

Comments and DNR Responses Natural Resources Board Order WA-17-18

December 10, 2021

This document presents a summary of public comments received on proposed rules affecting chapters NR 500 to 520 related to coal combustion residual landfills and surface impoundments.

OVERVIEW

The proposed rule will amend portions of chs. NR 500 to 520, Wis. Adm. Code, to incorporate new federal rules for the regulation of coal combustion residual (CCR) landfills. CCR, often called coal ash, is created when coal is burned by power plants to produce electricity. Specifically, the proposed rule would incorporate federal requirements for CCR landfills, such as: location restrictions, design criteria, operating criteria, groundwater monitoring and corrective action criteria, closure and post-closure care and recordkeeping, notification, and posting of information. The proposed rule would also include requirements for initial permitting, public participation in plan review, and review fees. The proposed rule would allow Wisconsin to seek approval of a state CCR permit program from the U.S. Environmental Protection Agency (EPA). This would allow CCR landfills to comply with a single consolidated rule rather than both state and federal rules. Where federal rules and Wisconsin rules differ, Wisconsin rules are required by EPA to be at least as protective as the federal rules.

Public outreach and input opportunities were conducted throughout the rulemaking process as follows:

- A preliminary public hearing on the statement of scope was held by DNR on January 7, 2020. No members of the public attended. Written comments were accepted and two sets of comments were received, one from Wisconsin Utilities Association (WUA) and Dairyland Power Cooperative (DPC) and one from Milwaukee Riverkeeper.
- A public informational meeting was held by DNR on December 1, 2020 to share preliminary rule concepts, including DNR's decision to not include surface impoundments in the rule. Written comments were accepted and two sets of comments were received from WUA/DPC and a group of organizations referring to themselves as Conservation and Environmental Health Organizations (CEHO) [Sierra Club, Action for the Climate Emergency, Clean Power Coalition of Southeast Wisconsin, Midwest Environmental Advocates, Milwaukee Riverkeeper, Physicians for Social Responsibility Wisconsin, Wisconsin Advocates for Public Health, Wisconsin Conservation Voters, Wisconsin Environment, Wisconsin Environmental Health Network, Wisconsin Health Professionals for Climate Action, Wisconsin Interfaith Power & Light, and 350 Madison].
- A public comment period was provided for the economic impact analysis between June 25 and July 25, 2021, as discussed further below.
- A public hearing was held by the DNR on October 28, 2021, as discussed further below.
- DNR met with WUA and DPC prior to the rulemaking process to discuss their concerns and the impact of the federal rule on the electric utilities' activities. DNR had phone calls or met with WUA and DPC during the rulemaking process to gather comments on rule language. Recent meetings were held on August 2, 2021 and September 14, 2021.
- Examples where DNR coordinated with WUA/DPC during the rule drafting process include:
 - WUA/DPC provided a table of CCR units subject to the federal rule and responses to permitting questions posed by DNR on May 28, 2020.
 - Alliant Energy provided a groundwater standards comparison for a CCR landfill in Wisconsin on November 2, 2020.
 - WUA/DPC provided comments on the draft rule language, specifically suggesting language for incorporating surface impoundments into the proposed rule, on August 12, 2021.

- DNR met with representatives of CEHO, specifically the Sierra Club, Milwaukee River Keepers and Midwest Environmental Advocates, on November 10, 2021 to discuss and seek clarification regarding CEHO comments on the proposed rule. DNR made changes to the proposed rule related to CEHO comments on plan review timeframes in ch. NR 508, Wis. Adm. Code. Specific responses to all CEHO comments are provided below.
- Throughout the rule drafting process, DNR met with representatives of the U.S. Environmental Protection Agency, approximately monthly, to discuss draft rule language and a potential permit program. EPA provided feedback and informal written comments on Wisconsin's existing rules and proposed rule language. EPA specifically requested additional information and clarifications on the rule's requirements for groundwater monitoring and analysis, requirements for remediation of contaminant releases, enforcement provisions, and enhanced public participation during the permitting process and for major modifications to permits. EPA provided comments on the full rule package during the public hearing comment period that was directly related to ensuring elements would be as protective as the federal rule. If the draft rule is adopted, the DNR must submit the rule and narrative justification to the EPA for final review and authorization of a state permit program.

ECONOMIC IMPACT ANALYSIS

A public comment period on the draft EIA occurred from June 25 to July 25, 2021. The DNR received two sets of comments from organizations (WUA/DPC and Midwest Environmental Advocates, Sierra Club, and Milwaukee Riverkeeper) on the EIA during this period. WUA/DPC commented on higher plan review fees, estimated number of CCR landfills and requested DNR include CCR surface impoundments within the proposed rule. WUA/DPC commented that overall there would be a neutral economic impact and that ongoing environmental monitoring and reporting costs would continue under the proposed rule. The Midwest Environmental Advocates, Sierra Club and Milwaukee Riverkeeper commented in support of rules that are equally or more stringent than the federal rule, requested DNR regulate surface impoundments due to concerns over changing federal rules, requested DNR carefully assess staffing needs to take on the program and requested an analysis of the economic impact of regulating both CCR landfills and impoundments.

LEGISLATIVE COUNCIL RULES CLEARINGHOUSE

The Legislative Council Rules Clearinghouse submitted comments on form, style and placement; and clarity, grammar, punctuation and the use of plain language. Changes to the proposed rule were made to address all recommendations by the Legislative Council Rules Clearinghouse.

PUBLIC COMMENTS ON DRAFT RULE

A public comment period for the draft rule occurred from October 4 to November 4, 2021, with a public hearing held on October 28, 2021. Ten individuals participated in the public hearing in addition to DNR staff. Three individuals registered in support, of which two provided testimony during the hearing. No individuals registered in opposition of the rule and seven registered for information only or no position, of which two provided testimony during the hearing.

Written comments were received from the following organizations: Wisconsin Utilities Association and Dairyland Power Cooperative and Conservation and Health Organizations. One hundred and sixty (160) individuals commented on the proposed rule, of which 159 individuals provided the same or similar comments.

The following is a summary of comments received during the public comment period and the DNR's responses.

Comment: WUA and DPC commented they agree with DNR’s approach to the proposed rule. Specifically, the approach to rely on framework in the NR 500 series that is currently used to regulate CCR landfills, which will provide compliance certainty and consistency that is important to the regulated community. WUA/DPC had no concerns or objections with the majority of specific requirements in the proposed rule. WUA/DPC applauded the DNR for its work to identify existing rules that are at least as stringent as federal rules, and for proposing commonsense approaches to addressing differences in the programs. WUA Director William Skewes also spoke at the public hearing on November 4, 2021.

Response: Comment is in support of proposed rule. No action required.

Comment: WUA and DPC commented that the Scope Statement for this rulemaking effort indicates that “the proposed rule may include portions of 40 CFR 257, Subpart D in order for Wisconsin to seek approval from EPA for a partial state CCR permit program for CCR surface impoundments.” However, DNR has elected not to seek approval of rules regulating groundwater monitoring, corrective action, post-closure care, and recordkeeping for closed CCR surface impoundments at this time. WUA/DPC expressed disappointment in this decision, but appreciate the DNR’s continued consideration of this issue and look forward to additional discussions. Regulation of closed CCR surface impoundments remains an important issue to WUA members and DPC, and would be consistent with efforts to allow CCR unit operators to apply a single set of consolidated rules and interact with one regulatory agency.

Response: The DNR will continue to consider and discuss the regulation of closed surface impoundments in Wisconsin, but not in this rule. When the DNR began this rulemaking process, a number of the federal CCR surface impoundment regulations were undergoing review or modification. EPA is currently in the rule making process for further rule revisions. The DNR made a decision early on, as presented to stakeholders in December 2020, to focus its efforts on CCR landfills, which DNR already regulates under its solid waste rules. The inclusion of CCR surface impoundments would have added another level of complexity to DNR's ongoing discussions with EPA regarding Wisconsin's rule drafting and use of existing rules. DNR does not currently regulate CCR surface impoundments under solid waste rules, but many are regulated under a Wisconsin Pollutant Discharge Elimination System (WPDES) permit. Furthermore, based on information received from utility operators, DNR expects all surface impoundments to close over the next few years and only a small number to close with CCR in place (approximately two facilities). While DNR will continue to evaluate and discuss the regulation of CCR surface impoundments in Wisconsin, they will continue to be regulated under WPDES permits and federal CCR rules. EPA's review of Wisconsin’s proposed rule for CCR landfills would also inform further discussions regarding the inclusion of CCR surface impoundments.

Comment: WUA and DPC commented that the proposed requirement at s. NR 506.20(1)(a)2. to conduct a visual inspection to assess the effectiveness of fugitive dust control measures is not currently a federal CCR Rule requirement, is not a state requirement, and is redundant with s. NR 506.07(1)(n). WUA/DPC requested deletion of this requirement. If this is kept, WUA/DPC requested clarification of the required frequency of “at least weekly” which they interpret to be different from the inspection that is required by s. NR 506.20(1)(a)1. “at intervals not exceeding 7 days.”

Response: The federal rule requires the CCR fugitive dust control plan include a description of the procedures the owner or operator will follow to periodically assess the effectiveness of the control plan. The frequency of periodic and the specific procedures are not specified in the federal rule. DNR reviewed dust control plans posted on the publicly accessible internet sites and found that inspections are the predominant method selected for evaluating dust conditions. DNR found that the

frequency varied widely, ranging from weekly to annual. Because "periodic" is difficult to define and regulate, DNR established a minimum frequency. Dust conditions can change frequently based on weather and other factors. A minimum frequency of weekly ensures that dust is being evaluated on a regular basis. The frequency for inspections for structural stability is set by the federal CCR rule "at intervals not exceeding 7 days." DNR has modified the proposed rule to require dust control inspections at this same frequency as the structural stability inspections so the language is consistent.

Comment: WUA and DPC concur with the proposed rule at s. NR 508.06(2)(c) to establish a Design Management Zone of zero feet for CCR units, which is more stringent than current state rules, but is appropriate because it matches the current federal requirement. WUA/DPC agreed with the proposal to distinguish between "Subtitle D" wells and other monitoring wells that may be used to supplement the monitoring network. This is an approach used by Wisconsin for municipal solid waste landfills for decades, with EPA approval, that yields helpful information about groundwater quality and promotes productive conversations about groundwater conditions.

Response: Comment is in support of proposed rule. No action required. Note that although the proposed rule uses the term "CCR wells" rather than "Subtitle D well" to differentiate them from "Subtitle D" wells for municipal solid waste landfills, the regulatory approach is similar.

Comment: WUA and DPC commented that the proposed rule s. NR 508.06(2)(g)1. requires the owner / operator of a CCR landfill to "develop a site investigation workplan and a site investigation report" within 60 days of confirming an exceedance of a PAL, ACL, or ES, unless the owner / operator demonstrates that an alternative source is the cause of the exceedance. They stated it is not realistic to complete the workplan, the investigation, and the investigation report within the same 60-day timeframe. Further, the current CCR Rule allows for an owner / operator to demonstrate that an alternative source is the cause of the exceedance before the requirement to develop an assessment of corrective measures goes into effect. WUA/DPC suggested that sections be revised to be consistent with NR 716 and 40 CFR 257.96. Specific suggestions were provided with the comment.

Response: The DNR has reviewed the process and timeframes in the proposed rule for response when a groundwater standard is attained or exceeded and made changes in response to these comments. The revisions to the proposed rule are consistent with timeframes in NR 716 and 722, Wis. Adm. Code, for site investigations of possible contamination and selecting remedial actions. The changes clarified submission and review timeframes, which include submitting a site investigation workplan within 60 days, a 30-day DNR review, and implementation of the site investigation within 90 days of approval of the workplan. Language from chs. NR 716 and 722 was also added by the DNR to clarify the submittal timeframes and DNR review process for both the site investigation report and the remedial action options reports. To match up with the federal CCR rule timelines, the DNR also included language recommended by WUA that a remedial action options report be submitted to the DNR within 90 days of a confirmed release from the CCR landfill with the option of submitting a revised remedial action options report within 60 days of submission of the site investigation report. The DNR maintained the requirement to submit a report that demonstrates that a source, other than the CCR landfill, caused the contamination within 60 days to be consistent with the existing timeframe for an alternate submittal of a site investigation work plan. The DNR added language stating the DNR shall review the report within 30 days.

Comment: WUA and DPC commented that the proposed rule s. NR 514.04(7) includes requirements for a public meeting "at least 30 days prior to the submittal of a plan of operation modification that may substantially affect the plan of operation, such as affecting the closure plan, groundwater monitoring plan, liner system, or leachate system ..." WUA/DPC support public involvement in changes to the plan of operation but this requirement is vague as currently drafted. To avoid unnecessary hearings on routine

changes, WUA/DPC request two revisions to this requirement: mirroring the public participation procedures in ch. NR 203, Wis. Adm. Code and that this requirement only apply to substantial changes in the closure plan, liner system, or leachate system, and changes that reduce the stringency of groundwater monitoring requirements.

Response:

In addition to already required public comment periods and public meetings for the state permitting of sites during feasibility of new/proposed landfills, the rule proposes discretionary pre-plan of operation submittal public meetings. The landfill owner would need to notify the department at least 30 days prior to the submittal of a plan of operation and post on its publicly accessible internet site. The department would also post online and hold a public meeting if within 30 days after posting the draft plan of operation on the department's internet site any county, city, village or town, the applicant or any 6 or more persons file a written request for a public meeting with the department. This is similar to public meeting request guidelines in existing statutes.

Similar with pre-plan of operation modification submittals, a landfill owner would need to notify the department at least 30 days prior to the submittal of a plan of operation modification affecting the closure plan, liner system, leachate system, or changes that reduce the stringency of groundwater monitoring requirements to the department and post the draft plan of operation modification on its publicly accessible internet site. The department would also post online and hold a public meeting if within 30 days after posting the draft plan of operation on the department's internet site any county, city, village or town, the applicant or any 6 or more persons file a written request for a public meeting with the department.

While this language does not match ch. NR 203, Wis. Adm. Code, the rule language changes address both of the suggestions made by WUA/DPC.

Comment: CEHO provided general comments regarding the toxic nature of CCR and the need for proper safeguards to protect the environment. CEHO commented that Wisconsin needs to address the decades-long legacy of coal-fired power generation and that DNR adopt a careful and cautious state-administered program that regulates CCR materials where they are found, including not only the substantive structures of the program but also procedural components, such as transparency of application and approval processes, and robustness of public participation rights.

Response: CEHO provided more specific comments related to this general comment and the responses are provided below.

Comment: CEHO commented that DNR should preserve improvements its draft rule contains over the federal CCR rule, and add additional improvements. CEHOs have noted and appreciate the DNR's improvements on the federal CCR Rule. However, CEHO commented that the proposed rule does not resolve certain closure requirements for existing landfills. CEHO explained, the closure of coal ash disposal units in place (rather than by excavation and removal), often described as "capping in place," is not protective of the environment if the coal ash in question is in contact with groundwater, because such a closure does nothing to prevent the lateral infiltration of groundwater.

Response: All of the CCR landfills that would be covered under the proposed rule are engineered and approved landfills with liners and leachate collection systems so that waste is not in contact with groundwater. In addition under the proposed rule, any new CCR landfill would be required to maintain the 5-foot separation from the uppermost aquifer. DNR believes its existing rules and

proposed rule are protective of the environment and incorporate the necessary federal requirements to be at least as protective as the federal rule. Any additional requirements beyond what is necessary to comply with the federal rule and which are not already in existing rules would be considered outside of the scope of this rulemaking.

Comment: CEHO commented that the DNR should further tighten the review schedule contained in ss. NR 500.07 and 508.06, Wis. Adm. Code. CEHO appreciates the DNR decision to impose a clear step-by-step process owners and operators of CCR Landfills must follow to remediate any contamination that is discovered through monitoring; and to impose reasonable time restrictions throughout most of the process. However, CEHO commented that the deadlines listed leave open the possibility for long term delay of a site remediation process, in a few key areas. CEHO commented that the proposed rule does not make explicit that the 65-business-day deadline on DNR for action on "plan approvals or exemptions" applies to a site operator's presentation and proposed selection of remedial action options under s. NR 508.06(3) and (4). CEHO commented that the proposed rule also references a requirement under s. NR 508.06(2)(f) that a site owner or operator determine the nature and extent of contamination that shows up in monitoring, but provides no timeline for when that would be prepared. CEHO commented that the existing set of deadlines leaves a giant hole in the schedule in the event that the DNR "deems incomplete" any submission by a site owner or operator under the Draft Rule; CEHOs are not aware of any deadline imposed either on the DNR or on the site owner or operator to complete any given plan or selection so as to ensure that progress continues in a reasonably timely manner toward site remediation. CEHO commented that the DNR should address the potential loopholes in the otherwise-timely process, to eliminate the possibility of unreasonable delay where CCR Landfills are found to be contaminating nearby environments.

Response: The DNR has reviewed the process and timeframes in the proposed rule for response when a groundwater standard is attained or exceeded and made changes in response to these comments. The revisions to the proposed rule are consistent with the DNR's existing remedial action process under chs. NR 716 and 722 (described in the response to WUA comments on page 4), and federal requirements such as submittal of a remedial action options report within 90 days of a proven release from the CCR landfill. The DNR has added the DNR's review timeframe where appropriate, such as the 30-day review timeframe for the site investigation work plan.

Comment: CEHO commented that DNR should require immediate progress toward corrective action at coal ash disposal units that are known to be contaminating groundwater. Although CEHOs appreciate the controlled timeline that has been established for rapid remediation of detected contamination, this process need not wait for monitoring to commence at all sites. Extensive testing at numerous sites has already been conducted under the CCR rule as part of a series of stages that include baseline monitoring, detection monitoring, and in some cases assessment monitoring. In such areas, the DNR should immediately start those sites on the remediation pathway described in s. NR 507.15(3)(m). DNR should add a section enabling those sites to move more expeditiously toward corrective actions.

Response: Currently, and even without this rulemaking, CCR landfills in Wisconsin are required to comply with ch. NR 508, Wis. Adm. Code, which establishes procedures for responding when a groundwater standard is attained or exceeded. All active CCR landfills have groundwater monitoring networks that have been monitoring groundwater quality at these sites for decades prior to promulgation of the federal CCR rule. DNR reviews data collected from these monitoring networks at CCR landfills and regularly inspects CCR landfills for compliance with Wisconsin's existing rules.

Comment: CEHO commented that DNR should regulate all coal ash landfills and other CCR deposit locations outside of ash ponds. CEHOs respect that DNR apparently does not intend to regulate non-landfills as part of this rulemaking process. However, non-landfill ash impoundments represent a significant portion of the CCR storage facilities currently operating or closed in the state of Wisconsin.

Response: DNR believes its existing regulations already cover the regulation of all coal ash landfills and other CCR deposit locations. Solid waste disposal facilities are regulated under ch. 289, Wis. Stats., and chs. NR 500 to 538, Wis. Adm. Code. Chapters NR 700 to 758, Wis. Adm. Code, further regulate the investigation and remediation of environmental contamination. Any proposed regulation not related to CCR landfills or surface impoundments would be outside of the scope of this rule making effort.

Comment: CEHO commented that the DNR should clearly demonstrate holistic anti-erosion protections in its regulation of CCR landfills. DNR should either a) clarify that the "final cover" includes not just the containment equipment above the CCR material, but also addresses the containment equipment below and around the CCR material; b) add an explicit requirement that the long-term stability of the entire CCR containment system (including the existing landfills) be ensured in the written closure and long-term care plans; or c) explicitly incorporate by reference existing regulations that the DNR believes are sufficient to ensure the long-term stability of CCR landfills in their entirety.

Response: The federal CCR rule requirements for closure and post closure care have been addressed in the proposed rule. However, Wisconsin's existing rules also have more specific requirements for final cover design, construction, slope stability, and storm water management. For example, Wisconsin limits final cover and waste slopes to no more than 4:1 unless otherwise approved, which has been effective at preventing subsidence and erosion after closure. For added clarity, changes have been made in the final version of the proposed rule. Closure performance standards have been added to s. NR 506.083, which includes slope stability. The performance standards were previously only referenced under the closure plan requirements in ch. NR 514.

Comment: CEHO commented that the DNR must include a citizen suit provision to ensure avenues are available for enforcement of its permits: CEHO commented that DNR should modify the existing enforcement provision located at s. NR 500.11, Wis. Adm. Code, to add avenues for public citizens to assist with enforcement of the final version of the Draft Rule.

Response: Based on discussions with EPA, no further modifications are required with respect to the citizen suit provision. Federal provisions for citizen suits would still be applicable, even if Wisconsin receives approval from EPA for a state permit program. Additionally, under existing state law, a person wishing to contest a DNR action would be able to establish the right to do so under s. 227.42, Wis. Stats.

Comment: An individual's comment was written in favor of the proposed rule. The comment stated reasons for support including:

- The draft rule would allow Wisconsin to get the CCR state permit for CCR landfills to be guided by one set of rules and provide more direct oversight by DNR.
- Along with more clarification on rules, CCR facilities will be able to eliminate the need for separate groundwater monitoring systems to fulfill different state and federal requirements and have a clear plan on how to manage their impoundments and landfills.

- This new set of rules and permits will be saving money for CCR owners and operators and be the most effective way to protect our society's health and environmental well-being by holding them to the highest standard.

The comment also stated that a description for contaminants and groundwater testing such as one on the Earthjustice website should be required.

Response: Comment is in support of proposed rule. No action required. Section NR 507.15(3)(m), Wis. Adm. Code, includes a list of minimum information that is required to be included in the annual groundwater monitoring and corrective action report. This includes a list of any groundwater quality exceedances at a landfill during the monitoring period.

Comment: One hundred and fifty-nine individuals provided a general comment on the toxic nature of coal ash and the importance of storing it properly to protect health and the environment, and commented more specifically on the following:

- DNR should also regulate CCR surface impoundments not just landfills: having them under different regimes makes no sense, and adds regulatory confusion especially for the public that may want to weigh in on the proper assessment, treatment, and closure of all remaining surface impoundments.
- If exceedances are detected, deadlines are needed for every step of the process. Also, deadlines should also be imposed on the WI DNR. These deadlines are needed to ensure that all parties are held accountable to the public and that any contamination is addressed and resolved as quickly as possible. Specifically: the draft rule states that any exceedance triggers a nature and extent determination, but does not provide any time deadline for when it must be completed; it requires the owner or operator of a site where exceedances are detected to submit a site investigation work plan and investigation report to DNR within 60 days, and to respond to DNR approval of that report by submitting site cleanup options again within 60 days - but it doesn't impose a deadline on DNR to respond to either of these submissions within any set period of time. For the process to move quickly to resolution, DNR must hold itself to the same timely standards it imposes on landfill owners and operators.
- The draft rule does not make fully clear that closure and long-term care plans must ensure that any coal ash deposits must be protected from the type of catastrophic erosion that has caused major contamination in Wisconsin before. The rule only references erosion control when it talks about "final covers" for landfills, which are not fully defined. In the final rule, the DNR should be more explicit that erosion protections must protect the entirety of any remaining coal ash impoundments, and that this must be a top priority for any long-term care or closure plan.

Response: Similar comments were received from WUA/DPC or CEHO related to regulation of surface impoundments and review timeframes. Responses were provided above.

The DNR understands catastrophic events relating to erosion have occurred at disposal sites that were not considered approved landfills meeting current design and construction standards.

In Wisconsin, the requirements for final covers are addressed under s. NR 504.07, Wis. Adm. Code, of existing state rules and under s. NR 504.12(4) of the proposed rule. In addition, closure performance standards have been added to s. NR 506.083 in the final version of the proposed rule. The performance standards require that the CCR landfills be closed in a manner that provides slope stability to prevent the sloughing or movement of the final cover system during the closure and long term care period. Long term care activities are specified under ss. NR 514.06(11) and 514.07(1)(d).

Under the long term care requirements, an owner or operator of a CCR landfill would be responsible for inspecting and maintaining the landfill including repair of any erosion damage. Because the final cover is placed over the waste and is several feet thick, if erosion were to occur it would first need to impact the final cover. However, any erosion affecting both the final cover and waste would require maintenance, repair and cleanup if needed.

Comment: An individual provided oral comments at the public hearing in support of consolidating rules under one regulatory authority and noted that Wisconsin should work towards making coal use safer and increase use of renewable energy sources.

Response: Comment in support of proposed rule. No action required.