Duke Gallagher Generating Station Ash Pond System*, No. 20-S-J-5096 (Ind. Office of Environmental Adjudication, May 4, 2021).

position that groundwater is not a solid waste and that the term “free liquid” is well understood under RCRA *not* to encompass groundwater.⁴² The ELJ explained, in pertinent part:

32. The term “free liquids” is not a new term under RCRA and the Federal CCR Rule. EPA intentionally used the same definition of “free liquids” that is used in EPA’s existing hazardous waste rules, such as the commonly used paint filter liquids test (EPA Method 9095B). This is a routine EPA test method for hazardous waste “used to determine the presence of free liquids in a representative sample of waste.” EPA Method 9095B, Paint Filter Liquids Test (Rev. 2, Nov. 2004) (emphasis added).

33. EPA states that groundwater, and for that matter, any environmental medium containing contaminants, is not a solid waste in the first place. Therefore, because groundwater is not a solid waste, it is axiomatic that groundwater does not, and cannot, constitute a “free liquid” under RCRA. 40 C.F.R. § 257.53.

34. This legal conclusion is also confirmed by the language in the Federal CCR Rule itself, which defines “groundwater” as “water below the land surface in a zone of saturation.” On the other hand, the Federal CCR Rule (like the paint filter liquids test) defines “free liquids” to mean “liquids that readily separate from the solid portion of a waste under ambient temperature and pressure.” *Id.*

35. Consequently, for present purposes, “free liquids” in the Federal CCR Rule consists of the water that separates from sluiced ash and forms the surface water in an ash pond.⁴³

The Indiana’s ELJ decision underscores that the plain language of the term “free liquids,” as is defined in the CCR rule and has been applied consistently throughout RCRA’s history, does not include groundwater. USWAG also notes, to amplify a point in the ELJ decision, that the paint filter test is the method employed under RCRA, including under the CCR rule, to determine the presence of free liquids in an environmental medium. Importantly, this is a screening test designed to evaluate the presence of liquids in a waste matrix *before* its placement in a disposal unit, as opposed to being applied to a waste that has already been disposed. Further it is a test designed to be representative of ambient conditions, not the confining pressures of the groundwater environment.⁴⁴ The fact that the test employed under RCRA to determine the presence of free liquids is not designed to be employed in the subsurface environment only underscores the error in EPA’s position and the soundness of the Indiana’s ELJ decision in rejecting this position.

⁴² *Id.*

⁴³ *Id.* at ¶¶ 32-35 (Ind. Office of Environmental Adjudication, May 4, 2021).

⁴⁴ See Comments of the Electric Power Research Institute (“EPRI”) filed in these same dockets for a further technical discussion regarding the problems associated with the paint filter test as applied to the subsurface environment.

That the concept of “free liquids” does not encompass groundwater is further evidenced by the initial data collection efforts EPA itself undertook to develop the scope and parameters of the CCR rule. In June 2010, EPA issued data collection requests under the Clean Water Act and RCRA directing facilities to provide, among other things, information describing, for each CCR management area, “the area’s approximate storage capacity, the volume of waste or wastewater currently stored, *and the approximate proportion of free liquid and settled solids within the stored wastewater*” and directing recipients to “[e]xplain how the company calculated these volumes.”⁴⁵ This inquiry on its face makes clear that EPA was using the term “free liquids” to mean the volume of ponded water in the unit that sits above the settled solids, and, not surprisingly, this was how respondents to the information request interpreted the question and calculated the volume of free liquids in their respective management units. To USWAG’s knowledge, EPA never questioned the responses or directed that they be recalculated to include groundwater within the calculations of free liquids in the CCR management units. Therefore, for EPA now to assert that the term “free liquids” encompasses groundwater is directly at odds with the underlying technical information EPA assembled in the rulemaking record to support the scope and parameters of the final rule.

Given the above, EPA’s position that the obligation to eliminate free liquids includes groundwater is at odds with the plain language of the regulatory text and the CCR rule’s regulatory structure. Therefore, this position cannot be the basis for asserting the closure plans are not in compliance with the CCR rule.

2. EPA’s Interpretation of “Free Liquids” is At Odds with EPA’s Subtitle C Hazardous Waste Program

In addition to being at odds with the regulatory text and rulemaking record, EPA’s position that the closure requirement to “eliminate free liquids” includes groundwater conflicts with EPA’s interpretation of the same requirement under the Subtitle C hazardous waste program. There is no legal basis for EPA to apply a broader interpretation of the same term under its Subtitle D program for CCR. Recognizing the statutory difference in the protectiveness standard between RCRA Subtitle C versus RCRA Subtitle D, the Supreme Court has made clear that “[n]onhazardous wastes are regulated much more loosely under Subtitle D, 42 U.S.C. §§ 6941-6949.”⁴⁶

⁴⁵ See, e.g., Santee Cooper Response to Clean Water Act Section 308 and Resource Conservation and Recovery Act Section 3007 Information Request (Docket ID No. EPA-HQ-RCRA-2009-0640-11990) at 3 (emphasis added); see also Wateree Station Response to Clean Water Act Section 308 and Resource Conservation and Recovery Act Section 3007 Information Request (Docket ID No. EPA-HQ-RCRA-2009-0640-11973) at 4; and Asheville Steam Electric Plant Response to Clean Water Act Section 308 and Resource Conservation and Recovery Act Section 3007 Information Request (Docket ID No. EPA-HQ-RCRA-2009-0640-11989) at 1.

⁴⁶ *City of Chicago v. Environmental Defense Fund*, 511 U.S. 328, 331 (U.S. 1994). See also *Sierra Club v. EPA*, 292 F.3d 895, 896-97 (D.C. Cir. 2002) (“Solid waste that is not deemed hazardous is ‘regulated much more loosely’ under Subtitle D of the Act, 42 U.S.C. §§ 6941-49.”) (citing *City of Chicago*, 511 U.S. at 331); *California Communities Against Toxics v. EPA*, 928 F.3d 1041, 1053 (D.C. Cir. 2019) (“In RCRA, Congress required EPA to regulate both hazardous and non-hazardous ‘solid waste,’ with more stringent requirements applying to hazardous waste.”). Consistent with the Supreme Court’s decision that

EPA's Subtitle C regulations for the closure-in-place of hazardous waste impoundments contain the *identical* requirement as set forth in the CCR rule with respect to the elimination of free liquids.⁴⁷ Tellingly, EPA has not interpreted that requirement in the Subtitle C context as requiring the removal of porewater attributable to intersecting groundwater under this requirement. Like the CCR regulatory program, units closing-in-place under RCRA's Subtitle C program must address groundwater contamination through RCRA's post-closure care and corrective action provisions, not through the closure-in-place standard designed to support a unit's cover system.

This point is further confirmed in EPA guidance setting forth the requirements for closing hazardous waste surface impoundments. In discussing the circumstances where close-by removal may be advantageous over closure-in-place, EPA cites, as one factor to consider in determining that closure-in-place may not be appropriate, circumstances where: "[i]mpoundments *where free liquids cannot be removed to yield consolidated wastes of sufficient density to support the cover and associated construction vehicles.*"⁴⁸ This passage underscores that the purpose of removing free liquids is to support the cover systems for units closing with wastes-in-place.

The above discussion makes clear that, in the context of the Subtitle C hazardous waste closure standards for surface impoundments, EPA has not interpreted the "eliminate free liquids" requirements to extend to groundwater. Nor can EPA do so in the CCR rule.

C. EPA Misinterprets the Term "Infiltration" as Applying to Horizontal Groundwater Flow

EPA also incorrectly interprets the term "infiltration" in the closure-in-place performance provision at 40 C.F.R. § 257.102(d)(1)(i). This provision directs that the owner or operator closing an impoundment under this closure option must "[c]ontrol, minimize or eliminate to the maximum extent feasible, post-closure *infiltration* of liquids into the waste and releases of CCR,

non-hazardous solid wastes, including, of course, CCR, is "regulated much more loosely" than Subtitle C hazardous waste, RCRA's Subtitle D protectiveness standard allows for a consideration of the "practicable capabilities" of the units, making clear that the performance standards applicable to CCR surface impoundments are not intended to be as prescriptive as the standards applicable to Subtitle C facilities. As EPA has explained, RCRA § 4004(a)'s "no reasonable probability of adverse effects on health or the environment from disposal of solid waste," 42 U.S.C. § 6944(a), "implies the discretion to impose requirements that are less certain to eliminate a perceived health or environmental threat than [the Subtitle C] standards that are 'necessary to protect human health and the environment.'" 56 Fed. Reg. 50983, 50983-84 (Oct. 9, 1991).

⁴⁷ Compare 40 C.F.R. § 265.228(a)(2)(i), with 40 C.F.R. § 257.102(d)(2)(i). When describing the requirements for closure-in-place, the first condition, as set forth in 40 C.F.R. § 264.228(a)(2)(i), provides: "Eliminating free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues."

⁴⁸ See EPA Office of Solid Waste, Closure of Hazardous Waste Surface Impoundments (SW000873) (Sept. 1982) at 9.

leachate, or contaminated run-off to the ground or surface or to the atmosphere.”⁴⁹ EPA reads the term “infiltration” as encompassing “any liquid passing into or through the CCR unit by filtering or permeating from any direction, including the top, sides, and bottom of the unit.”⁵⁰ This means, according to EPA, that “[i]n situations where the groundwater intersects the CCR unit, water may infiltrate into the unit from the sides and/or bottom of the unit because the base of the unit is below the water table.”⁵¹ Under this interpretation, therefore, steps must be taken to control, minimize, or eliminate post-closure infiltration of groundwater into the base of a CCR unit to meet the closure-in-place performance standard. Here too, this is the first time that EPA has announced a new interpretation of a key regulatory term in the Proposed Decisions. Even the Environmental Protection Network (“EPN”), a group of “more than 550 U.S. Environmental Protection Agency (EPA) alumni,” acknowledges that EPA’s pronouncement constitutes “a long-awaited clarification of the term infiltration.”⁵² While USWAG disagrees with EPN as to the legality of this interpretation, even former EPA staff recognize that this interpretation has not been previously articulated by EPA.

Given this, it is not surprising that EPA does not point to anything in the regulatory text that supports this interpretation; nor is there any. Instead, EPA claims only that its interpretation is consistent with the plain meaning of the term infiltration, citing the dictionary definition of the term in Merriam-Webster to mean “‘to pass into or through (a substance) by filtering or permeating’ or ‘to cause (something, such as a liquid) to permeate something by penetrating its pores or interstices.’”⁵³ Not only is EPA’s reliance on the definition of “infiltration” misplaced, EPA’s position is at odds with the plain language of the CCR rule and EPA’s preamble pronouncement regarding how the closure-in-place performance standard in 40 C.F.R. § 257.102(d)(1)(i) is to be met.

1. EPA’s Sole Reliance on General Dictionary Language is Flawed.

EPA points to nothing in the regulatory text, the preamble to the CCR rule, or any other source other than the general definition of “infiltration” in the Merriam-Webster dictionary for its interpretation of the term “infiltration” in § 257.102(d)(1)(i). Putting aside that EPA’s reference to a general dictionary definition of infiltration cannot overcome the plain meaning of EPA’s regulatory text or supporting preamble discussion, the Agency’s selective reference to general usage definitions from Merriam-Websters dictionary is flawed.

⁴⁹ 40 C.F.R. § 257.102(d)(1)(i) (emphasis added).

⁵⁰ Proposed Decision for Clifty Creek Power Station at 40. *See also* Proposed Decision for Gavin Plant at 47; Proposed Decision for Ottumwa Generating Station at 42.

⁵¹ Proposed Decision for Clifty Creek Power Station at 40. *See also* Proposed Decision for Gavin Plant at 47; Proposed Decision for Ottumwa Generating Station at 42.

⁵² *See* Comments of EPN in Docket for Interim Decision: Proposed Date to Cease Receipt of Waste for Meramec Energy Center Based on Interim Determination of Incompleteness of Demonstration (Docket ID No. EPA-HQ-OLEM-2021-0592) at 1, 4.

⁵³ Proposed Decision for Clifty Creek Power Station at 40. *See also* Proposed Decision for Gavin Plant at 47; Proposed Decision for Ottumwa Generating Station at 42.

First, other common usage dictionaries contain several different definitions of “infiltrate” that conflict with EPA’s interpretation. For example, the Cambridge Academic Content Dictionary defines “infiltrate” in the scientific context to mean “(of water) to flow slowly down into the earth from the earth’s surface, for example, through cracks in rocks.”⁵⁴ Because it is possible to simply pick one dictionary definition over another—as EPA has done here—the Supreme Court has admonished against such cherry picking among dictionary definitions, explaining that “a word is known by the company it keeps” and that “[t]o choose between [the] competing definitions, [the Court should] look to the context in which the words appear.”⁵⁵ Consistent with this admonition, the D.C. Circuit has specifically cautioned against EPA’s approach here of relying on a general dictionary meaning of a technical term in isolation from the regulatory context, especially where reference to technical sources more accurately reflect the context in which the term is used:

General-usage dictionaries cannot invariably control our consideration of statutory language, especially when the “dictionary definition of . . . isolated words[] does not account for the governing statutory context.” . . . After all, “[t]he plainness or ambiguity of statutory language is determined [not only] by reference to the language itself, [but as well by] the specific context in which that language is used, and the broader context of the statute as a whole.” . . . *Though our assessment of the ambiguity of statutory text sometimes begins and ends with the definitions provided in contemporary general-usage dictionaries, on other occasions it is useful and important to consult more technical sources where, as here, the statute focuses on a specific technical context.*⁵⁶

This caution applies with full force in the context of the CCR rule. As EPA emphasized in promulgating the CCR rule, it “re-evaluated the performance standards throughout the final rule to ensure that the requirements are sufficiently objective and *technically precise* that a qualified professional engineer will be able to certify that they have been met.”⁵⁷ So, in the context of the performance standard at § 257.102(d)(1)(i), the term “infiltration” plainly should be interpreted by reference to technical sources that QPEs, who are delegated under the rule to certify compliance with the standard, would rely on in interpreting the term and whose professional licenses turn on an objective evaluation and certification of facility compliance. Even a cursory glance at several relevant technical sources (discussed below) makes clear that EPA’s reliance on Merriam-Webster general-usage dictionary is precisely what the Supreme Court counseled against; indeed, it is apparent from the Part A Applicants’ certified closure plans and the certified closure plans of other facilities throughout the industry, professionals in the field have not relied on such a simplistic and out-of-context definition.

⁵⁴ *Infiltrate*, Cambridge Academic Content Dictionary, <https://dictionary.cambridge.org/us/dictionary/english/infiltrate> (last visited Mar. 22, 2022).

⁵⁵ *McDonnell v. United States*, — U.S. —, 136 S. Ct. 2355, 2368, 195 L. Ed.2d 639 (2016) (internal citations and quotation marks omitted).

⁵⁶ *Am. Coal Co. v. Fed. Mine Safety & Health Review Comm’n*, 796 F.3d 18, 25-26 (D.C. 2015) (emphasis added) (internal citations omitted).

⁵⁷ 80 Fed. Reg. at 21335, 21337 (emphasis added).

Rather, when evaluating the potential for “infiltration” under the closure-in-place performance standard, QPEs would naturally consider how the term has been applied and implemented throughout the history of the RCRA groundwater program, including in particular the risk assessment models used to develop the performance standards in the CCR rule. Chief among these is EPA’s Composite Model for Leachate Migration with Transformation Products (EPACMTP). This model formed the basis of EPA’s 2010 and updated 2014 CCR Risk Assessment underlying the rule. In the EPACMTP background technical documents, the concept of “infiltration” is consistently described as the phenomenon of water percolating through a cover system into the soil.

For example, in defining the “Landfill Infiltration Rate,” EPA’s technical document explains that

The landfill infiltration rate (m/yr) is defined as the rate at which water/leachate percolates through the landfill to the underlying soil. The landfill infiltration rate may be different from the ambient regional recharge rate due to the engineering design of the landfill (*e.g.*, landfill cover soil that has a lower conductivity than the regional soils), topography, land use, and vegetation.⁵⁸

Importantly, EPA emphasizes that infiltration rate is defined by water or leachate percolating *through* the landfill *into* the underlying soil (emphasis on point of generation and point of termination) and that this rate is influenced by landfill cover soils, regional soils, land use, and vegetation. These are critical elements that a qualified professional engineer would use to quantify minimization from infiltration with specific design/construction and local soils. Importantly, groundwater flow is not a defined element in this analysis.

Elsewhere, EPA explains that “[t]he infiltration rate is defined as the rate at which leachate flows from the bottom of the WMU (including any liner) into the unsaturated zone beneath the WMU.”⁵⁹ Again, the concept of infiltration is the vertical flow of liquids from the waste management unit (WMU) *into* the unsaturated zone beneath the WMU.

This concept of infiltration, as understood and applied by the professional engineer community, is consistent with EPA’s application of this term through the history of the RCRA groundwater program. EPA guidance regarding methods for meeting the performance standards for closing hazardous waste surface impoundments (which EPA acknowledges the CCR closure performance standards are modeled after) refers to the concept of “infiltration” under the closure standards as the downward migration of liquids through wastes:

Infiltration represents the primary mechanism for the downward migration of waste-derived constituents. Four processes are involved: (1) entry through the cover soil (or residual waste strata, if no cover is present), (2) storage within the soil, (3) transmission through the soil, and (4) deep drainage through the residual

⁵⁸ EPA, EPA’s Composite Model for Leachate Migration with Transformation Products (EPACMTP), Parameters/Data Background Document at 4-7 (Apr. 2003).

⁵⁹ *Id.* at 4-1.

waste strata and into the underlying soil. *A factor limiting any one of these processes (i.e., an impermeable soil cover) can significantly reduce the net volume of vertical flow.*

Rainfall characteristics (intensity, duration, and form), soil properties (texture, structure, permeability), and vegetative cover all influence the rate of infiltration. Fine textured soils (i.e., clays) generally have the lowest infiltration rates and make excellent cover material. Methods used to quantify infiltration are described in references 31, 35, and 36.⁶⁰

To illustrate this point, EPA depicts the concept of “infiltration” as the vertical flow of liquids through the cover system:

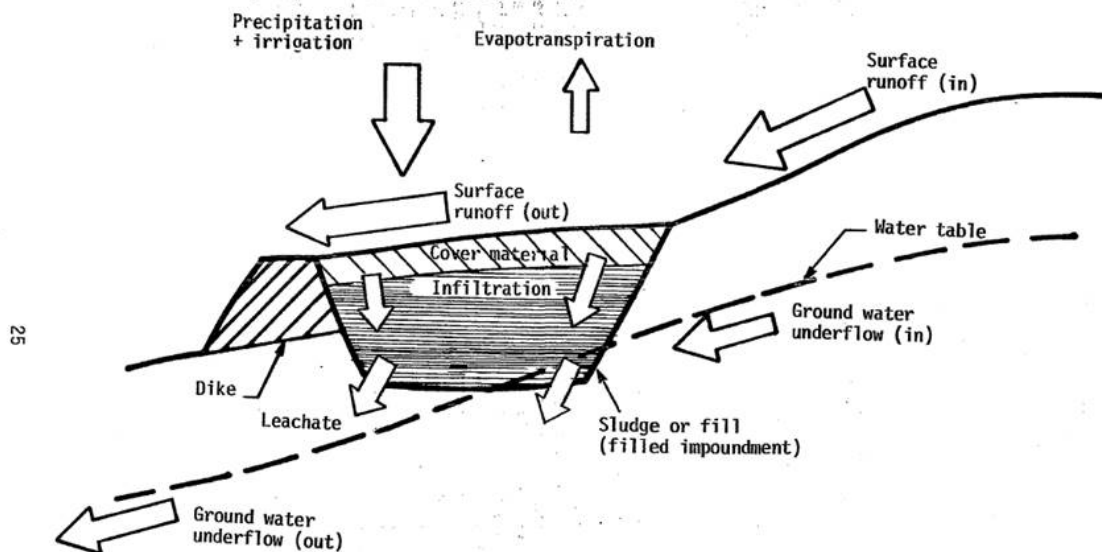


Figure 3-1. Simplified Water Balance for Filled Surface Impoundment

This illustration identifies the “[s]even principal input and output components of a hypothetical closed surface impoundment,” including: “(1) precipitation, (2) surface runoff onto the impoundment, (3) surface runoff from the impoundment area, (4) evapotranspiration, (5) ground water underflow in, (6) ground water underflow out, and (7) infiltration or seepage.”⁶¹ Notably, the Agency specifically distinguishes between groundwater underflow (which is horizontal) and

⁶⁰ See EPA Office of Solid Waste, Closure of Hazardous Waste Surface Impoundments (SW000873) at 26 (Sept. 1982).

⁶¹ *Id.* at 24.

infiltration (which is vertical).⁶² Notably, as related to the free liquids discussion above, this illustration also shows a hypothetical closed surface impoundment where groundwater remains in a portion of the unit, thus showing that “free liquids” does not include groundwater.

Further, EPA’s general website on “[Infiltration Models](#)” describes the “phenomena of water infiltration in the unsaturated zone” as follows:

Water applied to the soil surface through rainfall and irrigation events subsequently enters the soil through the process of infiltration. . . . Infiltrability is a term generally used in the disciplines of soil physics and hydrology to define the maximum rate at which rain or irrigation water can be absorbed by a soil under a given condition. Indirectly, infiltrability determines how much of the water will flow over the ground surface (*i.e.*, runoff or overland flow), terminating in lakes, streams, or rivers, and how much will enter the soil.⁶³

EPA’s infiltration website also specifically references the technical work of Daniel Hillel, who has been credited with coining the term “infiltrability.”⁶⁴ Mr. Hillel uses this term “to designate the infiltration flux resulting when water at *atmospheric pressure* is made *freely available* at the soil surface.”⁶⁵

While there are certainly other relevant technical documents that correctly define “infiltration” in the context of RCRA’s groundwater monitoring programs consistent with the above, it also worth referencing the definition provided to this term by the U.S. Geological Survey (“USGS”), the leading federal agency with expertise in geology. The USGS, provides a definition of “infiltration” as “flow of water from the land surface into the subsurface.”⁶⁶ Also, according to the USGS: “Water that infiltrates at land surface moves vertically downward to the water table to become ground water. The ground water then moves both vertically and laterally within the ground-water system.”⁶⁷

The above discussion underscores the point that EPA’s sole reliance on the Merriam-Webster definition of “infiltration” is legally flawed, as it does not reflect the technical definition of the term as defined by the Agency itself in the context of RCRA groundwater monitoring programs and as appropriately understood and applied by QPEs in assessing compliance under the CCR rule.

⁶² *See id.* at 25.

⁶³ EPA, Infiltration Models, <https://www.epa.gov/water-research/infiltration-models> (last visited Mar. 22, 2022).

⁶⁴ *Id.*

⁶⁵ Daniel Hillel, Introduction to Soil Physics, at 212 (1982) (emphasis in original).

⁶⁶ *Infiltration*, USGS Dictionary of Water Terms, <https://www.usgs.gov/special-topics/water-science-school/science/dictionary-water-terms> (last visited Mar. 22, 2022).

⁶⁷ Thomas C. Winter et al., Ground Water and Surface Water: A Single Resource, USGS Survey Circular 1139, at 7 (1999).

2. EPA's Interpretation is Inconsistent with the Regulatory Text and EPA's Prior Preamble Statements.

As noted above, when interpreting the term “infiltration,” one must look to the context of the particular provision as well as the regulation as a whole. Here, there is nothing in the regulatory text to support EPA's position that the term “infiltration” in the performance standard at § 257.102(d)(1)(i) extends to liquids entering the unit from any direction, let alone to groundwater flowing horizontally through CCR at the base of the unit undergoing closure. To the contrary, the applicable regulatory text makes clear that this performance standard is speaking to the performance of the final cover system—which is the central feature of the closure-in-place option⁶⁸—and its effectiveness in preventing liquids from infiltrating through the cover and causing CCR contained in the closed unit from being released or leaching to the ground or surface waters or to the atmosphere.

That the closure-in-place performance standard in § 257.102(d)(i) is addressing the prevention of liquid infiltration through the unit's cover system—as opposed to the horizontal movement of groundwater through the base of the unit—is confirmed by the regulatory text detailing how this performance standard is to be met. First, the written closure plan for impoundments closing-in-place requires a “description of the final cover system” and “*how the final cover system will achieve the performance standards specified in paragraph (d).*”⁶⁹ The performance standards “specified in paragraph (d)” include the requirement to minimize, control or eliminate to the maximize extent feasible the post-closure infiltration of liquid into the waste, the very standard that EPA now asserts includes horizontal groundwater flow intersecting the basis of the unit. But there is no similar requirement to describe how facilities should address groundwater flow to meet the closure standard. Rather, if through groundwater monitoring, a site determines that lateral groundwater flow is an issue, the process to address it is corrective action, independent of closure. The regulatory text is thus clear that the closure standard is to be met solely through installation and performance of the final cover system.

Second, the rule directs that the final cover system meet a specified “permeability” standard and ensure that “[t]he infiltration of liquids through the closed CCR unit must be minimized by the use of an infiltration layer” meeting specified criteria.⁷⁰ Here too, the regulatory text makes clear that the performance standard's direction to prevent “the post-closure infiltration of liquids into the waste” is tied directly to the implementation of a final cover system meeting specified permeability criteria and the use of an infiltration system designed to minimize such infiltration. Notably, while the performance standard provides detailed specifications for the adequacy of the cover system to prevent post-closure infiltration into the closed unit, the rule says *nothing* about the measures necessary to prevent horizontal groundwater “infiltration” into the base of the unit, let alone even mentioning this purported form of infiltration. Thus, in contrast to the specific design measures to prevent post-closure infiltration through the cover system, the absence of any corresponding regulatory standards to address the potential for post-closure horizontal groundwater flow through the unit only confirms that the rule's performance

⁶⁸ See 40 C.F.R. § 257.102(d)(3).

⁶⁹ *Id.* § 257.102(b)(1)(iii) (emphasis added).

⁷⁰ *Id.* § 257.102(d)(3)(i)(A)-(B) (emphasis added).

standard considers “infiltration” as the vertical flow of liquids through the closed unit’s cover system.

Even assuming, for purposes of argument, that EPA’s unbridled definition of “infiltration” could be read into the closure performance standard, the rule provides no criteria—in contrast to the detailed criteria for the necessary cover system—for how to “control, minimize or eliminate to the maximum extent feasible” horizontal groundwater “infiltration.” This type of undefined performance standard would be void for vagueness, especially when compared to the great lengths EPA went to specify the other technical criteria to address vertical infiltration in the performance standard.

EPA’s preamble discussion of the performance standard confirms that the term “infiltration” referenced in the performance standard at § 257.102(d)(1)(i) is infiltration of liquids through the unit’s cover system. EPA never mentions, let alone suggests, that the infiltration to be addressed could come from any direction other than through the cover system, let alone from horizontal groundwater flow through the base of the unit. In explaining the purpose of the detailed performance standard for the cover system for units closing-in-place, EPA explains:

This standard is modeled after the closure performance standard applicable to interim status hazardous waste units under § 265.111. The final rule requires that any final cover system *control, minimize or eliminate, to the maximum extent practicable, post-closure infiltration of liquids into the waste* and releases of leachate (in addition to CCR or contaminated runoff) to the ground or surface waters. . . . Under this performance standard, if the cover system results in *liquids infiltration* or releases of leachate from the CCR unit, the final cover would not be an appropriate cover.⁷¹

EPA’s explanation references the precise regulatory text used in the rule’s closure-in-place performance standard at § 257.102(d)(1)(i) concerning the type of “infiltration” being addressed by the regulatory text—*i.e.*, infiltration through the cover system and not the unbridled definition now suggested by EPA in response to the CCR Part A Demonstrations.

Similarly, the Risk Assessment supporting the CCR rule is also clear that infiltration only encompasses vertical movement of liquids through the cover system. In that document, EPA explains:

During operation, free liquids that are ponded in the impoundment create a strong hydraulic head that acts to increase infiltration through the base of the impoundment. The removal of free liquids and capping during closure reduces the hydraulic head and the rate of contaminant migration. After closure is complete,

⁷¹ 80 Fed. Reg. at 21413 (emphasis added).

*infiltration through the impoundments is driven only by percolation of incident precipitation through the cap.*⁷²

EPA cannot now claim that the rule is intended to address horizontal flow of groundwater as part of the closure requirements when the Agency itself did not consider that factor in the very assessment that forms the basis for each of the provisions EPA promulgated to meet the Subtitle D protectiveness standard.

For all these reasons, EPA's interpretation of the term "infiltration" in § 257.102(d) as including anything more than the vertical infiltration of liquids through the closed unit is unlawful and cannot serve as the basis for asserting that the closure plans are not in compliance with the CCR rule.

D. EPA Did Not Provide Fair Notice of its Legal Interpretations

Even assuming, for purposes of argument, that there is a valid basis for EPA's legal interpretations regarding how the performance standards in § 257.102(d) must be met, the Agency's positions cannot be imposed on the regulated entities because EPA did not provide fair notice to the regulated community regarding these compliance obligations. That fair notice must be provided to regulated parties is based on the fundamental principle of Due Process that "laws which regulate persons or entities must give fair notice of conduct that is forbidden or required."⁷³ Applying this principle in practice, courts have held that fair notice requires the agency to have "state[d] with *ascertainable certainty* what is meant by the standards [it] has promulgated."⁷⁴ If fair notice is not provided—*i.e.*, if it cannot be determined with "ascertainable certainty" what the law requires—an agency cannot enforce this position against a regulated entity.

As the D.C. Circuit has explained, "[i]f, by reviewing the regulations and other public statements issued by the agency, a regulated party acting in good faith would be able to identify, with 'ascertainable certainty,' the standards with which the agency expects parties to conform, then the agency has fairly notified a petitioner of the agency's interpretation."⁷⁵ But "when regulations can reasonably be interpreted in a way other than the agency does, the agency must give regulated entities notice *before* enforcing requirements based on that interpretation."⁷⁶ For similar reasons, courts have *not* deferred to an agency interpretation of its own regulations when such an interpretation creates "unfair surprise" to regulated parties or "an interpretation that

⁷² EPA, Human and Ecological Risk Assessment of Coal Combustion Residuals, App. K at K-1 (Docket ID No. EPA-HQ-RCRA-2009-0640-11993) (Dec. 2014) (emphasis added).

⁷³ *FCC v. Fox Television Stations, Inc.*, 567 U.S. 239, 253 (2012).

⁷⁴ *Diamond Roofing Co. v. OHSRC*, 528 F.2d 645, 649 (5th Cir. 1976) (emphasis added).

⁷⁵ *Gen. Elec. Co. v. U.S. E.P.A.*, 53 F.3d 1324, 1329 (D.C. Cir. 1995) (citing *Diamond Roofing*).

⁷⁶ *Hosp. of the Univ. of Pa. v. Sebelius*, 847 F. Supp. 2d 125, 135 (D.D.C. 2012) (citing *Satellite Broad. Co., Inc. v. FCC*, 824 F.2d 1, 3-4 (D.C. Cir. 1987)). See also *Rollins Env't'l Services v. EPA*, 937 F.2d 650, 655 (D.C. Cir. 1991) (Edwards, J., concurring in part and dissenting in part) ("The question is whether Rollins had 'fair warning' sufficient to justify a finding of a violation. There can be no violation to vitiate if Rollins could not reasonably have known what the agency had in mind.").

would have imposed retroactive liability on parties for longstanding conduct that the agency had never before addressed.”⁷⁷

The key question here, therefore, is whether the regulated community, acting in good faith, should have known with “ascertainable certainty”—*i.e.*, whether there was *no other way* to read the CCR closure performance standard—as interpreting the term “infiltration” in § 257.102(d)(1)(i) to include liquids entering the base of the CCR unit from any direction and for the obligation in § 257.102(d)(2)(i) to eliminate free liquids through the removal of liquid waste to encompass porewater derived from the lateral movement of groundwater in the base of the unit. For all the reasons discussed above regarding the legal flaws in EPA’s interpretations regarding these positions, the answer is “no.”

Further, despite EPA’s assertion that the Part A decisions restate EPA’s “consistently held position that landfills and surface impoundments cannot be closed in contact with groundwater,” the Agency has never previously—orally or in writing—interpreted the rule this way. For example, EPA’s own website contains a number of FAQs, but none of these contain this so-called “consistently held position.”⁷⁸ In addition, the Indiana Department of Environmental Management specifically asked EPA what the term “infiltration” in § 257.102(d)(1)(i) means, and, in response, the Agency stated:

Overall, the performance standards for closure when leaving CCR in place in EPA’s CCR regulations are designed so that the hazardous constituents in the wastes remain in the unit, away from potential receptors, and are not released into the environment. A key method for achieving this is to control, minimize or eliminate to the maximum extent feasible infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters. In implementing the various regulatory standards, EPA recommends that the state permitting authority (or the facility) evaluate these requirements in light of specific site conditions to determine how best to meet the performance standards. Careful consideration should be given to available monitoring data to determine adequacy of the closure plan. In reviewing the adequacy of a closure plan, the State should evaluate whether the planned closure can be performed in a manner that satisfies each of the relevant standards. In some cases, certain activities may be more efficiently performed during closure rather than waiting until the post-closure time period. An adequate closure plan would address such issues to ensure that closure activities do not foreclose or complicate any necessary corrective action.⁷⁹

⁷⁷ *Kisor v. Wilkie*, 588 U.S. ___, 139 S. Ct. 2400, 2417-18 (2019).

⁷⁸ See CCR Frequently Asked Questions, available at <https://www.epa.gov/coalash>.

⁷⁹ See Letter from Barnes Johnson, Director, Office of Resource Conservation and Recovery to Corey Webb, Deputy Assistant Commissioner, Indiana Department of Environmental Management (April 12, 2018) (provided as Attachment B).

This explanation—in response to a direct question on the meaning of “infiltration”—is a far cry from EPA’s current position, which clearly states that “infiltration” encompasses the horizontal movement of groundwater.⁸⁰

And the Agency was acutely aware that the regulated industry did not interpret the closure performance standard to require removal of groundwater or address horizontal infiltration. As noted in footnote 4 above, in March 2017, USWAG wrote to EPA to alert the Agency to and to counter arguments of the Southern Environmental Law Center (“SELC”) that the option of closing CCR impoundments under the rule’s closure-in-place option under § 257.102(d) was prohibited when CCR was in contact with groundwater.⁸¹ USWAG set forth a detailed explanation as to why this position was inconsistent with the regulations and made clear that the regulated community was not interpreting the rule in the manner espoused by SELC. EPA never responded to the letter, let alone suggested that this interpretation was at odds with EPA’s views, though the letter made clear how the regulated community was implementing the rule. EPA’s newly articulated positions, issued almost 5 years after USWAG made clear to EPA how regulated parties were complying with the rule, is precisely the type of “unfair surprise” and imposition of “retroactive liability on parties for longstanding conduct that the agency had never before addressed” that the Supreme Court has found unlawful.⁸²

Moreover, as illustrated by the QPE compliance certification for the closure plans of the Part A Applicants, technical experts given regulatory responsibility for certifying compliance with the rule’s closure performance standards never interpreted the regulations in the manner now espoused by EPA. Among other reasons, as discussed in Section II.C. above, this is because EPA’s technical documents relevant to evaluating groundwater monitoring programs under RCRA all refer to infiltration as the downward movement of liquids through the disposal unit and not to the broad “from any direction” interpretation now proffered by EPA. Similarly, with respect to the obligation to “eliminate free liquids through the removal of liquid waste,” based on EPA’s implementation of the same requirement under the Subtitle C hazardous waste program, the regulatory community correctly read this obligation to remove “liquid wastes”—*i.e.*, free-standing ponded water—and not porewater derived from intersecting groundwater.

Clearly, there are other ways to reasonably read the applicable regulations in a manner other than that now put forward by EPA. EPA’s pronouncements in the Proposed Decisions are precisely the type of unfair surprise that the “fair notice” doctrine is intended to guard against.⁸³ Accordingly, these interpretations cannot serve as the basis for denying the Part A Demonstrations on grounds that the facilities were not in compliance with the applicable CCR closure standards.

⁸⁰ USWAG also notes that, had EPA intended to preclude closure in place when a unit is in contact with groundwater, it could have mandated closure by removal for impoundments that fail to meet the aquifer separation location restriction. But it did not. Instead, the rule allows such units to close in place or by removal.

⁸¹ See Letter from USWAG Executive Director Jim Roewer to Barnes Johnson, Director, Office of Resource Conservation and Recovery (March 20, 2017) (Attachment A).

⁸² See *Kisor*, 139 S. Ct. at 2417-18.

⁸³ See *Gen. Elec. Co.*, 53 F.3d at 1329.

E. EPA's New Interpretations Amend the Closure Performance Standards in Violation of the APA.

Section 553 of the APA imposes a procedural requirement on federal agencies when promulgating, amending, modifying, or repealing a rule or regulation.⁸⁴ This requires an agency taking such action to first publish “[g]eneral notice of proposed rulemaking . . . in the Federal Register” and “give interested persons an opportunity to participate in the rule making through submission of written data, views, or arguments with or without opportunity for oral presentation.”⁸⁵

EPA's new interpretations of the term “infiltration” and the standard for “eliminating free liquids through the removal of liquid wastes” effectively amend key provisions of the CCR rule's closure performance standards in § 257.102(d). Such an expansion of the scope and substantive requirements of the CCR rule involve legislative rulemaking requiring the APA's notice and comment procedures.

Courts have made clear that “an agency creates substantive rules when issuing ‘reasonable but arbitrary (not in the ‘arbitrary or capricious’ sense) rules that are consistent with the statute or regulation under which the rules are promulgated but not derived from it, because they represent an arbitrary choice among methods of implementation.’”⁸⁶ As explained above, EPA's interpretations of the rule's closure performance standards are not reasonable. But even if reasonable, the interpretations certainly are “arbitrary” in that they represent an “arbitrary choice among methods of implementation” of the CCR closure performance standards. As discussed above, they are at odds with the rule's regulatory text and applicable EPA technical guidance upon which QPEs reasonably relied in certifying compliance with the rule's closure requirements. “When agencies base rules on arbitrary choices they are legislating . . . so the[] rules . . . require notice and comment rulemaking, a procedure that is analogous to the procedure employed by legislatures in making statutes.”⁸⁷

EPA's proffered interpretations of the rule's closure performance standards in § 257.102(d) constitute a substantive rulemaking subject to the APA's notice and comment requirements.⁸⁸ EPA is not simply applying the existing regulations as written to specific Part A Demonstrations. Instead, EPA has announced new substantive standards and requirements that it is directing all facilities subject to the rule to follow (including facilities that did not even

⁸⁴ 5 U.S.C. § 553; *see also Am. Hosp. Ass'n v. Bowen*, 834 F.2d 1037, 1044 (D.C. Cir. 1987) (stating that agencies must comply with § 553 “prior to a rule's promulgation, amendment, modification, or repeal”).

⁸⁵ 5 U.S.C. § 553(b)-(c).

⁸⁶ *United Steel, Paper & Forestry, Rubber, Mfg., Energy, Allied Indus. & Serv. Workers Int'l Union v. FHA*, 151 F. Supp. 3d 76, 87 (D.D.C. 2015) (*citing Hoctor v. USDA*, 82 F.3d 165, 170 (7th Cir. 1996)).

⁸⁷ *Hoctor*, 82 F.3d at 170.

⁸⁸ *See Gen. Elec. Co. v. EPA*, 290 F.3d 377, 385 (D.C. Cir. 2002) (vacating EPA guidance document as legislative rule that EPA issued without following APA procedures).

submit a Part A demonstration).⁸⁹ EPA has also directed States to follow EPA’s new requirements for closure announced in EPA’s proposed Part A decisions in their implementation of the CCR rule under State programs.⁹⁰ But EPA cannot impose new regulations and requirements without following the APA publication and notice-and-comment requirements.

Even if EPA’s new position does not amount to a legislative rule, an interpretive rule cannot serve as the basis for an Agency’s finding of noncompliance. While an agency can issue “interpretive rules” without going through the notice-and-comment rulemaking process, such rules do not have the force and effect of law. Instead, interpretive rules are “meant only to ‘advise the public’ of how the agency understands, and is likely to apply, its binding statutes and legislative rules,” i.e., regulations.⁹¹ Importantly, “[a]n interpretive rule itself never can form ‘the basis for an enforcement action’ because . . . such a rule does not impose any ‘legally binding requirements’ on private parties.”⁹²

Thus, whether legislative or interpretive, EPA’s position on the closure performance standard cannot serve as the basis for finding that facilities are not in compliance with the CCR rule’s closure provisions.

III. Facilities Cannot Be Found in Noncompliance with Requirements Certified by QPEs

EPA proposes to find that elements of the Part A Applicants’ groundwater monitoring programs do not meet specific groundwater monitoring provisions in the CCR rule, even though the facilities’ QPEs had certified compliance with the relevant performance standards in the rule. These include the number and placement of downgradient wells necessary to meet the rule’s performance standard at § 257.91(a)(2), as well as asserting that QPE certifications of compliance with this standard do not meet the certification standard in § 257.91(f).⁹³ The Agency also proposes to find the facilities’ alternative source demonstrations (“ASDs”) do not meet the rule’s ASD criteria, despite the facilities’ QPEs certifying the technical accuracy of the ASDs.⁹⁴ EPA also asserts that the facilities are subject to the rule’s corrective action

⁸⁹ *Id.* (holding that EPA guidance document was a legislative rule that required APA procedures because “[o]n its face the Guidance Document imposes binding obligations on applicants to submit applications that conform to the Document”).

⁹⁰ *See, e.g.*, Letter from Carolyn Hoskinson, Director, Office of Resource Conservation and Recovery, to Richard E. Dunn, Director, Georgia Environmental Protection Division (Jan. 11, 2022).

⁹¹ *Kisor* 139 S. Ct. at 2420.

⁹² *Id.*

⁹³ Proposed Decision for Clifty Creek Power Station at 43-44. *See also* Proposed Decision for Gavin Plant at 69-71; Proposed Decision for Ottumwa Generating Station at 43-46.

⁹⁴ Proposed Decision for Clifty Creek Power Station at 47-49. *See also* Proposed Decision for Gavin Plant at 73-79; Proposed Decision for Ottumwa Generating Station at 47-51.

requirements and have failed to meet the obligation to conduct corrective action in accordance with 40 C.F.R. §§ 257.95(g)(3) and 257.96(a).⁹⁵

EPA cannot find facilities that have justifiably relied upon a QPE's certification of compliance to be in noncompliance with those criteria, including those referenced above. The rule is necessarily designed this way because of its self-implementing nature and EPA's recognition that, absent EPA oversight, a qualified professional is required to provide assurance to EPA and the public that the rule's technical criteria are being met. Given this, the QPEs oversee whether a facility is in compliance with the rule, much like EPA does in the context of more traditional EPA permitting programs. QPEs cannot merely "rubber stamp" a facility's position concerning its compliance with the rule. Rather, the rule is specifically designed to ensure that QPE certifications are objective and that the consequences of inaccurate/biased certifications can, as discussed below, result in the loss of a professional license and/or fines.

While it is possible that resolution of any technical dispute between EPA and the QPE may result in future modifications to a facility's operations, it cannot be the basis for finding that an owner/operator, who has justifiably relied upon a QPE certification, is not in compliance with applicable CCR rules and thus serve as the basis for proposing to deny a complete Part A submission. This is because reliance upon a QPE certification is the basis for a facility to make a compliance demonstration with respect to those elements of the rule covered by the QPE certification. The rule's regulatory text and supporting preamble discussion confirm this point.

With respect to meeting the rule's groundwater performance standard (including the requisite number and location of groundwater monitoring wells), the rule provides that the "owner or operator must obtain a certification from a qualified professional engineer . . . stating that the groundwater monitoring system has been designed and constructed *to meet the requirements of this section [i.e., the rule groundwater performance standard]*."⁹⁶ Similarly, with respect to an ASD, the rule provides that "[a]ny such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions and *must be certified to be accurate* by a qualified professional engineer."⁹⁷

The definition of QPE makes clear that it is a QPE, not an EPA contractor or some other third party, who has the specialized training and knowledge to make these compliance certifications:

An individual who is licensed by a state as a Professional Engineer to practice one or more disciplines of engineering and who is qualified by education, technical knowledge and experience to make the specific technical certifications required

⁹⁵ Proposed Decision for Clifty Creek Power Station at 52. *See also* Proposed Decision for Gavin Plant at 81; Proposed Decision for Ottumwa Generating Station at 49-51.

⁹⁶ 40 C.F.R. § 257.91(f) (emphasis added).

⁹⁷ *Id.* § 257.95(g)(3)(ii).

under this subpart. Professional engineers making these certifications must be currently licensed in the state where the CCR unit(s) is located.⁹⁸

As explained above, this regulatory approach was necessarily established by EPA because of the rule's self-implementing nature and EPA's recognition that QPE certifications are, in effect, to act in place of a regulatory authority's sign off (typically provided through a permit).⁹⁹ To ensure regulatory reliance on QPE certifications, the Agency specifically "re-evaluated the performance standards throughout the final rule to ensure that the requirements are sufficiently objective and technically precise that a *qualified professional engineer will be able to certify that they are met*."¹⁰⁰ In response to commenters' concern about the over reliance on QPE certifications as the means for assessing compliance, EPA reiterated that the "specific technical standards" included in the rule "will operate to significantly constrain the facilities activities and discretion" and that the "certifications required by the rule supplement these technical requirements" along with the requirement to post the certifications to publicly available websites.¹⁰¹

EPA went to great lengths in the rule's preamble to underscore the reliability and objectivity of QPE certifications. Referencing other programs where QPEs plays a similar regulatory compliance role (e.g., EPA's SPCC program), EPA explained "that professional engineers, whether independent or employees of a facility, being professionals, will uphold the integrity of their profession and only certify documents that meet the prescribed regulatory requirements; and that the integrity of both the professional engineer and the professional oversight boards licensing professional engineers are sufficient to prevent any abuses."¹⁰² It is the threat of fines being imposed on the QPEs and/or loss of their professional licenses that EPA correctly reasoned guards against inaccurate, negligent, or biased QPE certifications. As EPA explained, "[i]n fact, this personal liability of the professional engineer is one of the primary reasons that commenters to the 'Burden Reduction Rule' supported the idea that RCRA certification should only be done by licensed professional engineers."¹⁰³ Similarly, for QPE certifications under the CCR rule, EPA correctly concluded that "[i]n light of the third party oversight provided by the state licensing boards in combination with the numerous recordkeeping and recording requirements established in this rule, the Agency is confident that abuses of the certification requirements will be minimal, and that human health and the environment will be protected."¹⁰⁴ And while EPA was provided with enforcement authority over the CCR rule with the enactment of the WIIN Act in 2016,¹⁰⁵ nothing in that statutory amendment replaces the self-implementing nature of the CCR rule and the reliance on QPE certifications until such time that EPA issues and implements a federal permitting program for

⁹⁸ *Id.* § 257.53.

⁹⁹ *See* 80 Fed. Reg. at 21335-37.

¹⁰⁰ *Id.* at 21335 (emphasis added).

¹⁰¹ *Id.*

¹⁰² *Id.* at 21336.

¹⁰³ *Id.* at 21337.

¹⁰⁴ *Id.*

¹⁰⁵ Water Infrastructure Improvements for the Nation Act, 42 U.S.C. § 6945(d).

the rule or amends the rule to allow EPA to overrule QPE certifications. To date, EPA has not taken such action.

Indeed, in the SPCC regulatory program, where, as noted above, the Agency also established a requirement for a licensed professional engineer to certify a facility's compliance with applicable standards, EPA explicitly made clear in the rule itself, unlike in the CCR rule, that "such certification shall in no way relieve the owner or operator of a facility of his duty to prepare and fully implement such Plan in accordance with the requirements of this part."¹⁰⁶ EPA elaborated in the preamble that "[w]hile we generally agree that certification by a PE should show that all necessary equipment and planning are in place, we reserve the right to make a determination that additional measures may be necessary to comply with the rule."¹⁰⁷ In other words, where EPA wanted to make clear to the regulated community that reliance on a regulatory mandated QPE certification did not ensure compliance with the regulations, it knew how to say so and to incorporate such a caveat on the QPE compliance certification in the regulations themselves. EPA has not done so in the CCR rule; indeed, just to the contrary, the Agency has made clear both in the preamble of the CCR rule and the plain language of the regulatory text, that a QPE certification under the CCR rule is the regulatory mechanism for demonstrating compliance with the applicable technical standards.

In short, the CCR rule contemplates the regulated community relying on QPE certifications to demonstrate compliance. In promulgating the final regulations, EPA expressly "re-evaluated" the performance standards in the rule to ensure that they are "sufficiently objective and technically precise" so that qualified professionals with specialized knowledge can objectively certify compliance with those standards.¹⁰⁸ Again, while a subsequent disagreement by EPA with the QPE may result in the facility ultimately amending its management operations, such disagreement cannot serve as finding a facility in noncompliance with the applicable standards. That is certainly true here where EPA has proffered no technical report, other than its belief and assertions in the Proposed Decisions, that the QPE certifications are inaccurate. Such a cavalier rejection of the QPE certifications is inconsistent with the plain text of the rule and the role of the QPE in the CCR rule's self-implementing program.¹⁰⁹

IV. EPA's Evaluation of Compliance Improperly Expands the Requirements of Corrective Action

EPA is proposing to find that the Part A Applicants have failed to comply with several corrective action requirements, including an insufficient characterization of the nature and extent of the release under § 257.95(g) and an insufficient assessment of corrective measures under

¹⁰⁶ 40 C.F.R. § 112.3(d)(2).

¹⁰⁷ 67 Fed. Reg. 47042, 47052 (July 17, 2002).

¹⁰⁸ 80 Fed. Reg. at 21335.

¹⁰⁹ Even if EPA can essentially "overrule" a QPE certification and find noncompliance, EPA's finding of noncompliance must be based on more than just a mere technical disagreement with a QPE. Instead, EPA must show that the QPE's certification, based on its own professional judgment and site-specific knowledge, is wrong. EPA has failed to do that in its proposed decisions.

§ 257.96.¹¹⁰ However, EPA's complaint is not that the Part A Applicants failed to conduct a characterization of the nature and extent of the releases or undertake an assessment of corrective measures. Rather, EPA disagrees with the approach and analyses taken by the Part A Applicants and their consultants and believes the facilities should have done more in the time provided under the rule.

Many of the issues raised in the Proposed Decisions involve site-specific technical issues that go beyond the scope of these comments. However, as a general matter, USWAG believes that it is important to address what appears to be an expansion of the corrective action requirements that is both at odds with the plain language of the rule and an unrealistic expectation of what facilities can accomplish in the corrective action timeframes provided under the rule.

When a facility triggers corrective action, the rule requires the facility to characterize the nature and extent of the release and any relevant site conditions that may affect the remedy ultimately selected.¹¹¹ This characterization must be "sufficient to support a complete and accurate assessment of the corrective measures" under § 257.96 and should include the following minimum measures: (1) Install additional monitoring wells necessary to define the contaminant plume(s); (2) Collect data on the nature and estimated quantity of material released including specific information on the constituents listed in appendix IV of this part and the levels at which they are present in the material released; (3) Install at least one additional monitoring well at the facility boundary in the direction of contaminant migration and sample this well; and (4) sample all wells to characterize the nature and extent of the release.¹¹²

Following the characterization, the facility must complete an assessment of corrective measures under § 257.96. This assessment

must include an analysis of the effectiveness of potential corrective measures in meeting all of the requirements and objectives of the remedy as described under § 257.97 addressing at least the following: (1) The performance, reliability, ease of implementation, and potential impacts of appropriate potential remedies, including safety impacts, cross-media impacts, and control of exposure to any residual contamination; (2) The time required to begin and complete the remedy; (3) The institutional requirements, such as state or local permit requirements or other environmental or public health requirements that may substantially affect implementation of the remedy(s).¹¹³

¹¹⁰ Proposed Decision for Clifty Creek Power Station at 52. *See also* Proposed Decision for Gavin Plant at 81; Proposed Decision for Ottumwa Generating Station at 49-51.

¹¹¹ 40 C.F.R. § 257.95(g)(1).

¹¹² *Id.*

¹¹³ *Id.* § 257.96(c).

This entire process—the characterization and assessment of corrective measures—must be completed within 180 to 240 days.¹¹⁴ There is no opportunity to go beyond this timeframe. Thus, the “sufficiency” of a characterization is necessarily dependent on site-specific conditions at each individual facility and constrained by the regulatory timeframe for completing the assessment of corrective measures. This time constraint also limits the level of analysis that can be incorporated into an assessment of corrective measures. For example, many sites in corrective action are currently also undergoing closure activities, which can result in dynamic site conditions that simply cannot be captured in 180 to 240 days. And, as a facility gathers site data, it may discover conditions that warrant additional investigation. For example, delineation of a plume could require multiple well-installation mobilizations that extend beyond the regulatory timeframe provided in the rule.

That a facility may need to gather more data to support a selection of remedy does not make a characterization “insufficient” or an assessment of corrective measures “inaccurate,” as EPA seems to contend. Instead, the rule contemplates that, to the extent needed, additional site-specific data can be gathered following the assessment to support remedy selection. The remedy selection process—which must occur “as soon as feasible” but otherwise has no set timeframe in the rule—can take many months, if not several years, and requires a thorough and complete understanding of the nature and scope of the release that will often require a far more involved and lengthy investigation than that called for in the initial and time-limited release characterization obligation under § 257.95(g).

In short, release characterization is frequently a complex and time-consuming task depending on site-specific conditions. Thus, a facility’s compliance with §§ 257.95(g) and 257.96 should be based on those site-specific conditions and what can realistically be accomplished at that site during the regulatory timeframes provided. EPA’s Proposed Decisions recite what the Agency believes is necessary for site characterization and assessment, but its findings do not take into account the dual real-world and regulatory constraints facilities are facing on the ground implementing this rule.

USWAG further notes that its members have repeatedly asked EPA to provide examples of facilities that, in EPA’s view, have performed an adequate characterization of nature and extent and an adequate assessment of corrective measures. EPA has stated it cannot provide an example because it has yet to identify a facility that has done so. In other words, across an entire industry, EPA believes no facility has met the rule’s corrective action requirements. Either EPA promulgated a rule that no qualified professional could discern what actually is required—which is contrary to EPA’s assertion in the 2015 preamble that the Agency was setting forth specific enough standards that QPEs would know what is required—or EPA is misinterpreting its own regulations and requiring more than can be accomplished in the regulatory timeframes provided. This makes the rule either arbitrary and capricious as applied (it requires the impossible) or void for vagueness for failing to set a standard even one facility could understand.

¹¹⁴ See 40 C.F.R. § 257.96(a).

V. The CCR Rule's Remedial Objectives Do Not Preclude the Use of MNA Based on Any Specific Mechanisms

EPA proposes to find that the assessment of corrective measures undertaken by the Part A Applicants are not in compliance because there is a “lack of data to support conclusions about monitored natural attenuation (MNA).”¹¹⁵ The basis for this assertion appears to be that the Part A Applicants have not, in EPA’s view, adequately demonstrated the specific mechanisms of natural attenuation. This is necessary, EPA contends, because the rule requires facilities to “remove from the environment as much of the contaminated material as is feasible.”¹¹⁶ But EPA is misapplying this remedial objective.

The rule does not dictate what remedy is selected by the facility, nor does it preclude any particular remedy, including MNA based on any specific mechanism, as long as the facility can demonstrate that the remedy is capable of achieving the specific corrective action remedial objectives spelled out in the rule at 40 C.F.R. § 257.97(b). These objectives require that the remedy: (1) be protective of human health and the environment; (2) attain the groundwater protection standard; (3) control the source(s) of releases so as to reduce or eliminate, to the maximum extent feasible, further releases of constituents in appendix IV to this part into the environment; (4) remove from the environment as much of the contaminated material that was released from the CCR unit as is feasible, taking into account factors such as avoiding inappropriate disturbance of sensitive ecosystems; and (5) comply with standards for management of wastes as specified in § 257.98(d).¹¹⁷

Notably, the fourth objective identified above—and relied on by EPA to call into question the use of MNA—was added to the final rule specifically to address “remediation of contamination associated with a release, such as from a collapse or structural failure of a CCR unit.”¹¹⁸ This was an understandable response to dam failures, an extraordinary occurrence which was a major impetus behind EPA’s proposal of CCR regulations in the first place.¹¹⁹ Therefore, when finalizing the 2015 rule, EPA included this provision in the corrective action standard to apply to non-groundwater releases.¹²⁰ On the other hand, when there are groundwater exceedances of the type that could occur at any waste site, there is no precedent under decades of closures under RCRA to require source removal from groundwater across the board at the molecular level. Based on a technical evaluation, it may well be possible to achieve compliance with the groundwater protection standard without undertaking effort to that end. Thus, this remedial objective is not applicable to corrective action for groundwater releases where contaminants have leached from CCR but no “material” has been released.

¹¹⁵ Proposed Decision for Ottumwa Generating Station at 56.

¹¹⁶ See 40 C.F.R. § 257.97(b)(4).

¹¹⁷ 40 C.F.R. § 257.97(b).

¹¹⁸ 80 Fed. Reg. at 21407.

¹¹⁹ See *id.* at 21313.

¹²⁰ *Id.* at 21407.

This reading is confirmed by the fact that a separate remedial objective addresses the level to which groundwater must be remediated. The second objective requires that the remedy “attain the groundwater protection standard.”¹²¹ EPA’s interpretation that the fourth objective requires removal of as much of the constituents that were released from the unit as is feasible results in a different—and conflicting—standard than attaining the groundwater protection standard. In other words, EPA’s new feasibility standard could require clean up to below the groundwater standard or to above the groundwater standard depending on the feasibility at each individual site, which is not what EPA originally intended and is not what the rule requires.¹²²

VI. The Rule Does Not Preclude Beneficial Use of CCR for Closure

EPA proposes to find that CCR cannot be beneficially used for purposes of closing a unit subject to forced closure.¹²³ But this is an interpretive error regarding the regulatory prohibition on “placing CCR” in a unit required to close pursuant to 40 C.F.R. § 257.101 (*e.g.*, unlined CCR surface impoundments and CCR units failing location restrictions). Specifically, the Agency states that the term “placement” does not distinguish between the “disposal” of CCR and the “beneficial use” of CCR.¹²⁴ Thus, under EPA’s reading of the rule, an owner/operator is unable to use CCR during the closure process for units subject to forced closure, even if such use meets the rule’s beneficial use conditions.

As USWAG explained in 2018 and in its comments on EPA’s Part B Proposed rule—which EPA has never addressed—EPA’s reading of the word “placement” in 40 C.F.R. § 257.101 flies in the face of RCRA statutory text and the Agency’s historical use of that term over the past several decades.¹²⁵ Under RCRA, the term “disposal” encompasses the term “placing.”¹²⁶ While disposal can be (and is) broader than just placement of waste materials, placement can never be broader than the term “disposal.” Placement *is* disposal. The statute is

¹²¹ 40 C.F.R. § 257.97(b)(2).

¹²² Further evidence that MNA can be an appropriate method of corrective action is supported by historical remediation of groundwater contamination from surface impoundments. For example, the Illinois Environmental Protection Agency has approved groundwater corrective action plans that rely on MNA to address groundwater contamination associated with CCR surface impoundments in Illinois. *See, e.g.*, R2020-019, In re Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 Ill Adm. Code 845, Illinois Environmental Protection Agency’s First Supplement to IEPA’s Pre-filed Answers at p. 56 (Ill. Pollution Control Bd. Aug. 5, 2020) (available at <https://pcb.illinois.gov/documents/dsweb/Get/Document-102673>)

¹²³ EPA makes this assertion in response to the Part A Demonstration of Interstate Power & Light Company (“IPL”), *see* Proposed Decision for Ottumwa Generating Station at 35-36. But as noted in the comments of IPL, such beneficial use is not actually occurring at the site in question.

¹²⁴ 83 Fed. Reg. 11584, 11605 (Mar. 15, 2018).

¹²⁵ *See* USWAG Comments on Phase One Proposal (Docket ID No. EPA-HQ-OLEM-2017-0286-0001) at 93-94.

¹²⁶ 42 U.S.C. § 6903(3) (“The term ‘disposal’ means the discharge, deposit, injection, dumping, spilling, leaking, or *placing* of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters.”) (emphasis added).

crystal clear on this point, and, since the statute was enacted, EPA has always viewed placement as disposal (in contrast to the movement of waste within a disposal unit or area of contamination, which is not disposal).¹²⁷ Therefore, the suggestion that the prohibition on “placing” CCR in units subject to forced closure somehow encompasses the concept of “beneficial use,” which is distinct from disposal, is incorrect as a matter of law.

In addition to misconstruing the term “placing,” EPA’s interpretation is contrary to the plain language of the regulatory text in 40 C.F.R. § 257.50(g). That provision exempts all beneficial uses from all provisions of the CCR rule, irrespective of whether such uses can be viewed as “placement.” The rule provides that “this subpart [*i.e.*, the CCR rule] does not apply to practices that meet the definition of a beneficial use of CCR.”¹²⁸ Thus, if the use of CCR meets all applicable beneficial use conditions, no portion of the CCR regulatory program applies to such uses, including the prohibition on “placement” of CCR found in § 257.101. EPA’s interpretation reads an exception into this blanket exclusion—namely, that CCR cannot be beneficially used for units undergoing forced closure—that simply does not exist.

As USWAG has previously noted, where EPA wanted to create a regulatory bar to CCR beneficial use, it did so explicitly. When EPA promulgated the CCR rule in 2015, the Agency found that any use meeting the conditions of beneficial use would not pose a risk to human health or the environment, irrespective of where or how the CCR is being used.¹²⁹ In the only circumstance where EPA found a specific use of CCR to pose a risk to human health and the environment—placement in sand and gravel pits and quarries—it explicitly precluded such use from qualifying as a beneficial use under any circumstances.¹³⁰ Critically, no other uses are *de facto* precluded from meeting the beneficial use conditions. In fact, EPA recognized that waste stabilization—which necessarily occurs in a waste disposal unit such as a CCR surface impoundment subject to forced closure—can be a valid beneficial use so long as the conditions are met.¹³¹ In short, EPA’s regulatory interpretation of the prohibition on “placement” contradicts the plain language and structure of the CCR regulations, all of which make clear that there is no bar to using CCR to close units subject to forced closure provided such uses are done in accordance with the rule’s beneficial use criteria.

And because there is no ambiguity in the plain meaning or structure of the CCR regulations supporting this conclusion, EPA’s erroneous regulatory interpretation is not due any deference. As the Supreme Court recently made clear, the degree of deference owed to an agency in interpreting its own regulations (referred to as “*Auer* deference”) is limited solely to those circumstances where “a regulation is genuinely ambiguous,” which can only be found to be the

¹²⁷ See, e.g., National Oil and Hazardous Substances Pollution Contingency Plan, 55 Fed. Reg. 8666, 8759-60 (Mar. 8, 1990); Memorandum titled “Use of the Area of Contamination (AOC) Concept During RCRA Cleanups” from Michael Shapiro, Director, Office of Solid Waste, to RCRA Branch Chiefs and CERCLA Regional Managers (Mar. 13, 1996) (RCRA Online No. 11954).

¹²⁸ 40 C.F.R. § 257.50(g) (emphasis added).

¹²⁹ 80 Fed. Reg. at 21329-30, 21348-49.

¹³⁰ See *id.* at 21354.

¹³¹ *Id.* at 21353.

case after a court has exhausted all of its “traditional tools” of construction.¹³² Here, there is no ambiguity in the plain meaning of the regulations. The regulatory text in 40 C.F.R. § 257.50(g) could not be clearer: any uses of CCR that qualify as “beneficial use” are not subject to the CCR regulations in 40 C.F.R. Part 257, Subpart D. It is hard to imagine regulatory text being any more direct. As the Supreme Court emphasized, “[t]he regulation then just means what it means—and the court must give it effect, as the court would any law.”¹³³

Even assuming, for purposes of argument, that one could glean some ambiguity in the regulatory text, deference is appropriate only where the interpretive issue in question “in some way implicate[s]” EPA’s “substantive expertise.”¹³⁴ There is nothing here remotely implicating EPA’s substantive expertise; the issue is one solely of regulatory interpretation and is a matter that “fall[s] more naturally into a judge’s bailiwick.”¹³⁵ In short, no judicial deference is due to the Agency’s interpretation of the term “placing” in § 257.101 or to any Agency interpretation of the regulatory text in § 257.50(g) stating that “practices meet[ing] the definition of a beneficial use of CCR” are not subject to the CCR rule.

Given the above, EPA cannot find any facilities in noncompliance because of any plan to utilize CCR as beneficial use during the closure process.

VII. Self-Supporting Concrete Tanks Are Not CCR Surface Impoundments

EPA has expressed concern that a Part A Applicant’s plans to construct a concrete tank system appears, based on the information provided, to constitute the installation of a new CCR surface impoundment and therefore does not meet the requirements for a new CCR surface impoundment (e.g., installing a groundwater monitoring system).¹³⁶ It is USWAG’s understanding, however, that the Part A Applicant’s plans involve a concrete tank that is designed to be self-supporting (*i.e.*, meets the “parking lot test”). Thus, the tank system does not meet the definition of CCR surface impoundment and is not regulated by the rule.

The CCR rule defines CCR surface impoundment as “a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.”¹³⁷ EPA confirmed that tanks do not meet this definition when it presented its “Top 20 Questions on EPA’s CCR Final Rule” to USWAG members shortly following issuance of the final rule.¹³⁸ Specifically, EPA presented the following:

¹³² *Kisor*, 139 S. Ct. at 2405.

¹³³ *Id.* at 2415.

¹³⁴ *Id.* at 2417.

¹³⁵ *Id.* (citing cases where no judicial deference is due an agency in circumstances involving “the elucidation of a simple common-law property term” or interpretation of a judicial review provision).

¹³⁶ *See* Proposed Decision for Clifty Creek Power Station at 29-32.

¹³⁷ 40 C.F.R. § 257.53.

¹³⁸ A copy of this presentation is provided as Attachment C. This presentation was given by EPA staff to USWAG members during a conference on the CCR rule in April 2015.

7. Would a concrete basin be considered a surface impoundment under the CCR rule?

Answer: EPA guidance for tanks under the Agency's subtitle C hazardous waste program would be relevant to this situation. Namely, "[i]n making this assessment, the unit should be evaluated as if it were free standing, and filled to its design capacity with the material it is intended to hold. If the walls or shell of the unit alone provide sufficient structural support to maintain the structural integrity of the unit under these conditions, the unit can be considered a tank. Accordingly, if the unit is not capable of retaining its structural integrity without supporting earthen materials, it must be considered a surface impoundment." So, using the same logic, if the concrete basin were free standing, and filled to its design capacity with the material it is intended to hold and the walls or shell of the unit alone provide sufficient structural support to maintain the structural integrity of the unit under these conditions, the unit would likely not be considered to be a surface impoundment.¹³⁹

This guidance is confirmed by the plain language of the term surface impoundment, which does not include "tanks." A tank is not a "natural topographic depression," "diked area," or "man-made excavation" (even if a tank is placed into a man-made excavation, that would not make the tank itself an excavation).

Further, the regulatory definition of CCR surface impoundment generally parallels EPA's subtitle C definition of hazardous waste "surface impoundment."¹⁴⁰ EPA has consistently applied the "self-supporting" test to distinguish inground tanks from surface impoundments under Subtitle C. EPA cannot somehow interpret the term "surface impoundment" more broadly under Subtitle D than under Subtitle C.¹⁴¹

In fact, the proposed CCR rule included a definition of CCR surface impoundment that was identical to the definition of surface impoundment in the Subtitle C rules. EPA explained that the definition was intended to be the same as that in the co-proposed Subtitle C definition and the same as the existing definition of surface impoundment in § 257.2 (the criteria for solid waste disposal facilities).¹⁴² Only two changes were made to the final definition, neither of which were intended to broaden the scope of impoundments under the CCR rule to include tanks.

¹³⁹ Even assuming, for purposes of argument, that EPA's interpretation of "CCR surface impoundment" is not inconsistent with the regulatory text, regulated entities clearly did not have fair notice of EPA's new interpretation in light of this guidance. Thus, EPA cannot enforce this new position. *See* Section II.D. above.

¹⁴⁰ *See* 40 C.F.R. § 260.10.

¹⁴¹ The CCR rule does not contain a definition of "tank" because, unlike subtitle C, "tanks" (which are storage units) are not regulated under the CCR rule and there is therefore no reason for EPA to have defined this term under Part 257, Subpart D. Thus, the absence of the definition of "tank" in the CCR rule is of no consequence.

¹⁴² *See* 75 Fed. Reg. 35128, 35196 (June 21, 2010).

First, EPA acknowledged in the final rule that the proposed definition could be construed overbroadly as including units that only contain “truly ‘de minimis’ levels of CCR” and that the definition was intended only to encompass the type of units reviewed in EPA’s risk assessment and the damage cases underlying the rule.¹⁴³ Therefore, EPA amended the final definition, “*consistent with the proposed rule*” to only encompass units “designed to hold an accumulation of CCR and liquid,” so that it would not be read overbroadly to capture impoundments containing only *de minimis* amounts of CCR.¹⁴⁴ Given that the proposed definition clearly did not encompass tank systems in the first instance (indeed, to our knowledge, tank systems were not even evaluated in the risk assessment and damage cases) and that EPA simply amended the text so it would not be construed overbroadly, it is clear that this change was not intended to broaden the final definition to encompass tanks.

Second, EPA changed the definition of “dike” in the final rule to—unlike its counterpart in Subtitle C—to include *non-earthen* materials. This change was made in response to a comment from the Tennessee Department of Environment and Conservation, who pointed out that some impoundment dikes are constructed out of CCR. In response, EPA stated: “EPA acknowledges that dikes and berms are also constructed using CCR and *is revising the definition by not specifying that dikes are formed primarily of earthen materials*. The Agency believes this revision will encompass all CCR surface impoundments regardless of the material used to form or construct dikes.”¹⁴⁵ Thus, this change in the final definition of CCR surface impoundment is not to be read as expanding the scope of the term as originally proposed; rather it was made simply to clarify that diked areas, one category of a CCR surface impoundment, can be made of non-earthen materials, such as CCR.

USWAG notes that it is theoretically possible for a dike to be constructed out of concrete (though it is aware of no such CCR impoundments in existence). If that were to occur, the unit could fall within the definition of “CCR surface impoundment.” But a tank is not a “diked area” just because its walls are made of non-earthen materials. Self-supporting tank walls are not dikes.

Based on the foregoing, EPA clearly did not intend to expand the definition of surface impoundment in the CCR rule to include tank systems. Nor do we think EPA could have intended such a significant expansion in the scope of the final definition of CCR surface impoundment without at least discussing/justifying somewhere in the final rule such a material change from the proposed definition.¹⁴⁶

In short, tanks are not CCR surface impoundments as long as the structure is self-supporting. This is consistent with the CCR rule’s regulatory definition of CCR surface

¹⁴³ 80 Fed. Reg. at 21357.

¹⁴⁴ *Id.* (emphasis added).

¹⁴⁵ EPA, Comment Summary and Response Document (Docket No. EPA-HQ-RCRA-2009-0640), Vol. 3 at 74 (emphasis added).

¹⁴⁶ Expanding the definition of CCR surface impoundment to encompass tanks now clearly constitutes a legislative rule that requires EPA to go through notice and comment rulemaking. *See* Section II.E. above.

impoundment and with previous EPA guidance. Thus, if a tank system is designed to meet the self-supporting “parking lot test,” EPA cannot find this system to be a CCR surface impoundment.¹⁴⁷

VIII. The Cease Receipt Deadline Must Assess Grid Reliability and Not Cause Undue Prejudice

A. Ensuring Power Reliability Must Be the Predominate Factor in Establishing Cease Receipt Date

EPA has proposed that facilities receiving an incomplete determination on or a denial of their Part A applications will have 135 days to cease the receipt of wastes and initiate closure.¹⁴⁸ EPA reasons that this is the same time period the facilities would have had if EPA had denied the Part A Demonstrations immediately upon their submission on November 30, 2020 (the difference between the deadline and the regulatory cease receipt deadline of April 11, 2021 being 135 days).¹⁴⁹ EPA correctly points out that the regulatory text for issuing a final decision on a Part A Demonstration does not specify a cease receipt deadline for facilities that are denied a Part A extension. Instead, the rule provides EPA flexibility for determining the appropriate date, stating that all decisions issued under 40 C.F.R. § 257.103(f) will contain a facility’s deadline to cease receipt of waste.¹⁵⁰ But whatever timeframe the Agency provides for ceasing receipt of wastes, it must be reasonable and “tak[e] into account any genuine, demonstrated risks to grid reliability identified through the process established by [the relevant RTO].”¹⁵¹

USWAG agrees with EPA that any cease receipt deadline must balance EPA’s obligations under RCRA with any legitimate risks to grid reliability that may be caused by an accelerated time frame for the affected units to cease receipt of wastes. As the D.C. Circuit has previously acknowledged, compelling CCR units to cease receipt prematurely in a manner that would threaten grid reliability “would be disruptive.”¹⁵² This potential threat to grid reliability remains true today and must guide EPA’s determination of the appropriate time frame for facilities to cease the receipt of CCR and non-CCR wastestreams.

While USWAG appreciates EPA’s efforts to ensure that a cease receipt date will not affect power reliability, looking only at an RTO’s annual reserve margin may not be the

¹⁴⁷ Note also that, even if the tank system is not self-supporting, EPA could not find noncompliance with the rule because *the tank system has not yet been built*. As noted in Section I above, EPA cannot base noncompliance on future actions that have not yet occurred.

¹⁴⁸ Proposed Decision for Clifty Creek Power Station at 71. *See also* Proposed Decision for Gavin Plant at 81; Proposed Decision for Ottumwa Generating Station at 64.

¹⁴⁹ Proposed Decision for Clifty Creek Power Station at 71. *See also* Proposed Decision for Gavin Plant at 82; Proposed Decision for Ottumwa Generating Station at 64-65.

¹⁵⁰ 40 C.F.R. § 257.103(f)(3)(ii).

¹⁵¹ Proposed Decision for Clifty Creek Power Station at 74. *See also* Proposed Decision for Gavin Plant at 84; Proposed Decision for Ottumwa Generating Station at 67.

¹⁵² *See* 85 Fed. Reg. at 53522.

appropriate measure for making this assessment.¹⁵³ Because reliability assessments are complex and depend on a number of factors specific to a particular RTO—a fact EPA appears to acknowledge—EPA should work directly with the affected RTO to address these potential issues. To this point, USWAG’s points to the comments filed by the Midcontinent Independent System Operator (“MISO”) on the Part A demonstrations that EPA has determined are incomplete and/or ineligible. In those dockets, EPA sought comment on the same 135-day cease receipt timeframe and related reliability issues as presented in the Proposed Decisions, so MISO’s comments are particularly significant here as well. In response to EPA’s evaluation only of the annual reserve margin, MISO cautions that:

The interim decisions include a short paragraph that concludes that ‘MISO currently has excess generating capacity, and consequently, an adequate reserve margin.’ Based on the most currently available information, however, MISO expects there is very little excess generating capacity (or none at all) to cover demand for electricity, plus the required reserve margin, in the immediate future.

For a variety of reasons, evaluation based primarily on MISO’s regionwide reserve margin does not sufficiently portray the adequacy of generation resources to provide services to customers. For example, MISO has experienced an increasing number of hours during the year when supply is barely adequate to cover demand even during non-peak seasons and times of the day. These events, which place MISO in near-emergency or emergency conditions, are the result of the changing resource profile, including a significant number of thermal plant retirements and related increases in planned and unplanned outages. Challenges also arise from an increasing number of extreme weather events that increase demand, adversely affect generator performance, and may limit the ability of neighboring systems to help address a situation within the MISO footprint.¹⁵⁴

MISO also cites to a NERC Long Term Assessment underscoring the “false sense of comfort” of relying solely on reserve margins and capacity-based estimates in evaluating power reliability issues:

As stated by NERC in its 2020 Long Term Reliability Assessment: The addition of variable energy resources, primarily wind and solar, and the retirement of conventional generation is fundamentally changing how the [Bulk Power System] is planned and operated. Resource planners must consider greater uncertainty across the resource fleet as well as uncertainty in electricity demand that is increasingly being effected {sic} by demand-side resources. *As a result, reserve*

¹⁵³ See Proposed Decision for Clifty Creek Power Station at 74-77. See also Proposed Decision for Gavin Plant at 84-87; Proposed Decision for Ottumwa Generating Station at 67-70.

¹⁵⁴ MISO Comments at 5-6 in Dockets EPA-HQ-OLEM-2021-0588, -0589, -0592 -0593, and -0594 (internal citations omitted).

*margins and capacity-based estimates can give a false sense of comfort and need to be supplemented with energy adequacy assessments.*¹⁵⁵

MISO concludes that “[t]he loss of any significant portion of the 3.1 GW from the five generators considered in the above-captioned cases would push resource adequacy coverage of regional demands into dangerous territory.”¹⁵⁶ While MISO’s concerns are in response to the loss of power generation from the four Part A Demonstrations that EPA has determined are incomplete or ineligible, the same concerns and questions would appear to be directly applicable to EPA’s Proposed Decisions in the instant dockets.

Compounding this concern is MISO’s caution that the simultaneous withdrawal of service by all five generators, as contemplated by EPA’s proposed timeframe, would have cumulative impacts that must be examined beyond just the localized impacts. As MISO explains, “[t]his is especially true since the proposed decisions could result in withdrawn generation for plants close time proximity to one another rather than the more normal situation where generator outages result from individual decisions by their owners.”¹⁵⁷ Again, the same concerns are present in the Proposed Decisions if all of the Part A Applicants are required to simultaneously cease power generation under EPA’s proposed 135-day “cease receipt” deadline. Given the above, USWAG reiterates its request that EPA work directly with the affected RTO to address these potential issues.

Further, while USWAG also appreciates EPA’s recognition that time must be given for affected facilities to cease receipt after issuance of a final denial, it is unclear whether 135 days will always be enough time to do so without adversely impacting plant operations. MISO notes that 135 days generally should be sufficient “to make an initial assessment of whether reliability issues are present due to a suspension in service by a generator if the permutations in assumption are not overly involved.”¹⁵⁸ However, MISO explains that if reliability issues are reported to the generator, EPA should allow MISO to evaluate “whether alternatives exist while permitting the generator to remain in service (i.e., determining whether the generator needs to be placed on a contract for continued operation as a last-resort measure).”¹⁵⁹

EPA appears to recognize this uncertainty and has proposed an automatic extension of the 135-day cease receipt deadline if the relevant RTO denies an outage request by the affected facility based on a “formal reliability assessment(s) [] that established that the temporary outage of the boiler during the period needed to complete construction of alternative disposal capacity

¹⁵⁵ *Id.* at 6, n. 11, (citing NERC 2020 Long Term Reliability Assessment (Dec. 2020) at 6 (emphasis added), publicly available at: https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2020.pdf).

¹⁵⁶ *Id.* at 16.

¹⁵⁷ *Id.* at 3.

¹⁵⁸ *Id.* at 12.

¹⁵⁹ *Id.* at 10.

would have an adverse impact on reliability.”¹⁶⁰ If this is the case, EPA proposes that, “without additional notice and comment, it could authorize continued use of the impoundment for either the amount of time provided in an alternative schedule proposed by [the RTO] or the amount of time EPA determines is needed to complete construction of alternative disposal capacity based on its review of the Demonstration, whichever is shorter.”¹⁶¹

As noted above, USWAG agrees with EPA that it must defer to the affected RTO with respect as to whether “genuine, demonstrated risks to grid reliability” would arise if the affected facility seeks a scheduled outage. USWAG is concerned, however, that EPA has not made clear what it means by “formal reliability assessment(s)” and “finding of technical infeasibility for demonstrated reliability concerns.” It is possible that an RTO could raise genuine reliability concerns over a planned outage of a facility without making what EPA describes as “formal reliability assessment” and that, absent such an assessment, EPA may not extend the cease receipt deadline of the affected facility.¹⁶² In this case, USWAG is concerned that EPA inappropriately could be supplanting the RTO’s technical decision in a manner that, even without a formal reliability assessment, could still be based on reliability concerns. The way to address these concerns is for EPA to be more explicit about what the Agency would consider an appropriate “formal reliability assessment” or a “finding of technical infeasibility.” In the alternative, EPA could state that it will defer to the reasonable judgment of the RTO.

Furthermore, whether 135 days is enough time for an RTO to assess reliability concerns will turn on a host of factors unknown at this time, including, among others, the time of year and associated power generator needs (*e.g.*, reliability evaluations may be different in the summer months, during the so-called “no fly zones,” versus the winter months). As MISO explains in evaluating capacity issues related to generator outages, “[i]n addition to the regional needs of the transmission system, the ability to meet peak demand depends upon season factors in the supply and demand for electricity, which is important for scheduling downtime for generators that is needed or maintenance, repair and other reasons.”¹⁶³ But EPA has not identified the date by which it expects to issue final decisions for the affected facilities and therefore it is not possible at this time to predict with any degree of certainty the factors and associated timeframes that an RTO may have to assess in evaluating reliability concerns.

Finally, EPA must also take into account the fact that certain non-CCR wastestreams at some facilities are generated even when the boilers are not running (*e.g.*, leachate, coal pile runoff, etc.). In these circumstances, EPA must work with the facilities to ensure that enough time is provided for these wastestreams to be rerouted, as EPA cannot compel the impossible.

¹⁶⁰ Proposed Decision for Clifty Creek Power Station at 75. *See also* Proposed Decision for Gavin Plant at 86; Proposed Decision for Ottumwa Generating Station at 69.

¹⁶¹ Proposed Decision for Clifty Creek Power Station at 76. *See also* Proposed Decision for Gavin Plant at 86; Proposed Decision for Ottumwa Generating Station at 69.

¹⁶² *See* Proposed Decision for Clifty Creek Power Station at 71-77. *See also* Proposed Decision for Gavin Plant at 81-87; Proposed Decision for Ottumwa Generating Station at 64-70.

¹⁶³ MISO Comments at 12.

B. The Part A Applicants Are Being Unfairly Prejudiced with An Accelerated Cease Receipt Deadline

Solely because the Part A Applicants are included in EPA's Proposed Decisions out of the universe of 51 complete Part A demonstrations received by EPA,¹⁶⁴ they are being unfairly subject to a potential cease receipt deadline that is far shorter than those that will ultimately be imposed under final denials issued at a later point in time. This is because the proposed 135-day cease receipt deadline for denied Part A Demonstrations begins to run on the date of the Agency's final decision. Therefore, assuming for purposes of argument, that EPA issues its final decision denying some or all of the Part A Demonstrations on May 1, 2022, the final cease receipt deadline would be 135 days later, on September 12, 2022. This deadline, of course, would only apply to the Part A Applicants.

It is unclear at this time what the cease receipt dates will be for any future final denials of the complete Part A demonstrations still pending before the Agency, as EPA does not appear to have a set schedule for issuing the next round of proposed decisions or a date for issuing final decisions on all the complete Part A demonstrations. What is clear, however, is that the cease receipt deadline for any future final denials will be further in time than that proposed to be imposed on the Part A Applicants solely because of the apparent randomness of EPA's internal review schedule. Indeed, this undue prejudice will necessarily be the case *for any recipient* of a final Part A demonstration denial that is issued prior to the final round of Part A decisions, as the last round of denials will have the latest in time cease receipt deadline. Plainly, the deadline for when a facility must cease receipt of waste in the affect CCR impoundments has profound impacts on the operation of a power plant, including strategic operational and capital investment plans necessary to meet continued energy supply demands. Such arbitrary imposition by EPA of different cease receipt deadlines with such consequential operational impacts on the Part A Applicants, based solely on the Agency's own internal scheduling decisions and no reasoned explanation as to why some facilities are "first in line" for such decisions, is the hallmark of arbitrary and capricious decision-making.

It is axiomatic that "[a]n agency must treat similar cases in a similar manner unless it can provide a legitimate reason for failing to do so."¹⁶⁵ Indeed, it is black letter law that a "fundamental norm of administrative procedure requires an agency to treat like cases alike,"¹⁶⁶ and an agency "must provide an adequate explanation to justify treating similarly situated parties differently."¹⁶⁷ Failure to do so is arbitrary and capricious in violation of the APA. Here, all the Part A Applicants submitted their demonstrations pursuant to EPA's procedures and regulatory timeline; put another way, they are all similarly situated, yet EPA is providing no explanation, let alone an adequate explanation, as to why similarly situated Part A submitters will be subject to different future dates for the cease receipt of wastes.

¹⁶⁴ USWAG understands that one complete application has been withdrawn.

¹⁶⁵ *Indep. Petroleum Ass'n of Am. v. Babbitt*, 92 F.3d 1248, 1258 (D.C. Cir. 1996).

¹⁶⁶ *Westar Energy, Inc. v. Federal Energy Regulatory Com'n*, 473 F.3d 1239, 1241 (D.C. Cir. 2007).

¹⁶⁷ *Burlington Northern and Santa Fe Ry. Co. v. Surface Transp. Bd.*, 403 F.3d 771, 776 (D.C. Cir. 2005).

As noted above, an order by EPA to cease the receipt of wastes in the subject CCR impoundments has significant real-world consequences on the facility and those subject to the first-in-time cease receipt dates are being differently and unfairly by EPA with no reasoned justification by the Agency. The Part A Applicants cannot be subject to such an arbitrary and capricious decision-making process by EPA. For this reason alone, EPA's Proposed Denials of the Part A Demonstrations cannot stand. Until the Agency determines a method for treating all the Part A submitters alike in a fair and reasoned basis, the cease receipt deadline should continue to be tolled for the Part A Applicants. The burden is on EPA, not the Part A Applicants, to adhere to the APA. EPA has not carried that burden here.

IX. EPA Has Authority to Issue Conditional Approvals

EPA proposes in one decision to conditionally approve the extension request based on its finding that the facility could provide additional information or take additional actions to address any identified noncompliance with the rule.¹⁶⁸ To qualify for the conditional approval, the facility would have to meet a number of conditions within identified timeframes set by EPA.¹⁶⁹ If it fails to do so, the approval would be automatically revoked and the facility would have 135-days to cease receipt of waste.¹⁷⁰ EPA requests comment on this conditional approval approach.

USWAG supports EPA's use of conditional approvals and urges the Agency to utilize this same approach for the other Part A Demonstrations and for other appropriate Part A applications in the future. Given that the Part A rule explicitly allows EPA to request additional information from Part A submitters in evaluating the submissions,¹⁷¹ directing facilities to supplement their compliance demonstrations as a condition of final approval is fully within the scope of the rule, especially where any alleged shortcomings can be remedied within a defined timeframe. This is particularly the case where a finding of noncompliance is based on new agency positions for which the entity did not have fair notice. Facilities should be given the opportunity to address EPA's concerns in an adequate amount of time.

¹⁶⁸ Proposed Decision: Conditional Approval of an Alternative Closure Deadline for H. L. Spurlock Power Station, Maysville, Kentucky (Docket ID No. EPA-HQ-OLEM-2021-0595-0002).

¹⁶⁹ Proposed Decision for Spurlock Power Station at 68-71.

¹⁷⁰ Proposed Decision for Spurlock Power Station at 71-72.

¹⁷¹ 40 C.F.R. § 257.103(f)(3)(ii).

Comments of
The Utility Solid Waste Activities Group on
CCR Part A Rule Demonstrations:

Proposed Decision: Proposed Denial of Alternative Closure Deadline for
Clifty Creek Power Station
Docket ID No. EPA-HQ-OLEM-2021-0587-0023

Proposed Decision: Proposed Denial of Alternative Closure Deadline for
General James M. Gavin Plant
Docket ID No. EPA-HQ-OLEM-2021-0590-0002

Proposed Decision: Conditional Approval of an Alternative Closure Deadline for
H. L. Spurlock Power Station, Maysville, Kentucky
Docket ID No. EPA-HQ-OLEM-2021-0595-0002

Proposed Decision: Proposed Denial of Alternative Closure Deadline for
Ottumwa Generating Station
Docket ID No. EPA-HQ-OLEM-2021-0593-0002

Exhibit A

Submitted to
The United States
Environmental Protection Agency

March 25, 2022

March 20, 2017

Via Email

Barnes Johnson
Director, Office of Resource Conservation & Recovery
United States Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, D.C. 20460-0001
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Re: Closure-in-Place Option under the CCR Rule

Dear Barnes:

I write because it has come to my attention that certain environmental organizations are erroneously alleging that the performance standard for the closure-in-place option under the coal combustion residuals (“CCR”) rule cannot be achieved when CCR in the impoundment undergoing closure is in contact with groundwater. This position is not only incorrect from a technical perspective, but is flatly inconsistent with the plain language of the regulations and prior EPA pronouncements that both of the rule’s closure options are equally protective and that there are no particular set of circumstances that mandates the use of one option over the other. Nonetheless, environmental organizations are alleging that, in certain circumstances, the rule effectively compels the use of the closure-by-removal option, which as you know can have adverse off-site environmental impacts and can be far more costly than the closure-in-place option.

As EPA contemplated in developing the rule’s Regulatory Impact Analysis, and as the Agency stated explicitly in the preamble to the final rule, EPA fully expects most owners/operators to select the closure-in-place option when closing their CCR surface impoundments. Therefore, USWAG intends to remain vigilant in responding to the misleading arguments being advanced by environmental organizations attempting to limit the use of the closure-in-place option and seeking to compel facilities to close-by-removal. Set forth below are arguments rebutting environmental groups’ assertions that the closure-in-place option cannot be used in circumstances where CCR is in contact with groundwater.

Overview of CCR Rule Closure Options

The CCR rule authorizes owners/operators of CCR surface impoundments to close their impoundments by either (1) leaving the CCR in place after dewatering and/or stabilizing the wastes sufficient to support a final cover system and conducting 30-years of post-closure groundwater monitoring (referred to as “closure-in-place”) or (2) removing the CCR and decontaminating the CCR unit and releases from the unit (referred to as “closure-by-removal”). Impoundments that undergo closure-by-removal are exempt from undertaking post-closure care.

The CCR rule does not mandate the use of the closure-by-removal option in any particular set of circumstances, but, rather, leaves to the owner/operator the choice of using either option. Indeed, the closure-in-place option specifically contemplates that CCR will remain in the unit and that any potential releases from the unit following closure—including any releases from CCR in contact with groundwater—will be addressed, as necessary, through the rule’s post-closure care groundwater monitoring and corrective action requirements. Therefore, the suggestion by environmental organizations that the closure-by-removal option must be used when CCR is in contact with groundwater water is inconsistent with the plain text and structure of the CCR rule.

1. The Closure-in-Place & Closure-by-Removal Performance Standards

The CCR rule sets forth a number of requirements that must be met when the closure-in-place option is selected, including a closure-in-place performance standard directing that the impoundment be closed in a manner that will:

- (i) Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;
- (ii) Preclude the probability of future impoundment of water, sediment, or slurry;
- (iii) Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;
- (iv) Minimize the need for further maintenance of the CCR unit; and
- (v) Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

40 C.F.R. § 257.102(d)(1).

In addition, free liquids in the impoundment must be eliminated by either removing liquid wastes or solidifying the remaining wastes and waste residues so that the remaining wastes are stabilized sufficiently to support a final cover system. *Id.* at § 257.102(d)(2). Further, a final cover system must be installed over the closed unit meeting specified design standards that minimize infiltration and erosion. *Id.* at § 257.102(d)(3).

Because CCR remains in the impoundment when closure-in-place is completed, the CCR rule also requires that the owner/operator continue to maintain the unit’s groundwater monitoring program (under 40 C.F.R. §§ 257.90 through 257.98) for not less than 30-years (referred to as “post-closure care groundwater monitoring”), in addition to continuing to maintain the effectiveness and integrity of the unit’s final cover system for 30-years. *See* 40 C.F.R. § 257.104(b)-(c). If at any time during this 30-year period a release from CCR remaining in the unit is confirmed at a statistically significant level above an applicable groundwater protection standard, the owner/operator must initiate and undertake corrective action to address the release. Corrective action and groundwater monitoring must continue until the applicable groundwater protection standards are met, even if this time period extends beyond the 30-year post-closure care period. *Id.* at §§257.98(c), 257.104(c)(2).

In contrast, the closure-by-removal performance standard requires removal of all CCR from the unit and decontamination of all areas affected by releases of CCR from the unit. 40 C.F.R. § 257.102(c). Closure is complete when the CCR contamination is removed and groundwater monitoring concentrations do not exceed applicable groundwater protection standards. *Id.* Because the closure-by-removal option requires removal of all CCR from the unit and remediation of CCR releases from the unit, impoundments closed under this option are exempt from post-closure care requirements (*id.* at § 257.104(a)(2)) and are not subject to further regulation under the CCR rule.

EPA has made clear that if the relevant performance standard is met, both closure options are equally protective and that the rule does not mandate the use of one option over the other. However, because the costs of closure-by-removal (commonly referred to by EPA as “clean closure”) can be far greater than closure-in-place, the Agency expects most facilities to close CCR surface impoundments under the closure-in-place option. EPA stated in the final rule that “most facilities will likely *not* clean close their CCR units given the expense and difficulty of such an operation.” 80 Fed. Reg. 21302, 21412 (April 17, 2015) (emphasis added). This conclusion is consistent with the assumptions in the Regulatory Impact Analysis underlying the rule where EPA “assume[d] that *all* surface impoundments undergo closure as landfills [*i.e.*, utilize the closure-in-place option], meaning that surface impoundments are not excavated [*i.e.*, do not utilize the closure-by-removal option], nor is their ash trucked off site.”¹ Thus, EPA clearly contemplates most owner/operators closing their impoundments under the closure-in-place option. Nonetheless, the Agency included the closure-by-removal option in the rule because EPA believed it is “generally preferable from the standpoint of land re-use and redevelopment” and therefore “explicitly identified this as an acceptable means of closing a unit.” 80 Fed. Reg. at 21412. Critically, however, EPA explained that “both methods of closure (*i.e.*, clean closure and closure with waste in place) can be equally protective, provided they are conducted properly.” *Id.* EPA also made clear that “[t]he final rule allows the owner or operator to determine whether clean closure or closure with the waste in place is appropriate for their particular unit.” *Id.*

Thus, nothing in the plain text of the CCR rule mandates that a particular closure option be employed in any particular set of circumstances. In fact, EPA explicitly states that it “did not propose to require clean closure *nor to establish restrictions on the situations in which clean closure would be appropriate.*” *Id.* at 21412 (emphasis added). Nonetheless, environmental groups contend that the closure-by-removal option *must* be selected in circumstances where CCR is in contact with the groundwater. This argument is without merit and, among other things, misreads the plain text and structure of the CCR rule.

2. Environmental Group’s Position is at Odds with the Plain Language and Structure of the CCR Rule

The notion that the closure-by-removal option must be used in circumstances where CCR is in contact with groundwater was raised recently in a December 21, 2016, letter from the

¹ Regulatory Impact Analysis,” EPA’s 2015 RCRA Final Rule Regulating Coal Combustion Residual (CCR) Landfills and Surface Impoundments at Coal-Fired Electric Utility Power Plants,” December 2014, at 4-24 (emphasis added).

Southern Environmental Law Center (“SELC”) to the Tennessee Department of Environment and Conservation alleging that the Tennessee Valley Authority cannot close certain of its surface impoundments under the closure-in-place option because of the presence of CCR in groundwater. In these circumstances, SELC argued the closure-in-place performance standard could not be met because it:

will not control or minimize releases “to the maximum extent feasible,” as required by the Rule, because the waste will be left perpetually submerged in groundwater that is hydrologically connected to the nearby creek and Cumberland River. Nor will the proposal minimize or eliminate “the infiltration of liquids into the waste.” In fact, it is obvious that water will constantly enter and exit the saturated ash, leaching contaminants into the environment, indefinitely.

SELC Letter at 13-14. While it is difficult to ascertain the precise logic of this position, SELC appears to be arguing that the closure-in-place performance standard to control or minimize infiltration into the unit cannot be met as long as CCR in the impoundment is in contact with the groundwater. This position misreads the plain meaning and structure of the CCR rule and effectively reads into the CCR rule a restriction on using the closure-in-place option when the rule says nothing of the sort. In fact, the CCR rule expressly contemplates CCR remaining in place under the closure-in-place option, with no distinction regarding whether or not the CCR is in contact with groundwater.

Further, while EPA has made clear the CCR rule allows an owner or operator to determine which closure option is appropriate for its particular units, a recent EPA guidance document has caused some confusion because it could be construed as stating that the closure-by-removal option should be employed when CCR is in contact with the groundwater. Specifically, when discussing the performance standards for the rule’s two closure options, the Agency explained that:

[w]hether any particular unit or facility can meet the performance standards for closure with waste in place is a site-specific determination that will depend on a number of factual and engineering considerations, such as the hydrogeology of the site, the engineering of the unit, and the kinds of engineering measures available. For example, if a small corner of a unit is submerged in the underlying aquifer, a facility might be able to meet the performance standard for closure with waste in place for the majority of the unit, by “clean closing” the submerged portion of the unit, and installing the necessary engineering measures to ensure that the rest of the unit meets the [closure-in-place] performance standards in § 257.102(d).²

There have been concerns that this example implies that a CCR surface impoundment may not be able to meet the CCR rule’s closure-in-place performance standard where a portion

² This example was provided by EPA in a “Question and Answer” document released by EPA in December 2016 discussing the relationship between the CCR rule and EPA’s Clean Water Act NPDES requirements.

of the CCR in the impoundment is “submerged in the underlying aquifer,” and that in such circumstances this portion of the impoundment must be closed through the closure-by-removal option. While closing an impoundment under the closure-by-removal option in these circumstances may be an option, EPA also has made clear that the CCR rule does not mandate the use of either closure option in any particular set of circumstances. 80 Fed. Reg. at 21412. Indeed, there may be circumstances, given the regulatory timelines for closure under the rule, where it may not be possible to meet the closure-by-removal standard within the rule’s prescribed timeframes. *See* 40 C.F.R. § 257.102(f)(1)-(2). This could be due to any number of site-specific geological or unit-specific factors, including, for example, the volume of CCR in the unit and the time necessary to safely and effectively dewater and excavate the CCR from the unit, as required under the closure-by-removal option. In these cases, the owner/operator would, as a practical matter, have little option but to select the closure-in-place option to ensure compliance with the rule’s prescribed closure deadlines. Therefore, EPA’s example should not be improperly construed as compelling use of the closure-by-removal option when CCR in the unit is in contact with groundwater.

SELCO, however, is doing just that by arguing that the closure-in-place performance standard cannot be met when CCR is in contact with groundwater. This argument is fundamentally flawed because it reads into the rule a limitation on the use of the closure-in-place option that does not exist and ignores the rule’s post-closure care program that works in conjunction with the closure-in-place option to address any potential contamination from CCR that remains in place. This position also is directly at odds with EPA’s position that the rule does not mandate use of a particular closure method and that the Agency in fact expects the majority of CCR surface impoundments to be closed under the closure-in-place option. To pinpoint the flaws in SELCO’s position, it is important to understand how the rule’s two closure options address CCR that may be in contact with groundwater at the time of closure.

The CCR rule is clear that if an impoundment undergoing closure has CCR in contact with groundwater, the CCR in the groundwater must be removed, as necessary, *only if* the owner/operator chooses to utilize the closure-by-removal option. This option requires removal of all wastes from the unit and the decontamination of any areas affected by releases from the unit, including the removal or decontamination “of the underlying and surrounding soils and flushing, pumping, and/or treating the aquifer.” *Id.* at 21412. EPA “interprets the term ‘soil’ broadly to include both unsaturated soils and soils containing groundwater.” *Id.* (emphasis added). Therefore, CCR in contact with groundwater must be addressed as a condition of closing-by-removal.

If a unit closes under this standard, the sources of potential contamination are removed and the unit is not subject to post-closure care. EPA included the exemption from post-closure care to incentivize owners and operators to “clean close” their units. *Id.* at 21412. The fact that EPA offered this exemption as an incentive for units closing-by-removal underscores that this closure method *is an option* and not mandatory under any particular set of circumstances, including where CCR is in contact with groundwater.

On the other hand, the closure-in-place option is specifically designed to allow for closure with wastes remaining in the closed unit, including in the unsaturated soils and soils containing groundwater (hence the name “Closure performance standard when leaving CCR in place”). 40 C.F.R. § 257.102(d). This is precisely why units that close-in-place are subject to a

minimum of 30 years of post-closure care groundwater monitoring to monitor and undertake corrective action, as necessary, if any releases are confirmed from the closed unit above the applicable groundwater protection standards. EPA included the post-closure care requirements in the rule precisely because it recognized that controls were necessary “to ensure that there would be no reasonable probability of adverse effect from the wastes that remain after a CCR unit has closed.” 80 Fed. Reg. at 21409. If CCR in an impoundment undergoing closure-in-place is in contact with groundwater, releases from the unit—including any potential releases from CCR contained in groundwater—will be detected by the unit’s groundwater monitoring system and addressed, as necessary, through the rule’s corrective action program. The critical point is that this closure option recognizes that CCR may remain in contact with groundwater when closure is complete, and that releases from such CCR will be addressed, as necessary, by virtue of the rule’s post-closure care requirements.³

In short, owners and operators of CCR units have two equally acceptable closure options under the rule with respect to addressing CCR that may be in contact with groundwater: either excavate the CCR and remediate other areas of related contamination, including the CCR in contact with groundwater, demonstrate attainment of the applicable groundwater protection standard, and essentially “walk away” from the unit; or close with CCR in place, conduct no less than 30 years of post-closure care, and, if required, implement corrective action measures if CCR releases are detected, including those from CCR in contact with groundwater, until such time as the rule’s groundwater protection standards are met. In either case, if CCR is in contact with the groundwater at the time of closure, both closure options will ensure that any releases from the CCR will not exceed the rule’s groundwater protection standards.

3. Environmental Group’s Argument Misreads the Closure-in-Place Performance Standard

Apart from ignoring the fundamental structure of the CCR rule, SELC’s position misreads the purpose and plain text of the closure-in-place performance standard, which provides that facilities utilizing the closure-in-place option:

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

40 C.F.R. § 257.102(d)(i) (emphasis added). SELC reads this standard as somehow precluding any CCR in the closed unit from contacting groundwater at the completion of closure. The regulatory text, however, says nothing of the sort, and instead speaks to preventing to the “maximum extent feasible” the post-closure infiltration of liquids *into the waste* (i.e., through the final cover system) to prevent releases of CCR or contaminated runoff “to the ground or surface waters or the atmosphere.” In other words the performance standard is speaking to the performance of the final cover system—which is the central feature of the closure-in-place option (*see id.* at § 257.102(d)(3))—and its effectiveness in preventing liquids from infiltrating

³ In fact, in preparing its risk assessment underlying the CCR rule, EPA specifically considered the potential implication of groundwater-saturated CCR and concluded that “this uncertainty is unlikely to have an appreciable effect” on its risk assessment. Human and Ecological Risk Assessment of Coal Combustion Residuals, EPA 5-10 to 5-11 (December 2014). Thus, despite specifically acknowledging this groundwater scenario, EPA still concluded in the final rule that both closure options, if properly performed, were equally protective.

the cover and causing CCR contained in the closed unit from being released or leaching to the ground, surface waters or the atmosphere.

Given this, it is not surprising the standard does not mention groundwater, let alone suggest that the standard cannot be met if CCR is in contact with groundwater. Indeed, when EPA refers to the term groundwater elsewhere in the rule, it specifically uses the single word – “groundwater.”⁴ Here, the rule’s use of the definite article “the” before “ground” only underscores that the standard is referring to releases—such as contaminated runoff from the cover system—to the ground. This makes complete sense given, as explained above, that any releases to “groundwater” from CCR remaining in the closed unit are addressed, as necessary during the minimum of 30-years of post-closure care groundwater monitoring and associated corrective action. Not only does the performance standard not mention groundwater, but SELC’s argument ignores the rule’s express reliance on the post-closure care groundwater monitoring and corrective action program to address potential releases to “groundwater” from units that close-in-place.

That the closure-in-place performance standard in 40 C.F.R. § 257.102(d)(i) is addressing the prevention of liquids through the unit’s cover system—as opposed to addressing CCR in contact with groundwater—is further confirmed by the related regulatory text detailing how this performance standard is to be met. First, the written closure plan for impoundments closing-in-place requires a “description of the final cover system” and “*how the final cover system will achieve the performance standards specified in paragraph (d) [i.e., the closure-in-place performance standard].*” 40 C.F.R. 257.102(b)(1)(iii) (emphasis added). Thus, the rule on its face ties achievement of the closure-in-place performance standard to the proper installation of the final cover system. Second, the rule directs that the final cover system meet a specified “permeability” standard and ensure that “[t]he *infiltration of liquids* through the closed CCR unit must be minimized by the use of an infiltration layer” meeting specified criteria. *Id.* at § 257.102(d)(3)(A)-(B) (emphasis added). Here too, the regulatory text makes clear that the performance standard’s direction to prevent “the post-closure infiltration of liquids into the waste” is tied directly to the implementation of a final cover system meeting specified permeability criteria and the use of an infiltration system designed to minimize such infiltration.

EPA itself in the preamble to the final rule confirms that the closure-in-place performance standard is tied to the performance of the final cover system:

To address the commenters’ concerns that the final cover system may not function effectively as designed over the long term under certain circumstances, the rule also includes a performance standard that any final cover system must meet. . . . The final rule requires that any final cover system *control, minimize or eliminate, to the maximum extent practicable*, post-closure infiltration of liquids into the waste and releases of leachate (in addition to CCR or contaminated runoff) to the ground or surface waters. Thus, a facility must ensure that in designing a final cover for a CCR unit they account for any condition that may cause the final cover system not to perform as designed. Under this performance

⁴ In fact, “groundwater” is a defined term in the CCR rule. See 40 C.F.R. § 257.53.

standard [i.e., the closure-in-place performance standard], if the cover system results in liquids infiltration or releases of leachate from the CCR unit, the final cover would not be an appropriate cover.

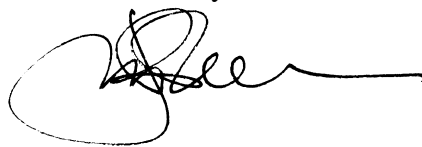
80 Fed. Reg. at 21413 (emphasis added). EPA's explanation references the precise regulatory text used in the rule's closure-in-place performance standard, underscoring that the standard is referring to preventing the penetration of liquids through the cover system and achievement of this standard through the implementation of a proper cover system. Indeed, the proposed CCR rule would have required, *inter alia*, that the final cover for all CCR units "be designed to minimize, over the long-term, the migration of liquids through the closed impoundment . . . so that the cover's integrity is maintained." 75 Fed. Reg. 35127, 35208 (June 21, 2010). Thus, in both the proposed and final rules, the text of the closure-in-place performance standard speaks to preventing the infiltration of liquids through the final cover system through the implementation of a specified cover system, not to the remediation of CCR that may be in contact with the groundwater.

Even assuming, for purposes of argument, the performance standard could be read as extending beyond the effectiveness of the final cover system to encompass CCR in contact with groundwater, the standard does not require the total elimination of CCR from the groundwater as SELC contends. SELC's position ignores the plain language in the standard providing that the "infiltration of liquids into the waste and releases of CCR" be "[c]ontrol[ed], minimize[d] or eliminate[d], to the maximum extent feasible." 40 C.F.R. § 257.102(d)(i) (emphasis added.) Controlling or minimizing, to the maximum extent feasible, releases of CCR from the unit also meets the standard and could be achieved in any number of ways. Thus, even under SELC's incorrect reading of the closure-in-place performance standard, the standard does not mandate the complete removal of CCR that may be in contact with groundwater.

* * * * *

As the above discussion makes clear, nothing in the CCR rule mandates the use of the closure-by-removal option in any particular set of circumstances, but rather leaves to the owner/operator the choice of using either option. The closure-in-place option specifically contemplates that CCR will remain in the unit and that any potential releases from the unit following closure—including any releases from CCR in contact with groundwater—will be addressed, as necessary, through the rule's post-closure care groundwater monitoring and corrective action requirements. The suggestion by environmental organizations that the closure-by-removal option must be used when CCR is in contact with groundwater water is inconsistent with the plain text and structure of the rule.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Roewer", with a long horizontal flourish extending to the right.

James Roewer
USWAG Executive Director

Comments of
The Utility Solid Waste Activities Group on
CCR Part A Rule Demonstrations:

Proposed Decision: Proposed Denial of Alternative Closure Deadline for
Clifty Creek Power Station
Docket ID No. EPA-HQ-OLEM-2021-0587-0023

Proposed Decision: Proposed Denial of Alternative Closure Deadline for
General James M. Gavin Plant
Docket ID No. EPA-HQ-OLEM-2021-0590-0002

Proposed Decision: Conditional Approval of an Alternative Closure Deadline for
H. L. Spurlock Power Station, Maysville, Kentucky
Docket ID No. EPA-HQ-OLEM-2021-0595-0002

Proposed Decision: Proposed Denial of Alternative Closure Deadline for
Ottumwa Generating Station
Docket ID No. EPA-HQ-OLEM-2021-0593-0002

Exhibit B

Submitted to
The United States
Environmental Protection Agency

March 25, 2022



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 12 2018

OFFICE OF
SOLID WASTE AND
EMERGENCY RESPONSE
NOW THE
OFFICE OF LAND AND
EMERGENCY MANAGEMENT

Mr. Corey Webb
Deputy Assistant Commissioner
Indiana Department of Environmental Management
Office of Land Quality
100 North Senate Avenue, IGCN, Room 1154
Indianapolis, Indiana 46204

Re: Responses to Questions Regarding the Federal Coal Combustion Residuals (CCR)
Regulations

Dear Mr. Webb:

Please find enclosed responses to questions regarding the final rule titled "Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals," 80 FR 21302 (April 17, 2015). These federal regulations are codified in 40 CFR part 257, subpart D. Your staff posed six questions to us regarding the implementation of the CCR rule and this letter provides our response to questions 4 through 6. We previously sent our response in regards to questions 1 through 3 on February 21, 2018. If you have questions regarding either letter, please contact me at (703) 308-8895 or Mary Jackson at (703) 308-8453.

Sincerely,

A handwritten signature in black ink, reading "Barnes Johnson", is written over a horizontal line.

Barnes Johnson, Director
Office of Resource Conservation and Recovery

Enclosure

cc: Ms. Rebecca Eifert Joniskan, Indiana Department of Environmental Management

EPA Response to Questions 4-6 on the CCR Regulations from the Indiana Department of Environmental Management

Q4(a): What does the Agency mean by “infiltration” in § 257.102(d)(1)(i), the performance standard for CCR units closing with waste in place?

Q4(b): Does “ground” in § 257.102(d)(1)(i) mean ground or ground water?

A(4a-b): Overall, the performance standards for closure when leaving CCR in place in EPA’s CCR regulations are designed so that the hazardous constituents in the wastes remain in the unit, away from potential receptors, and are not released into the environment. A key method for achieving this is to control, minimize or eliminate to the maximum extent feasible infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters. In implementing the various regulatory standards, EPA recommends that the state permitting authority (or the facility) evaluate these requirements in light of specific site conditions to determine how best to meet the performance standards. Careful consideration should be given to available monitoring data to determine adequacy of the closure plan. In reviewing the adequacy of a facility’s closure plan, the State should evaluate whether the planned closure can be performed in a manner that satisfies each of the relevant standards. In some cases, certain activities may be more efficiently performed during closure rather than waiting until the post-closure time period. An adequate closure plan would address such issues to ensure that closure activities do not foreclose or complicate any necessary corrective action.

Q4(c) What factors should be taken into account in determining “the maximum extent feasible”?

A (4c): The regulation does not dictate a particular method by which a facility must demonstrate that the facility has “controlled, minimized or eliminated, to the maximum extent feasible...” as this is dependent on site-specific circumstances. One engineering set of solutions that may meet the standard of controlling, minimizing, or eliminating to the maximum extent feasible may be appropriate at one site but inappropriate at another site. One way for an owner/operator to document that they have “controlled, minimized or eliminated, to the maximum extent feasible...” would be for the facility to present an analysis of different closure options and different techniques to achieve this standard. At a minimum the facility would need to document the measures they had taken to meet the performance standards and explain why these measures met the regulatory standard, based on the site and unit characteristics.

Q5: What was the intent of the Agency in revising the Q & A on closure located on the EPA's CCR website <https://www.epa.gov/coalash/relationship-between-resource-conservation-and-recovery-acts-coal-combustion-residuals-rule> (what are the options and the performance standards for closure of units under the CCR rule?)? What is the result of that change? Why was the example removed?

A: The revised Q&A in no way altered or modified the regulatory closure standards. Both the original and revised Q&A unequivocally state: "the facility must meet all of the performance standards for the closure option it has selected, and if it cannot meet all of the performance standards for one option, then it must meet all of the performance standards for the other option. For example, if the facility is unable to meet the performance standards for closure with waste in place for a particular unit (or portion of a unit), it must clean close the unit (or that portion)."

The revision was intended to clarify the following: "If the performance standards for clean closure and the performance standards for closure with waste in place can be met, an owner or operator may determine which alternative is appropriate for their particular unit. A facility also may choose to clean close a portion of a single unit and close the remainder of that unit with waste in place."

Q6: What does the Agency mean by "background" in § 257.91(a)(1)?

A: The owner/operator (O/O) must select wells for the determination of background levels of constituents that not have been affected by leakage from a CCR unit. § 257.91(a)(1).

Two points are relevant here: 1. The onus remains on the O/O to demonstrate that this performance standard has been met. 2. This includes leakage from any CCR unit located on the facility. Consequently, if the levels of regulated constituents are higher than would normally expected to be found in uncontaminated aquifers, the onus is on the O/O to demonstrate that the contamination has not come from a CCR unit. See also, e.g., 40 CFR 257.91(f), 257.105(h)(3).

Generally, in groundwater monitoring, the objective of background monitoring is to develop levels that represent groundwater that has not been contaminated by CCR while at the same time taking into consideration that both naturally occurring and anthropogenic sources of contamination if not considered could be misinterpreted as arising from CCRs. Some further guidance is discussed in the preamble to the final rule at 80 Fed Reg 21,400-21,401, along with references to more detailed technical guidance. As described in the "Technical Manual Solid Waste Disposal Facility Criteria", EPA530-R-93-017, USEPA, November, 1993, Chapter 5, Subpart E, Ground-Water Monitoring and Corrective Action, "The most important quality of background is that it reflects the historical conditions unaffected by the activities it is designed to be compared to."

*The Unified Guidance also includes the following definition: **Background** - Natural or baseline groundwater quality at a site; can be characterized by upgradient, historical, or sometimes sidegradient water quality.*

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Docket ID No. EPA-HQ-OLEM-2021-0593-0002

Exhibit C

Submitted to
The United States
Environmental Protection Agency

March 25, 2022

Top 20 Questions on EPA's CCR Final Rule

1. An owner or operator of an inactive CCR surface impoundment completes closure of the inactive impoundment within 36 months as prescribed by §257.100 of the rule. Is the owner or operator of the inactive impoundment subject to any other requirements of the CCR rule while the unit is being closed? For example, is the owner or operator subject to the structural stability and groundwater monitoring requirements of the CCR rule while the inactive impoundment is being closed?

- ▶ Answer: In addition to the closure-related requirements specified for inactive CCR surface impoundments in §257.100, the owner or operator of the inactive impoundment is also subject to certain recordkeeping, notification, and internet requirements, such as the requirement to submit notifications and annual progress reports. The owner or operator of an inactive impoundment that completes closure of the inactive impoundment in accordance with the procedures in §257.100 would not be subject to the requirements otherwise applicable to CCR surface impoundments, such as the structural stability and groundwater monitoring requirements.

2. If an impoundment is in the process of closure on the effective date of the rule and liquids have been drained from the unit and it is maintained during the closure process so that it can no longer impound water, is the unit an inactive CCR surface impoundment subject to regulation under the rule?

- ▶ Answer: An inactive CCR surface impoundment is defined as a CCR surface impoundment that no longer receives CCR on or after the effective date of the rule and that still contains both CCR and liquids on or after the effective date of the rule. If the unit is the process of closure and no longer contains liquid on the effective date of the rule, and is maintained during the closure process so that it can no longer impound liquids, the unit is not an inactive CCR surface impoundment.

3. Are inactive CCR landfills subject to the requirements of the CCR rule? An inactive landfill would be a unit that no longer receives CCR on or after the effective date of the rule.

- ▶ Answer: The CCR rule does not apply to inactive CCR landfills. See §257.50(d).

4. Does the CCR rule apply to CCR from a facility that is no longer part of the NAICS code 221112 (Fossil Fuel Electric Power Generation) because a fossil fuel power plant has closed if the CCR is sent for off-site management?

- ▶ Answer: The CCR rule does not apply to CCR generated by electric utilities and independent power producers that have ceased generating electricity (i.e., has closed) prior to the effective date of the rule. See §257(e).

5. Is CCR generated at an active facility (i.e., part of the NAICS code 221112) but then sent for management at a facility no longer producing power regulated under the CCR rule?

- ▶ Answer: CCR generated at an active facility but then sent for management at a facility no longer producing power is regulated under the rule. Section 257.50(b) specifies CCR generated by electric utilities and independent power producers that are generating electricity after the rule's effective date are subject to the rule. Section 257.50(b) specifies that the requirements also apply to CCR disposal units located off-site of the electric utility or independent power producer.

6. Is a fly ash pond located on the property of an electric utility that does not operate (i.e., the facility is not producing electricity) on or after the effective date of the rule subject to the requirements of the CCR rule?

- ▶ Answer: The CCR rule does not apply to CCR surface impoundments at electric utilities that no longer generate electricity.

7. Would a concrete basin be considered a surface impoundment under the CCR rule?

- ▶ Answer: EPA guidance for tanks under the Agency's subtitle C hazardous waste program would be relevant to this situation. Namely, "[i]n making this assessment, the unit should be evaluated as if it were free standing, and filled to its design capacity with the material it is intended to hold. If the walls or shell of the unit alone provide sufficient structural support to maintain the structural integrity of the unit under these conditions, the unit can be considered a tank. Accordingly, if the unit is not capable of retaining its structural integrity without supporting earthen materials, it must be considered a surface impoundment." So, using the same logic, if the concrete basin were free standing, and filled to its design capacity with the material it is intended to hold and the walls or shell of the unit alone provide sufficient structural support to maintain the structural integrity of the unit under these conditions, the unit would likely not be considered to be a surface impoundment.

8. The preamble of the CCR rule identifies certain impoundments as not being CCR surface impoundments – i.e., cooling water ponds, wastewater treatment ponds, storm water holding ponds, and aeration ponds. Are other types of ponds not specifically identified in the preamble but that similarly are not used to impound “significant quantities” of CCR considered not to be CCR surface impoundments.

- ▶ Answer: The final rule defines CCR surface impoundments as units that are designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR. Units that are not designed to hold an accumulation of CCR, and that do not treat, store, or dispose of CCR are not CCR surface impoundments. EPA provide examples in the preamble to the final rule of units that, in EPA’s experience, typically would be expected to fall outside of that definition. These examples were not intended to be exclusive or definitive. There may well be additional units that do not meet the definition of a CCR surface impoundment. Similarly, there may be instances in which a particular “wastewater treatment pond” is in fact functioning as a CCR unit (e.g., a facility uses an existing CCR disposal unit for wastewater treatment without dredging the CCR out of the impoundment). Ultimately, the critical determinant of whether a unit is subject to the rule is whether it meets the criteria in the regulatory definition, rather than whether it was included as an example in the final rule preamble.

9. Are aquifers that do not yield a usable quantity or quality of groundwater covered by the rule's definition of "aquifer" which is limited to those "capable of yielding usable quantities of groundwater to wells or springs."

- ▶ Answer: The requirement to construct a unit with a base located no less than 1.52 meters (five feet) above the upper limit of the uppermost aquifer would not apply to geologic formations that are incapable of yielding usable quantities of groundwater to wells or springs. However, consistent with the final CCR regulations, as well as the part 258 regulations on which the CCR regulations are based, the quality and value of an aquifer should be a site-specific determination. Usable water in an aquifer typically includes all groundwater currently used or potentially available for drinking water and other beneficial uses (e.g., industrial or agricultural use), whether or not it is particularly vulnerable to contamination. The Agency is unable to judge the resource value of an aquifer based on a generic scale of significance because of the variability of aquifers on a site-by-site basis.

10. Within one year of the effective date of the rule, an owner or operator of an existing CCR surface impoundment must document whether or not the unit is constructed with either (1) a liner consisting of a minimum of two feet of compacted soil with a hydraulic conductivity of no more than 1×10^{-7} cm/sec; (2) a composite liner that meets the requirements of §257.70(b); or (3) an alternative composite liner that meets the requirements of §257.70(c). Can a natural clay liner system with a hydraulic conductivity of no more than 1×10^{-7} cm/sec be considered as meeting the standard?

- ▶ Answer: No, consistent with Part 258 (which is the source of this requirement) EPA considers compacted soil to mean soil that is mechanically compacted in lifts and not naturally compacted soil.

11. Does the CCR rule require an unlined CCR landfill to retrofit to install a composite liner?

- ▶ Answer: No; all existing CCR landfills can continue to operate for the remainder of their useful life without retrofitting to a composite or alternative composite liner system. Lateral expansions of these CCR landfills however are considered new units and must comply with the design requirements for new units including the installation of a composite or alternate composite liner and a leachate collection system.

12. The regulatory text at §257.90(b) specifies that a that a facility must begin evaluating data for a statistically significant increase for Appendix III constituents as the first round of sampling under detection monitoring. The facility is given 90 days to analyze these samples (at 257.93(h)(2)) and, if they show a statistically significant increase over background, it has another 90 days to begin assessment monitoring (at 257.95(b)). We believe that this provides a total of 2.5 years after the effective date of the rule (3 years after Federal Register publication) to begin assessment monitoring. Is this correct?

- Answer: The final rule provides a total of 2.5 years after the effective date of the rule (3 years after Federal Register publication) to begin assessment monitoring. Within 30 months of publication the facility must install the groundwater monitoring system, take eight independent samples of upgradient and downgradient wells to develop background levels, and begin detection monitoring. Within 90 days, the facility must determine if there is a statistically significant increase over background levels for any Appendix III constituent. If there is a statistically significant increase over background for any Appendix III constituent, the facility has 90 days to begin assessment monitoring. This provides for three years after the publication date before the facility would need to begin assessment monitoring, at the earliest.

13. Does background need to be established for both Appendix III and IV constituents within 30 months of publication or just Appendix III?

- ▶ Answer: Background levels have to be established for both appendix III and IV constituents within 30 months of publication. See §257.94(b).

14. Where is the point of compliance for groundwater monitoring?

- ▶ Answer: The objective of a ground-water monitoring system is to intercept groundwater that has been contaminated by leachate from the CCR unit. To accomplish this objective, the rule requires that downgradient monitoring wells must be installed at the waste boundary that ensures detection of groundwater contamination in the uppermost aquifer. (40 CFR § 257.91(a)(2)). If it is not feasible to install wells at the waste boundary (e.g., it would disturb the unit's liner), the owner or operator must install the wells at the closest feasible point from the waste management unit boundary.

15. Does the CCR rule prohibit a unit from closing using multiple closure methods – e.g., closing one portion of a large pond via clean closure and closing another portion of the same pond via closure in place (as would occur where CCR in the pond is consolidated towards the center to reduce the footprint and slope of the closure in place portion)?

- ▶ Answer: EPA agrees that the rule does not prohibit a unit from closing using multiple closure methods.

16. What is the relationship between the EPA and the states in regard to implementation of the CCR rule?

17

- ▶ Answer: The final rule establishes self-implementing requirements—primarily performance standards—that owners or operators of regulated units can implement without any interaction with regulatory officials. These requirements apply directly to the facilities. States are not required to adopt or implement these regulations, to develop a permit program, or submit a program covering these units to EPA for approval and there is no mechanism for EPA to officially approve or authorize a State program to operate “in lieu of” the federal regulations. In order to ease implementation the regulatory requirements for CCR landfills and CCR surface impoundments, EPA strongly encourages the States to adopt at least the federal minimum criteria into their regulations. EPA recognizes that some States have already adopted requirements that go beyond the minimum federal requirements; for example, some States currently impose financial assurance requirements for CCR units, and require a permit for some or all of these units. This rule will not affect these State requirements. The federal criteria are minimum requirements and do not preclude States’ from adopting more stringent requirements where they deem to be appropriate.

17. What are the consequences, if any, to a state for not participating, i.e., not having an EPA-approved Solid Waste Management Plan or not having one that includes the CCR requirements?

- ▶ Answer: The rule imposes minimum federal criteria with which CCR units must comply without any additional action by a State or federal regulator. States are not required to adopt or implement these regulations, to develop a permit program, or submit a program covering these units to EPA for approval and there is no mechanism for EPA to officially approve or authorize a State program to operate “in lieu of” the federal regulations. The facilities will have to comply with the federal regulations whether or not the state adopts them. If the state has regulations that differ from the federal requirements, and the state does not adopt the federal rules, the facilities will have to comply with both sets of regulations. If a state does not revise their solid waste management plan and get it approved by EPA, the state will not be able to establish a compliance schedule for a facility.

18. How does the CCR rule impact CCR that are beneficially used?

- ▶ Answer: The final rule does not regulate CCR that are beneficially used. The Bevill determination remains unchanged for beneficial use. This rule provides a definition of beneficial use to distinguish between beneficial use and disposal. The rule clarifies that a use of a CCR that does not meet the definition of a beneficial use is disposal.

19. Are CCR piles located in a containment building that protect it from the elements considered a CCR pile subject to the requirements for CCR landfills?

- ▶ Answer: No, as defined in the rule, a CCR pile or pile means any non-containerized accumulation of solid, non-flowing CCR that is place on the land. CCR piles that are containerized, or that are placed on an impermeable base with runoff control and fugitive dust control are not considered CCR piles and are not subject to the requirements of the rule. Therefore, if an accumulation of CCR is in a building that meets the above criteria, it would not be subject to the requirements of the rule.

20. When will the CCR rule be published in the Federal Register?

▶ Answer:

Friday, April 17, 2015

CCR Rule Implementation Dates

22

- ▶ CCR Rule is scheduled to be published in the Federal Register on [April 17, 2015](#)
- ▶ If published on April 17, the effective date of the rule would be [October 14, 2015](#)
- ▶ Tables 1 & 2 show the implementation time frames for existing CCR surface impoundments and existing CCR landfills based on an April 17 rule publication

Table 1–Existing Surface Impoundments

23

Requirement	Deadline to Comply	Description of Requirement
Location Restrictions (§257.60 - §257.64)	Oct 17, 2018	- Complete demonstrations for placement above the uppermost aquifer, wetlands, fault areas, seismic impact zones, and unstable areas
Design Criteria (§257.71)	Oct 17, 2016	- Document whether CCR unit is either a lined or unlined surface impoundment
Structural Integrity (§257.73)	Dec 17, 2015 Oct 17, 2016 Apr 17, 2017 Apr 17, 2017	- Install permanent marker - Compile a history of construction - Complete initial assessments (hazard potential classification, structural stability, & safety factor) - Prepare emergency action plan
Air Criteria (§257.80)	Oct 19, 2015	- Prepare fugitive dust control plan
Hydrologic and Hydraulic Capacity (257.82)	Oct 17, 2016	- Prepare initial inflow design flood control system plan
Inspections (§257.83)	Oct 19, 2015 Oct 19, 2015 Jan 18, 2016	- Initiate weekly inspections of the CCR unit - Initiate monthly monitoring of instrumentation - Complete initial annual inspection of CCR unit

Table 1–Impoundments cont.

24

Requirement	Deadline to Comply	Description of Requirement
Groundwater Monitoring and Corrective Action (§257.90 - §257.98)	Oct 17, 2017	<ul style="list-style-type: none">- Install the groundwater monitoring system; develop the groundwater sampling & analysis program; initiate the detection monitoring program; and begin evaluating the groundwater monitoring data for statistically significant increases over background levels
Closure & Post-Closure Care (§257.103 - §257.104)	Oct 17, 2016	<ul style="list-style-type: none">- Prepare written closure and post-closure care plans
Recordkeeping, Notification, and Internet Requirements (§257.105 - §257.107)	Oct 19, 2015 Oct 19, 2015 Oct 19, 2015	<ul style="list-style-type: none">- Conduct required recordkeeping- Provide required notifications- Establish CCR website

Table 2-Existing CCR Landfills

25

Requirement	Deadline to Comply	Description of Requirement
Location Restrictions (§257.60 - §257.64)	Oct 17, 2018	- Complete demonstration for unstable areas
Air Criteria (§257.80)	Oct 19, 2015	- Prepare fugitive dust control plan
Run-On & Run-Off Controls (257.82)	Oct 17, 2016	- Prepare initial run-on and run-off control system plan
Inspections (§257.83)	Oct 19, 2015 Jan 18, 2016	- Initiate weekly inspections of the CCR unit - Complete initial annual inspection of CCR unit
Groundwater Monitoring and Corrective Action (§257.90 - §257.98)	Oct 17, 2017	- Install the groundwater monitoring system; develop the groundwater sampling & analysis program; initiate the detection monitoring program; and begin evaluating the groundwater monitoring data for statistically significant increases over background levels
Closure & Post-Closure Care (§257.103-257.104)	Oct 17, 2016	- Prepare written closure and post-closure care plans
Recordkeeping, Notification, and Internet Requirements	Oct 19, 2015 Oct 19, 2015 Oct 19, 2015	- Conduct required recordkeeping - Provide required notifications - Establish CCR website

Thank you

Questions?