ILLINOIS POLLUTION CONTROL BOARD
August 22, 2024

IN THE MATTER OF:	)	
	)	
STANDARDS FOR THE DISPOSAL OF	)	R20-19(A)
COAL COMBUSTION RESIDUALS IN	)	(Rulemaking – Land)
SURFACE IMPOUNDMENTS: PROPOSED	)	
NEW 35 ILL. ADM. CODE 845	)	

Proposed Rule. First Notice.

ORDER OF THE BOARD (By B.F. Currie):

On April 15, 2021, the Board adopted rules implementing Section 22.59 of the Environmental Protection Act (Act) (415 ILCS 5/22.59 (2022)). Specifically, the Board added a new Part 845 to its rules, which created standards for the disposal of coal combustion residuals (CCR) within the State. In that rulemaking, docket R20-19, the Board opened sub-docket A to address other issues concerning CCR. Those four issues are: (1) historic, unconsolidated coal ash fill in the State; (2) the use of temporary storage piles of coal ash, including time and volume limits; (3) fugitive dust monitoring plans for areas surrounding CCR surface impoundments; and (4) the use of environmental justice screening tools. The Board requested comment as well as proposed language to address the four issues.

On March 3, 2022, the Board presented, for public comment, rule text that was jointly proposed by the Environmental Law & Policy Center, Little Village Environmental Justice Organization, Prairie Rivers Network, and Sierra Club (collectively, Environmental Groups). Today, pursuant to Section 28(a) of the Environmental Protection Act (Act) (415 ILCS 5/28(a) (2022)) the Board moves, on its own motion, to first notice on proposed rule language and also addresses the impact of recent final rules from the United States Environmental Protection Agency (USEPA) on this sub-docket.

PROCEDURAL BACKGROUND AND MOTIONS

Procedural History

The Board asked all participants to comment and propose rule language on the four subjects at issue in this sub-docket. On August 6, 2021, the Environmental Groups provided substantive comment as well as proposed language in PC 10. On March 3, 2022, the Board found, "that the issues raised by the commenters should be further explored. To begin doing so the Board presents the Environmental Groups' proposed rule text for public comment." Proposal for Public Comment at 4. Today, at first notice, and pursuant to Section 28(a) of the Act, the Board proposes several rule text amendments to Part 845 on its own motion.

Following the proposal for public comment, the Board received 10 comments on the proposed rule text. The content of each public comment will be discussed in detail in the

following sections as they relate to the four subjects at issue in this sub-docket. On June 2, 2022, the Illinois Environmental Protection Agency (IEPA or Agency) filed a written comment (PC 15). On June 3, 2022, comments were filed by the Illinois Environmental Regulatory Group (IERG) (PC 16), the Illinois Chapter of the Sierra Club (PC 17), Midwest Generation, LLC (Midwest or MWG) (PC 18), Dynegy Midwest Generation, LLC, Electric Energy Inc., Illinois Power Generating Company, Illinois Power Resources Generating, LLC, Kincaid Generation (Collectively, Dynegy) and Southern Illinois Power Cooperative (SIPC) (PC 19), and the Environmental Groups (PC 20). On August 2, 2022, comments were filed by the Office of the Illinois Attorney General (AG) (PC 21), Dynegy and SIPC (PC 22), Midwest (PC 23), and the Environmental Groups (PC 24).

Proposal for Public Comment

Several participants questioned the procedural posture of the Environmental Groups' substantive comment and proposed rule text in PC 10. IERG and Midwest argued that PC 10 did not meet all the procedural requirements in 35 Ill. Adm. Code 102.202 for a new rulemaking proposal. PC 16 at 4 and PC 18 at 3. IERG points to requirements in Section 102.202 that new rulemaking proposals for regulations of general applicability need to include a petition signed by at least 200 people and a synopsis of all testimony to be presented by the proponent at hearing, among other requirements. PC 16 at 3-4. The Board disagrees with IERG and Midwest. On February 4, 2021, the Board asked all participants to propose rule text regarding the four subjects at issue in this sub-docket. The Environmental Groups responded to the Board's request and provided language for consideration. Thus, this is not a new rulemaking. Further, the Board can propose new rulemakings on its own motion, and in this case, the Board sought input from participants for language to propose.

In the second notice order in R20-19 the Board announced the opening of this sub-docket and the Board requested – of all participants – the following: "For each of these four subjects, the Board seeks more information and evidence, as well as proposed rules to consider." R20-19, slip op. at 2 (Feb. 4, 2021). The Environmental Groups responded to the Board with language for consideration in this sub-docket. In proposing, for public comment, rule text developed by the Environmental Groups, the Board intended to foster a discussion on the substance of the four subjects at issue in this sub-docket. As allowed in Section 28(a) of the Act, the Board issued the proposed rule text for public comment and now issues rule text for first notice.

Motion to Modify

On September 2, 2022, the Environmental Groups filed a motion to modify certain provisions of Part 845 (Mot. to Modify). The Environmental Groups ask the Board to modify portions of Part 845 that allow additional CCR to be placed in unlined impoundments before closure, provisions exempting temporary storage piles, and use of background groundwater monitoring wells. Mot. to Modify at 2. The Environmental Groups included proposed rule text amendments as Appendix A to the motion.

Following the end of the initial public comment period, on September 2, 2022, the Environmental Groups filed a motion to modify certain provisions of Part 845. Accompanying the motion, the groups also filed a memorandum (Memo). Both Dynegy and Midwest objected to the motion (Dynegy Resp., Midwest Resp.) and IEPA and IERG requested additional time to respond. The Board extended the deadline for participants to respond and on November 4, 2022, IEPA filed a response objecting to the motion (IEPA Resp.) as did IERG (IERG Resp.). The Environmental Groups filed a reply to all responses on November 18, 2022 (EG Reply).

The Board denies the Environmental Groups' motion to modify and discusses the decision further below.

HISTORIC, UNCONSOLIDATED COAL ASH FILL IN THE STATE

In opening this sub-docket, the Board found that the issue of how to address historic, unconsolidated coal ash fill was of significant concern, but had not been addressed in Part 845. In the main rulemaking for Part 845, R20-19, the Board was under a strict timeline to adopt rules that were at least as stringent as those adopted by USEPA. USEPA's CCR surface impoundment rules had not addressed the issue of historic CCR fill. In order to investigate the issue of historic fill, the Board opened this sub-docket and sought information and proposals from participants. The Environmental Groups submitted evidence that historic coal ash fills are present at coal-fired power plants throughout Illinois, and that these fill areas have been a source of groundwater pollution. PC 10 at 2. And while some historic fill sites have been identified, the Environmental Groups argued many have not yet been identified due to the past industry practice of dumping coal ash in unlined landfills. *Id.* As discussed below, recent developments have created a path forward for identifying historic fill sites.

The Board proposed, for public comment, a new Part 846 that would have created requirements for historic coal ash fill areas that included location restrictions, groundwater monitoring, corrective action, and closure. In public comments, the affected entities and IEPA strongly opposed this proposal. They have questioned the need for a new regulatory program and the technical feasibility and economic reasonableness of the proposal. Additionally, they have raised significant policy issues, including the lack of information on the universe of sites covered by the proposal and the lack of IEPA resources to implement the proposed new regulatory program.

USEPA

Since the Board opened this sub-docket, USEPA has proposed and adopted final rules regulating legacy CCR surface impoundments (inactive surface impoundments at inactive facilities), including areas it has called "coal combustion residuals management unit" (CCRMU). 89 Fed. Reg. 38,950 (May 8, 2024). The federal definition for CCRMU is:

> Any area of land on which any noncontainerized accumulation of CCR is received, is placed, or is otherwise managed, that is not a regulated CCR unit. This includes inactive CCR landfills and CCR units that closed prior to October 19, 2015, but does not

include roadbed and associated embankments in which CCR is used unless the facility or a permitting authority determines that the roadbed is causing or contributing to a statistically significant level above the groundwater protection standard established under § 257.95(h). 89 Fed. Reg. 39,051 (May 8, 2024).

USEPA's final rules regulate legacy CCR surface impoundments as well as CCRMUs at active CCR facilities and at inactive CCR facilities with a legacy CCR surface impoundment. *Id.* at 38950. Given the definition of CCRMU includes "any area of land on which any noncontainerized accumulation of CCR is received, placed, or otherwise managed, that is not a regulated CCR unit", the Board finds that the definition of CCRMU under USEPA's final rule includes the "historic CCR fill areas" the Board planned to address in this sub-docket.

USEPA's final rule requires the identification of CCRMUs containing one ton (or more) of CCR at regulated facilities. In addition, the rule requires CCRMUs containing 1,000 tons or more to comply with the existing requirements in 40 C.F.R. Part 257, subpart D for groundwater monitoring, corrective action (where necessary), and in certain cases, closure, and post-closure care regardless of how or when that CCR was placed at the facilities. For CCRMUs containing greater than or equal to 1 ton and less than 1,000 tons of CCR, the final rule requires compliance with only the facility evaluation report requirements under 40 C.F.R. § 257.75 until a permitting authority determines that regulation of these units, either individually or in the aggregate, is warranted and determines the applicable requirements. 89 Fed. Reg. 39,048 (May 8, 2024). The final rule "provides facilities 54 months to initiate closure, and depending on the CCRMU, the facility may have as much as an additional seven to 15 years to complete closure." *Id.* at 39,073. Fifty-four months after the effective date of USEPA's final rule is May 8, 2029.

USEPA's final rule justifies the need for regulating historic CCR fill, and also provides a workable approach by amending the existing CCR surface impoundment rules without adding a new set of regulations. Because the Board's CCR surface impoundment rules under Part 845 closely track the federal CCR rules, the Board will await an IEPA proposal to adopt corresponding revisions to Part 845, or will plan to do so on its own motion.

USEPA notes that a CCRMU involves "the direct placement of CCR on the land, in sufficient quantities to raise concern about releases of hazardous constituents, and - in most, if not all cases - with no measures in place to effectively limit the contact between the CCR and liquids, and subsequent generation and release of any leachate." 89 Fed. Reg. 39,044 (May 8, 2024). Further, data collected "since 2015 demonstrates that these exempt solid waste management practices are currently contaminating groundwater at many sites, and at others, have the potential to pose risks commensurate with the risks associated with currently regulated activities." *Id.* at 39034. However, USEPA's final rule excludes units that are not designed to hold an accumulation of CCR, and those that do not generally contain a significant amount of CCR. These include closed or inactive process water ponds, cooling water ponds, wastewater treatment ponds, and stormwater holding ponds or aeration ponds. Also, "any CCR used in roadbed and associated embankments would not be considered CCRMU." 89 Fed. Reg. 39,044 (May 8, 2024). EPA explained that the risks posed from CCR placed in fills are different from beneficial use of CCR in roadways and embankments. This is because the method of CCR placement in fills is different from construction of roads and embankments, which are subject to

engineering specifications and differing material properties. *Id*. USEPA explains that roadways differ from CCR landfills and impoundments as they are "subject to engineering specifications that generally specify CCR to be placed in a thin layer (e.g., six to 12 inches) under a road. The placement under the surface of the road limits the degree to which rainwater can influence the leaching of the CCR." *Id*.

CCRMU Requirements

As an initial step, USEPA's final rule requires identification and delineation of CCRMUs at coal-fired generating plants. The federal rules require a review of all "reasonably and readily available information" regarding any past and present CCR management that resulted in the accumulation of CCR on the ground. 89 Fed. Reg. 39,054 (May 8, 2024). Additionally, the rules require, where necessary, the physical inspection as well as field investigation activities to establish the location and boundaries of identified CCRMUs. *Id*. at 39,057.

Next, USEPA's final rule applies standards that are applicable to CCR units such as surface impoundments, landfills, and lateral expansion, to CCRMUs by amending existing rules rather than proposing new rules. The federal rule requirements include facility-wide fugitive dust control; a groundwater monitoring program, installation of a groundwater monitoring system, sampling and analysis plans and monitoring requirements, corrective action requirements, and closure and post-closure criteria.

Of note, USEPA did not include location restrictions or requirements for liner design, impoundment structural integrity, or operation of CCRMUs. These requirements, USEPA says, are unnecessary because legacy CCR surface impoundments and CCRMUs must close under the rules. 89 Fed. Reg. 39,010-39,011 (May 8, 2024). Additionally, USEPA has finalized compliance timeframes and deadlines for CCRMUs. *Id*. at 39,059-39,060. For example, the facility's records must be evaluated as to whether it contains a CCRMU and a report must be submitted by February 9, 2026; depending on what is found at the facility, the owner/operator must submit a second part of the report, detailing the physical examination of the site, including, where necessary field sampling by February 8, 2027; the owner/operator must be in compliance with groundwater monitoring requirements by May 8, 2028, and begin submitting annual groundwater monitoring reports by January 31, 2029. *Id*. at 39,101-39,103. If, during the investigative phase, the owner/operator finds a CCRMU at the facility they must submit a written closure plan by May 8, 2029, and initiate closure by November 8, 2029. *Id*. at 39108. With the revisions to the proposed definitions of CCRMU and CCR unit and addition of the new term "regulated CCR Unit," the final rule allows the regulation of CCRMUs with relatively few revisions to the existing rules. *Id*. at 3,9051.

Implications to State's CCR Permit Programs

Since the final rules have been adopted by USEPA, the requirements for approval and retention of a state CCR permit program in accordance with Resource Conservation and Recovery Act (RCRA) section 4005(d) will change. 89 Fed. Reg. 39,093 (May 8, 2024). If a state has an approved CCR program, like Illinois does, USEPA notes that the state's existing regulations will continue to apply until it revises its CCR program by adopting the new rules. *Id.*

citing 42 U.S.C. 6945(d)(1)(A), (3). USEPA maintains that approved states must revise their rules within three years of any revision to the federal CCR regulations to maintain program approval, which will be November 4, 2027. 89 Fed. Reg. 39,093 *citing* 42 U.S.C. 6945(d)(1)(D)(i)(II). Regarding issuance of permits, USEPA notes that states will need to update their regulations pursuant to Section 4005(d) of RCRA. *Id*.

Board Discussion and Findings

The Board finds that USEPA's final rules on CCRMUs address the issue of historic, unconsolidated CCR fills in the State. The Board will await a new IEPA rulemaking proposal that incorporates the federal rule amendments into Part 845, or a new rulemaking proposal from participants. Should IEPA or participants not file a rulemaking proposal by six months after the effective date of the federal rule, the Board plans to, on its own motion, propose such rulemaking amendments. The effective date of the federal rule is November 4, 2024, and six months after that date is May 5, 2025. Such a proposal is more appropriate for a wholly new rulemaking, rather than this sub-docket.

TEMPORARY STORAGE PILES OF COAL ASH

The Board requested more information as well as proposed rule text to address the management of temporary CCR storage piles, including time and volume limits. Under Part 845, a "CCR storage pile" is defined as a "temporary accumulation of solid, non-flowing CCR placed on the land that is designed and managed to control releases of CCR to the environment." 35 Ill. Adm. Code 845.120. The term "temporary accumulation" is defined as follows:

> An accumulation on the land that is neither permanent nor indefinite. To demonstrate that the accumulation on the land is temporary, all CCR must be removed from the pile at the site. The entity engaged in the activity must have a record in place, such as a contract, purchase order, facility operation and maintenance, or fugitive dust control plan, documenting that all the CCR in the pile will be completely removed according to a specific timeline. 35 Ill. Adm. Code 845.120

The rules also specify requirements for CCR storage piles that apply during closure by removal under Section 845.740(c)(4)(B), that include the tarping of piles, dust suppression measures, liners, berms to control run-off and run-on, and groundwater monitoring. However, the rules do not specify any limits to storage volume or duration.

The Environmental Groups' Proposal

The Environmental Groups have proposed amendments that address storage volume, duration limits, and additional measures relating to inspection, loading, setbacks and dewatering.

Volume and Duration Limits

The Environmental Groups propose a three-month accumulation limit for CCR storage piles. PC 10 at 11. Under this limit, a facility would be able to store no more than "the

maximum volume equal to the amount of CCR that can reasonably be expected to be excavated from a CCR impoundment over three months" at any given time. *Id*. at 12. The Groups argue that the owner or operator should have ongoing operations to move the CCR out of the pile to either an onsite landfill or offsite facility via rail, barge, or low-polluting truck so as to prevent CCR storage piles from reaching an unmanageable size. *Id*. Further, the Groups propose that the owner or operator be required to provide an estimate of the volume of CCR that will be excavated in a three-month period and that the final construction permit specify the maximum volume of ash that can be accumulated in a temporary CCR pile at a time. *Id.* at 15.

In general, the Environmental Groups argue that the proposed volume and duration limits would provide a buffer for scenarios in which protective tarps, wind barriers, storage pads, liners, berms, or other protective measures were inadequately sized or located. PC 10 at 12. The Groups point to a case before the Board where the Board found that coal ash stored on bare ground contributed to groundwater contamination. PC 10 at 13, *citing* Sierra Club, et. al v. Midwest Generation, LLC, PCB 13-15, slip op. at 42 (June 20, 2019). Additionally, they argue that the three-month limitation would provide a good balance between the industry's need for flexibility and the public's need for effective pollution control management and oversight. *Id*. Looking beyond Illinois, the Groups point to Michigan's 60-day waste accumulation limit. *Id*. at 13.

Additional Measures for Temporary CCR Piles

In addition to the volume and duration limits, the Environmental Groups recommend additional requirements for CCR piles pertaining to inspection, loading, setbacks, dewatering, and storage piles within CCR surface impoundments. PC 10 at 13-14. First, they propose quarterly inspections of the pads and storage liners and that liners or pads for CCR piles be designed larger than needed for a three-month volume of CCR to ensure that "each portion of the pad or liner is uncovered for inspection at least once in a three-month." *Id.* at 13-14. The proposal has the quarterly inspection results, as well as any repairs performed on holes, tears, or other damage found during inspections, reported in the monthly removal reports required by 35 Ill. Adm. Code 845.740(d) for the month following the inspection period. *Id.* at 14. The owners or operators would also be required to prepare monthly reports which should include how much ash had been added to or removed from the pile over the previous month and documentation that the specified maximum in the final construction permit was not exceeded. *Id.*

The Environmental Groups argue that the rules should include limitations on drop distance to minimize fugitive dust during transfer of dry or semi-dry CCR into piles, particularly when wind speeds are above 10 meters per second. PC 10 at 14. They point to regulations used by the City of Chicago that allow for only the transfer of moist material that is conducted "in a manner that minimizes the exposed drop." PC 10, Exh. 8 at 10. The Groups' proposal does not specify a minimum drop distance.

Additionally, the Environmental Groups argue that the rules should include a required setback from waterways for temporary CCR piles considering the threat the piles pose to water and air pollution. PC 10 at 14. The Groups do not propose a specific setback distance, but say

the temporary storage piles should, "be located as far as feasible from surface waters." PC 10 at Appendix 2.

The Environmental Groups also recommend that in order to minimize dust hazards, the Board should require the use of silt curtains during dewatering prior to removal at all locations adjacent to water bodies, and additional protective measures when CCR within surface impoundments is excavated from one portion of the impoundment and placed in another area of the impoundment. PC 10 at 14. Finally, the Environmental Groups argue that "the Board should consider whether additional protections should be required for ash accumulated within, but not outside of, CCR surface impoundments." *Id.* The Groups note that the process of excavating CCR from one portion of a surface impoundment to another for dewatering may create dust hazards as the material dries. They recommend additional measures during closure to be specified in permit, including increased watering frequencies or new locations for water or chemical dust suppressant sprays to control dust from CCR piles located within impoundments. *Id.*

Response from Utilities, Industry Groups and IEPA

Illinois Environmental Regulatory Group

IERG opposes the Environmental Groups' suggestions concerning the use of temporary storage piles of coal ash. PC 16 at 8. IERG argues that additional requirements are unnecessary because Part 845 provides protective measures concerning temporary storage piles, including liners, storage pads, and IEPA oversight. *Id.* IERG argues that there has been no evidence that storage piles that are compliant with Part 845 requirements have been linked to negative impacts on air quality, groundwater, or surface water. *Id.* at 9. Additionally, IERG notes that under current Part 845, IEPA has oversight over temporary storage piles, because the piles must be discussed in closure plans that are submitted as part of construction plan applications. *Id.* at 8-9. Finally, IERG emphasizes that the Environmental Groups have not adequately addressed the technical feasibility or economic reasonableness of the Groups' proposed changes to Part 845 concerning the use of temporary storage piles. *Id.* at 9.

Midwest Generation

Midwest argues that the Environmental Groups' proposal "amount[s] to a solution searching for a problem." PC 18 at 15. Midwest highlights the statements of Todd Mundorf, the Powerton Station Manager, who testified that he has not encountered any problems with inadequately sized storage pads, liners, tarps, or wind barriers for temporary storage piles. *Id.* at 15-16 *citing* Exh. I. Additionally, Midwest disagrees with the Environmental Groups' concern of fugitive dust from CCR piles within surface impoundments because "CCR in these temporary piles created within CCR surface impoundments is damp when removed, even after the water is drained." *Id.* at 16.

Dynegy and SIPC

Dynegy argues that, as written, Part 845 adequately protects against CCR releases into the air, groundwater, or surface water. PC 19 at 7. Dynegy emphasizes that, by definition, "CCR storage piles" are only "temporary accumulation[s]" of CCR. Further, the owners or operators are already required to demonstrate the temporary nature of the accumulation in the facility records (i.e., through a contract, purchase order, facility operation and maintenance plan, or fugitive dust control plan) to ensure the removal of all CCR in the pile on a specific timeline. *Id. citing* 35 Ill. Adm. Code 845.120. Dynegy highlights that Part 845 control requirements are in place to prevent CCR releases from storage piles through requirements such as, the use of tarp, dust suppression measures such as wetting, storage on a pad or liner meeting specific specifications, construction with berms where appropriate (to reduce run-on and runoff stormwater), and groundwater monitoring. *Id.* at 7-8. Dynegy argues that the Part 845 requirements, which provide temporal limitations, controls, and oversight for CCR storage piles, renders the Environmental Groups' proposal unnecessary. *Id.* at 8.

American Coal Ash Association (ACAA)

The ACAA is concerned that additional regulation of temporary storage piles would cause unwarranted roadblocks to the beneficial use of CCR. PC 11 at 7. The ACCA argues that the Environmental Groups have not provided any damage cases or scientific analysis to justify additional regulation of temporary CCR piles. *Id.* Further, the ACAA notes that the ability to use storage piles is a fundamental component in beneficial use because coal ash must be readily available when needed by the end users. *Id.* ACAA argues that additional regulations on temporary CCR storage piles are an overreach that disincentivizes beneficial use due to the extra paperwork, perceived liability concerns, and the possibility of sharing proprietary information. *Id.* Pursuing other expensive disposal options like landfills instead of beneficial use may also lead to higher electricity rates. *Id.* The ACAA argues that the Environmental Groups' proposal "disregards the decades of state and federal regulatory scrutiny, scientific evidence of the low toxicity of CCP in beneficial use settings, and the presence of well-developed consensus-based standards for guiding beneficial use projects." *Id*.

The ACAA recommends the Board to provide a blanket exemption from reporting requirements for storage of CCR "that is containerized, not in direct contact with the ground, or located on properties that are already subject to other regulatory controls such as NPDES [National Pollutant Discharge Elimination System] and facility air permits." PC 11 at 8. They additionally recommend that paperwork be kept to a minimum such as limiting reports to the submission of gross annual receipts and records of coal ash shipments. *Id.*

Illinois Environmental Protection Agency

IEPA acknowledges the potential benefits of additional storage pile limits, however, it argues that placing a three-month limit on pile size would be arbitrary and would not account for site-specific considerations or seasonal construction schedules. PC 15 at 24. Failing to account for these could unintentionally delay closure by removal, IEPA argues. The Agency is also concerned that the proposed amendments do not allow for any alternative volume based on site-

specific factors. *Id.* "While the desire to control the size of the pile is understandable (to reduce fugitive dust and runoff potential), putting an arbitrary limit on pile size would not account for site specific considerations or seasonal construction schedules and may unintentionally delay closure by removal." *Id.*

Next, the Agency voices concern that the proposed requirement for storage piles to be located as far as feasible from surface waters is vague and unenforceable. PC 15 at 24. IEPA objects to the required use of silt curtains during removal because silt curtains are one of many erosional control measures that are already covered under the construction stormwater permit for each facility. *Id.* IEPA also objects to the proposed amendment to Section 845.680(a)(3) that requires the use of silt curtains as an option for interim corrective action measures. *Id.* at 22. IEPA argues that it is unclear if the amendment is referring to stormwater runoff control, slurry walls or grout curtains for control of groundwater pollutant migration. *Id.* IEPA notes that the affected facilities are already required to obtain coverage under the general National Pollutant Discharge Elimination System (NPDES) permit for stormwater associated with construction activities for controlling stormwater runoff from construction activities. *Id.*

Board Discussion and Findings

CCR storage piles are an integral component of managing CCR removed from surface impoundments prior to shipment for either beneficial use or disposal. Under Part 845, CCR storage piles are a *temporary accumulation* of CCR that are designed and managed to control releases of CCR to the environment. Further, the rules require owners or operators to demonstrate that such accumulations are temporary by maintaining records of timely CCR removal and using storage pile requirements (such as, tarping, liners, etc.) during closure by removal.

Volume and Duration Limits

Part 845 does not specify any limits on volume or duration of storage piles, but the rules allow IEPA to address these aspects during permitting based on site-specific considerations. The Board agrees with the Environmental Groups that the rules should include a reasonable time limit to ensure the proper management CCR during closure by removal. However, the Board supports IEPA's argument that the proposed three-month limit on storage piles does not account for site-specific considerations or seasonal construction schedules.

As such, at First Notice, the Board proposes a one-year limit to CCR storage piles, which mirrors a similar requirement found in the Board's landfill rules. *See* 35 Ill. Adm. Code 810. This time frame will accommodate site-specific conditions as well as seasonal construction schedules. The Board finds that a one-year limit, in addition to the requirements in Part 845 that owners and operators of CCR storage piles maintain records, including contracts, purchase orders, facility operation and maintenance, and fugitive dust control plans will ensure proper management of the storage piles. A one-year timeframe will account for seasonal issues that would not be accounted for in a three or six-month time frame. Additionally, the existing rules in Part 845 require that storage piles have low-permeability liners, dust mitigation (including

tarping), and groundwater monitoring. Therefore, the Board does not find it necessary to create a volume limit for storage piles.

Additional Measures for Temporary CCR Piles

The Environmental Groups recommend additional requirements for CCR storage piles pertaining to liners, inspection, loading, setbacks, and dewatering.

Storage Pads, Liners and Inspection. The Environmental Groups recommend that liners or pads for CCR piles be designed larger than needed for a three-month volume of CCR to ensure that "each portion of the pad or liner is uncovered for inspection at least once in a three-month." PC 10 at 13-14. Currently, Section 845.740(c)(4)(B)(iii) requires that the storage pile should "have a storage pad, or a geomembrane liner, with a hydraulic conductivity no greater than $1x10^{-7}$ cm/sec, that is properly sloped to allow appropriate drainage." However, the rules do not specify that the storage pad be large enough to allow for quarterly inspection. Given the potential for the storage pads to be subject to stresses from repeated loading and unloading of CCR, the Board proposes requiring the storage pads be large enough to allow each portion of the pad or liner to be uncovered for inspection at least once in a year. The results of the annual inspection as well as any repairs performed on holes, tears, or other damage found during inspections should be reported in the monthly removal reports required under Section 845.740(d) for the month following the inspection period.

Drop distance for loading CCR storage piles. The Environmental Groups ask that the Board include limitations on drop distance onto CCR storage piles to minimize fugitive dust during transfer of dry or semi-dry CCR into piles, particularly when wind speeds are above 10 meters per second. PC 10 at 14. They do not specify a minimum drop distance but suggest the addition of a requirement that drop distance be minimized when transferring CCR into storage piles. The current rules at Section 845.740(c)(4)(C) requires the owner or operator of a CCR surface impoundment to incorporate general housekeeping procedures, including good practices during unloading and loading. The Board finds that adding the proposed minimization of drop distance to this provision would provide more specificity.

Setback from waterways. To minimize the risk of water pollution, the Environmental Groups argue that the rules should require setbacks for CCR storage piles from waterways. PC 10. at 14. The Board agrees with IEPA that the proposed setback requirement may be difficult to enforce without a numeric setback distance, however the inclusion of the proposed requirement would serve as a performance standard that may be considered when locating a storage pile. Therefore, the Board proposes the setback requirement at Section 845.740(c)(4)(B)(vii).

Silt curtains. The Environmental Groups propose the placement of silt curtains around the sites located adjacent to waterways where CCR is being moved around a site into piles, for dewatering in preparation for removal, or during closure or corrective action to prevent the release of wind-blown or displaced CCR or contaminated soils into nearby waterways. As noted above, IEPA objects to this proposal because utilizing silt curtains is one of many erosion control measures that are already covered under the construction stormwater permits. The Board agrees

with IEPA and finds that there is no need to incorporate these requirements here as they are more appropriately covered in construction stormwater permits. Additionally, the facility's fugitive dust control plan must address mitigation measures, including the use of silt curtains if necessary, during handling of CCR during storage, dewatering, corrective action, or closure.

Additional requirements for CCR within CCR surface impoundments. Finally, the Environmental Groups recommend that Part 845 contain additional measures for dust control applicable to CCR piles within CCR surface impoundments. As noted above, Midwest disagrees, arguing that CCR in any temporary piles created within CCR surface impoundments is already damp when removed, even after the water is drained. The Board notes that under Section 845.500, the facility's CCR fugitive dust control plan must identify and describe the CCR fugitive dust control measures the owner or operator will use to minimize CCR from becoming airborne at the facility that includes dust sourced from within, and outside of the CCR surface impoundments. Therefore, the Board finds that it is not necessary to include additional requirements to address CCR dust from any storage piles within CCR surface impoundments.

Proposed Amendments to Part 845 As Related to Temporary Storage Piles:

Section 845.120 Definitions

"CCR storage pile" means any ~~temporary~~ accumulation of solid, non-flowing CCR placed on the land that is designed and managed to control releases of CCR to the environment, utilizing the measures specified in Section 740(c)(4)(A)-(G) of this Part. CCR contained in an enclosed structure is not a CCR storage pile. Examples of control measures to control releases from CCR storage piles include: periodic wetting, application of surfactants, tarps, or wind barriers to suppress dust; tarps or berms for preventing contact with precipitation and controlling runon/run-off; and impervious storage pads or geomembrane liners for soil and groundwater protection. For this Part, a CCR storage pile will be considered as CCR landfill as defined in 40 CFR 257.53, unless the owner or operator can demonstrate that CCR is not accumulated over a period longer than one year under Section 845.740(c)(4)(F).

~~"Temporary accumulation" means an accumulation on the land that is neither permanent nor indefinite. To demonstrate that the accumulation on the land is temporary, all CCR must be removed from the pile at the site. The entity engaged in the activity must have a record in place, such as a contract, purchase order, or facility operation and maintenance record or fugitive dust control plan, documenting that all the CCR in the pile will be completely removed according to a specific timeline.~~

Section 845.550 Annual Consolidated Report

a) By January 31 of each year, the owner or operator of the CCR surface impoundment must prepare an annual consolidated report for the preceding calendar year that includes the following:

1) Annual CCR fugitive dust control report (see Section 845.500(c));

2) Annual inspection report (see Section 845.540(b)), including:

A) Annual hazard potential classification certification, if applicable (see Section 845.440);

B) Annual structural stability assessment certification, if applicable (see Section 845.450);

C) Annual safety factor assessment certification, if applicable (see Section 845.460); and

D) Inflow design flood control system plan certification (see Section 845.510(c)).

3) Annual Groundwater Monitoring and Corrective Action Report (see Section 845.610(e)).

4) CCR storage pile pad or geomembrane inspection report under Section 845.740(c)(4).

5) CCR storage pile demonstration under Section 845.740(c)(4)(F).

Section 845.740(c) Closure by Removal

c) The owner or operator of a CCR surface impoundment removing CCR during closure must responsibly handle and transport the CCR consistent with this subsection.

4) The owner or operator of the surface impoundment must take measures to prevent contamination of surface water, groundwater, soil and sediments from the removal of CCR, including the following:

A) CCR removed from the surface impoundment may only be temporarily stored, and must be stored in a lined landfill, CCR surface impoundment, enclosed structure, or CCR storage pile.

B) CCR storage piles must:

i) Be tarped or constructed with wind barriers to suppress dust and to limit stormwater contact with storage piles;

ii) Be periodically wetted or have periodic application of dust suppressants;

iii) Have a storage pad, or a geomembrane liner, with a hydraulic conductivity no greater than 1 x 10^{-7} cm/sec, that is properly sloped to allow appropriate drainage, and large enough to allow each portion of the pad or liner to be uncovered for inspection at least once in a year under subsection (c)(4)(C)(iii);

C) The owner or operator of the CCR surface impoundment must:

i) incorporate general housekeeping procedures including ~~such as~~ daily cleanup of CCR, tarping of trucks, maintaining the pad and equipment~~,~~; ~~and~~

ii) incorporate good practices during unloading and loading including minimizing drop distance on to CCR piles~~.~~; and

iii) inspect the storage pad or geomembrane of CCR storage piles at least once a year and repair any cracks, holes, tears, or other damage identified during the inspection as soon as practicable. An annual inspection report summarizing the results of inspection under this subsection must be included in the annual consolidation report under Section 845.550.

D) The owner or operator of the CCR must minimize the amount of time the CCR is exposed to precipitation and wind.

E) The discharge of stormwater runoff that has contact with CCR must be covered by an individual National Pollutant Discharge Elimination System (NPDES) permit. The owner or operator must develop and implement a Stormwater Pollution Prevention Plan (SWPPP) in addition to any other requirements of the facility's NPDES permit. Any construction permit application for closure must include a copy of the SWPPP.

F) The owner or operator must demonstrate that CCR is not accumulated in a storage pile over a period longer than one year by using photographs, records (contracts, purchase orders), or other observable or discernable information that shows CCR is being removed within one year of being placed in the pile. This demonstration must be included in the annual consolidation report under Section 845.550.

FUGITIVE DUST MONITORING

When opening this sub-docket, the Board sought comments from the participants on air monitoring plans to measure fugitive dust in the vicinity of CCR surface impoundments,

including monitoring instrumentation, size of particles measured, cost of monitoring, monitoring period, linking monitoring results to mitigation measures, impact of fugitive dust on facility employees, impact of fugitive dust on surrounding residents, and whether fugitive dust emissions are increased during closure of CCR surface impoundments. Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 Ill. Adm. Code 845, R20-19 (Feb. 4, 2021) slip op. at 105-106.

The Board received information from the Environmental Groups that addressed the Board's request for information on fugitive dust. IERG, Dynegy, SIPC, and IEPA have filed comments opposing the rule text proposed by the Board. Below, the Board discusses the arguments and moves forward with proposed rule text on two issues at first notice.

Environmental Groups' Proposal

The Environmental Groups argue that fugitive dust from CCR impoundments is hazardous to the surrounding environment, communities, and people. PC 10 at 16. The Environmental Groups note that exposure to particulate matter (PM), both coarse (PM_{10}) and small ($PM_{2.5}$), can cause damage to lungs and has been linked to other health effects such as heart disease and cancer. *Id.* at 17. The Environmental Groups raise concern that exposure to PM, in combination with some of the substances found in CCR such as heavy metals and silica, have also been linked to cancers and neurological damage. *Id.* Silica exposure is of particular concern because chronic exposure can lead to silicosis which can lead to permanent lung damage and cyanosis (blue skin). *Id.*

Fugitive Dust Concerns

The Environmental Groups pointed to two sites in Puerto Rico and Tennessee, where workers at coal-fired power plants were harmed due to the improper handling of CCR. *Id.* at 18. These sites had reports of death and illnesses which included skin rashes, lung disease, and cancer from inhalation of coal ash dust. *Id.* Additionally, the Environmental Groups refer to the World Health Organization's finding from its September 2021 Global Air Quality Guidelines, which "reported adverse effects at much lower levels of air pollution exposure than had been previously studied." PC 20 at 16. Also, the Environmental Groups note that USEPA has found that "there is not only a possibility, but a strong likelihood that dry handling [of coal ash] would lead to NAAQS [National Ambient Air Quality Standards] being exceeded absent fugitive dust controls". PC 10 at 17. In USEPA's 2014 Technical Support Document for Fugitive Dust Damage Cases, three Illinois sites were discussed: Ameren Coffeen Power Station, Rocky Acres Coal Combustion By-Product Disposal, and Met-South Coal Combustion Waste Disposal Facility. PC 10, Ex. 10 at 39-41. The workers and communities surrounding all three sites have complained about the dust levels. At two of the sites, workers complained of lung and breathing problems with some additional complaints of eye irritation. *Id.* In 2010, the Occupational Safety and Health Administration (OSHA) fined the Coffeen facility approximately $400,000 for "more than two dozen safety violations endangering workers with dangerously high levels of hazardous ash dust without proper breathing equipment and training." *Id.* at 40.

The Environmental Groups argue that fugitive dust emissions increase during CCR surface impoundment closure due to the uptick in moving dry CCR, resulting from dewatering, construction, and movement from trucks. PC 10 at 19. Further, the Environmental Groups recommend that additional measures should be evaluated during closure by removal because that method can cause more agitation of the dry CCR when it is transported off-site. *Id.* Therefore, the Environmental Groups recommend that the Board require owners or operators of facilities subject to Part 845 to develop a fugitive dust monitoring and mitigation plan for closure of CCR surface impoundments that includes: "(1) the continuous monitoring of PM_{10} and $PM_{2.5}$ at multiple locations at a facility; (2) quarterly high-volume, filter-based monitoring to more thoroughly evaluate the composition of fugitive dust emissions; (3) sufficient recordkeeping and submittal of data to IEPA; and (4) a plan describing the actions that will be taken in response to detection of exceedances of Reportable Action Levels, the detection of visible fugitive dust, and the malfunction of monitors." *Id.* at 20.

Monitoring Requirements

The Environmental Groups recommend air monitors of at least six each of PM_{10} and $PM_{2.5}$ located at or near facility boundaries. PC 10 at 20. The Environmental Groups' minimum suggestion is that there should be one monitor located at each cardinal point (north, south, east, west) with an additional two monitors at downwind locations. *Id.* Additional monitors may be installed as needed based on the characteristics of the site, environmental factors, and proximity of neighborhoods. *Id.* The Environmental Groups also recommend quarterly, 24-hour, high-volume air sampling with at least two monitors, one upwind and one downwind. *Id.* The quarterly monitoring should include tests for $PM_{2.5}$ and PM_{10}, total suspended solids, silica, radionuclides, and metals. *Id.* Lastly, the Environmental Groups recommend the installation of a device to continuously monitor and log wind speed and direction at the facility. *Id.* at 21. The Environmental Groups also recommend that the monitors have attached data loggers. *Id.* The Environmental Groups estimate this would cost less than $50,000 annually per site. *Id.*

Air quality modeling

The Environmental Groups ask the Board to require owners or operators to conduct air modeling to predict fugitive dust emissions caused by a facility's operations. PC 10 at 22. The Environmental Groups reason that conventional air quality dispersion modeling and local records of weather conditions may be used to develop emissions factors, which allow for the assessment of "the anticipated impacts to air quality that various activities at a facility may have and help ensure the effectiveness of a facility's fugitive dust monitoring and mitigation plan and fugitive dust control plan." *Id.* Air modeling could also help develop and select mitigation measures, the Environmental Groups argue. *Id.*

Recordkeeping and Reporting

Additionally, the Environmental Groups suggest that owners and operators should notify the IEPA in writing within 24 hours every time there is an exceedance of the Reportable Action Level, or a malfunction has occurred that prevents data logging. PC 10 at 22. The Environmental Groups recommend that the owners or operators also maintain records of all

maintenance, scheduling of inspections, testing and maintenance, and monthly reports of the monitoring data. *Id.*

Dust Mitigation Plan

The Environmental Groups recommend that the Board require owners or operators to develop a separate fugitive dust mitigation and monitoring plan for the closure of CCR surface impoundments. PC 10 at 22-23. This closure-specific plan would be implemented alongside the general mitigation and monitoring plans and would include the installation of additional PM_{10} and $PM_{2.5}$ monitors close to the CCR surface impoundments undergoing closure. *Id.* at 23. In addition, the Environmental Groups recommend further requirements for closure by removal activities such as the installation of additional monitors around the point of transfer off-site, surveillance of vehicles transporting CCR, and contact information visibly located on the vehicle to be able to place a complaint. *Id.* at 23-24.

Participants' Concerns (Utilities, Industry Groups, and IEPA)

IERG argues that the current regulations are adequately protective and that the Environmental Groups' proposed additions are unnecessary. PC 16 at 9. Dynegy and SIPC agree with IERG's position and note that under Part 845, owners and operators must develop fugitive dust plans and control measures, obtain certification from a professional engineer, maintain oversight of the plans, and periodic assessments of control plan effectiveness. PC 19 at 8-9, *see* Sections 845.500(b), 845.710(b)(1)(D), 845.740(c)(1)(B), and 845.500(b)(2)(A). Additionally, fugitive dust complaints are required to be logged and submitted quarterly and annually along with all actions undertaken by the facilities to characterize and resolve the complaints. *Id.* at 9. An owner or operator who does not comply with the fugitive dust control measures would be subject to violation notices and subsequent enforcement. *Id.*

Because Part 845 was adopted recently, IERG argues that the effects of the new rules have yet to be seen and it is therefore inopportune to modify the rules at this point. PC 16 at 9. In addition to Part 845, CCR surface impoundments are also regulated by OSHA under 29 C.F.R. Part 1910, Subpart Z, and that Part addresses fugitive CCR dust monitoring, mitigation, and worker safety. PC 19 at 9-10. Dynegy and SIPC also highlight that the existing Illinois air regulations (Part 212) have restrictions on fugitive particulate matter and are protective of the surrounding communities. *Id.* at 10. IERG also characterizes the Environmental Groups proposed amendments as "costly and overly burdensome to regulated entities." PC 16 at 11.

IEPA argues that the Environmental Groups misunderstand the primary goal of fugitive dust controls, as Part 845 is designed to mirror the restrictions in Part 212. PC 15 at 16. IEPA notes that the current fugitive dust control plans are adequately protective as they are subject to continuous scrutiny in permit reviews and during enforcement cases with special emphasis on facilities located in an environmental justice community. *Id.* Therefore, unless the Environmental Groups can demonstrate that CCR is contributing to off-site fugitive dust impacts that cannot otherwise be addressed via fugitive dust control plans, IEPA urges the Board to deny the Environmental Groups' proposal on fugitive dust. *Id.*

IEPA argues that a preferable approach would be to wait to see if there are any demonstrated off-site impacts from CCR fugitive dust after the implementation of the fugitive dust controls in current Part 845. If there are, IEPA says that would be the time in which to implement modeling and property boundary monitoring on a site-specific basis. PC 15 at 16. If it appears that off-site impacts are a widespread issue at that time, IEPA says it would be appropriate to develop a proposal for the amendment of the fugitive dust control plan rules in Part 845. *Id.* at 17.

Finally, regarding the Environmental Groups recommendation that the Agency maintain an online database of the monthly air monitoring reports accessible to the public, the Agency says that such a requirement is unnecessary because interested parties can submit a Freedom of Information Act (FOIA) request as they do in many of the Agency's other programs. PC 15 at 17. The Agency also claims it is likely that posting monthly reports every month for every site would be "overly burdensome" and make the CCR webpage "unwieldly" for visitors. *Id.* at 22.

The Environmental Groups' Response

The Environmental Groups emphasize that many of the affected communities have been burdened for decades and that a "wait and see approach" as suggested by the other participants would be inappropriate. PC 24 at 21. The Environmental Groups argue that the additions to the fugitive dust monitoring rules are intended to protect the surrounding communities from the increased activity around CCR impoundment closures and is a complement to the existing Part 845 regulations. *Id.*

The Environmental Groups point out that relying on community complaints and OSHA violations to regulate fugitive dust is inappropriate because that puts additional burdens on a local community that is already overburdened. *Id.* Instead, the owners and operators should carry the responsibility of monitoring and submitting reports on a quarterly and annual basis. *Id.* Additionally, OSHA regulations are designed to protect workers, not necessarily the surrounding communities. *Id.*

Regarding an online database for air monitoring reporting, the Environmental Groups argue that it is inappropriate to expect the public to only access the monthly monitoring reports via FOIA requests, which again puts the burden on the public. PC 24 at 22. Clean Power Lake County voices similar concerns, noting that the monitoring data must be readily available so that facilities can be held accountable. PC 13.

Board Discussion and Findings

In response to the Board's request for additional information on fugitive dust controls, the Environmental Groups responded with comprehensive rule text that included, monitoring, modeling, recordkeeping and reporting requirements. While the Board finds some merit to parts of the Environmental Groups' rule text, we agree with the Agency and other participants that the proposal is burdensome and may over-complicate fugitive dust control measures. The Board finds that it would be prudent to wait to see if there are any demonstrated off-site impacts from CCR sourced fugitive dust after the implementation of the fugitive dust controls under current

Part 845 before requiring onerous and expensive air monitoring systems and site-specific air quality monitoring. However, in locations where there have been recorded complaints of fugitive dust and in areas of EJ concern, the Board finds that the rules should be amended to require the Agency to evaluate dust complaints and allow it to require additional mitigation measures, including dust monitoring.

Existing Fugitive Dust Control Rules

Under the current Part 845, owners and operators are required to develop and follow a fugitive dust control plan where they are required to describe the CCR fugitive dust control measures that will be implemented at the facilities to minimize dust impacts. 35 Ill. Adm. Code 845.500(b)(1). Owners and operators are also required to maintain a record of complaints made by the public and submit them to the Agency quarterly. 35 Ill. Adm. Code 845.500(b)(2). The Agency says its intent in drafting Section 845.500 was to have it mirror the regulations in Part 212. PC 15 at 16. Part 212 regulates visible and particulate matter from stationary emission units, including fugitive particulate matter. *See* 35 Ill. Adm. Code Part 212, Subpart K. However, neither current Part 845 nor Part 212 Subpart K require property boundary monitoring or modeling on a site-specific basis. The OSHA regulations under 29 C.F.R. § 1910, which are referenced in the CCR Fugitive Dust Control Plan requirements (29 C.F.R.§ 1910.1200(c)), are intended to protect workers from fugitive dust exposure, but are not intended for community protection.

Part 845 requires the timely submission of the record of all dust complaints received by a facility along with any response undertaken by the owner or operator to IEPA. However, the rules do not specify the response actions to be taken by IEPA. Given the site-specific nature of the fugitive dust issues, the Board finds it necessary to propose amendments to the current rules that provide specific measures that IEPA may require the owner or operator to institute to address the dust complaints based on the evaluation of the periodic dust complaint reports.

Fugitive Dust Monitoring

The Board recognizes the concerns noted by the Environmental Groups regarding the impacts of fugitive dust associated with CCR surface impoundments. However, the Board agrees with IEPA and IERG that dust monitoring and mitigation should be considered on a site-specific basis only if there are any demonstrated off-site impacts.

The Environmental Groups cite the City of Chicago's dust monitoring rules to support the proposed amendments. However, those rules were adopted specifically in response to the management of bulk solid material (such as coal, petcoke, metcoke) that had been impacting the south side of Chicago. There is no information in the record that the operation and closure of CCR surface impoundments in Illinois is causing significant fugitive dust impacts on the surrounding communities. Further, Part 845 requires the development and implementation of a specific plan for CCR fugitive dust control measures to minimize dust impacts. Additionally, as noted by IERG, many of the concerns highlighted by the Environmental Groups are also addressed by the Board's particulate matter regulations under Part 212. The Board therefore

finds that there is no current need to mandate continuous dust monitoring at all CCR surface impoundment sites.

However, the Board disagrees with the Agency that we must wait until off-site impacts become a widespread issue to amend the fugitive dust rules in Part 845 to require monitoring. As noted above, to facilitate the consideration of site-specific fugitive dust monitoring and mitigation, the Board proposes amending Section 845.500(b) to allow the Agency to require monitoring and or mitigation based on an evaluation of the quarterly dust complaints reports received under Section 845.500(b)(2)(B). Another factor that could be considered to require fugitive dust monitoring/mitigation is the proximity of the CCR surface impoundment to EJ communities. These amendments would allow the Agency to require fugitive dust monitoring and mitigation, if necessary, on a site-specific basis under Part 845, rather than in an enforcement action. The Board relies on the Environmental Groups proposal for specifying dust monitoring requirements. The Board proposes that dust monitoring must be conducted by using at least four each of PM_{10} and $PM_{2.5}$ air monitors located at or near facility boundaries with additional two each of PM_{10} and $PM_{2.5}$ air monitors located at downwind locations if not covered by the cardinal point monitors. The Board proposes the following amendments to Section 845.500:

b) CCR Fugitive Dust Control Plan. The owner or operator of the CCR surface impoundment must prepare and operate in accordance with a CCR fugitive dust control plan as specified in this subsection (b). This requirement applies in addition to, not in place of, any applicable standards under the Occupational Safety and Health Act (29 USC 15), including 29 CFR 1910.1018, 29 CFR 1910.1024, 29 CFR 1910.1025, 29 CFR 1910.1027, and 1910.1053, or any other State or federal law.

2) The CCR fugitive dust control plan must include procedures to log every complaint from members of the public received by the owner or operator involving CCR fugitive dust events at the facility. The owner or operator must:

A) Include for each logged complaint the date of the complaint, the date of the incident, the name and contact information of the complainant, if given, and all actions taken to assess and resolve the complaint; and

B) Submit quarterly reports to the Agency no later than 14 days from the end of the quarter of all complaints received in that quarter, including the information required by subsection (b)(2)(A).

<u>3) The Agency must evaluate quarterly complaint reports received under Section 845.500(b)(2)(B):</u>

<u>A) If the Agency determines the mitigation measures under the CCR fugitive dust control plan are not addressing the dust issues beyond the property boundary, the Agency may require the owner or</u>

operator to revise the plan to include additional mitigation measures, including air quality (dust) monitoring at the property boundary.

B) If the Agency determines under Section 845.700(g)(6) that the facility causing dust issues is in an area of environmental justice concern, the Agency must require the owner or operator to revise the plan to include additional mitigation measures and property boundary air quality monitoring.

C) Air quality (dust) monitoring under subsections (b)(3)(A) and (b)(3)(B) must include at least four each of PM_{10} and $PM_{2.5}$ air monitors located at or near facility's property boundary with one air monitor each of PM_{10} and $PM_{2.5}$ located at each cardinal point (north, south, east, west) with additional two each of PM_{10} and $PM_{2.5}$ air monitors located at downwind locations if not covered by the cardinal point monitors.

c) Annual CCR Fugitive Dust Control Report. The owner or operator of a CCR surface impoundment must prepare an annual CCR fugitive dust control report that includes a description of the actions taken by the owner or operator to control CCR fugitive dust and the four quarterly fugitive dust complaint reports submitted under subsection (b)(2)(B) along with any Agency determinations under subsection (b)(8). The annual CCR fugitive dust control report must be submitted as part of the annual consolidated report required by Section 845.550.

Implementation of a Public Database

Regarding the Environmental Groups recommendation that the Agency maintain an online database of the monthly air monitoring reports accessible to the public, the Board agrees that easy access to monitoring data would be helpful to the public to be aware of potential air quality issues. The Board finds that such public information should be accessible to residents of the State and that residents should not be required to file FOIA requests to find public information that can easily be uploaded to the facilities' state CCR websites. FOIA is meant to be self-enforcing, as public information should be easily accessible to residents of the state. Agencies should not have to rely on individuals to request information that is in an agency's possession and would be easy to distribute. The Board believes that the monitoring data at issue here can easily be uploaded to the facility's CCR websites. Therefore, the Board proposes the following addition to Section 845.800(d).

Section 845.800 Facility Operating Record

d) Unless otherwise required below, the owner or operator of a CCR surface impoundment must place the following information, as it becomes available, in the facility's operating record:

34) the quarterly fugitive dust complaint reports submitted to the Agency under Section 845.500(b)(2)(B) along with any Agency determinations under Section 845.500(b)(8).

ENVIRONMENTAL JUSTICE SCREENING TOOLS

Under Part 845, IEPA is required to determine whether a surface impoundment is located in "areas of environmental justice concern." 35 Ill. Adm. Code 845.700(g)(1)(C). Areas of environmental justice concern are identified, *under Part 845 only*, as any area that meets either of the following:

A) Any area within one mile of a census block group where the number of low-income persons is twice the statewide average, where low income means the number or percent of a census block group's population in households where the household income is less than or equal to twice the federal poverty level; or

B) Any area within one mile of a census block group where the number of minority persons is twice the statewide average, where minority means the number or percent of individuals in a census bock group who list their racial status as a race other than white or lone or list their ethnicity as Hispanic or Latino. 35 Ill. Adm. Code 845.700(g)(6).

IEPA is directed to classify any surface impoundment that falls within an area of EJ concern as a Category 3 impoundment, which is to receive closure prioritization. Under Part 845, all Category 3 surface impoundments were to have submitted a construction permit for either retrofit or closure by February 1, 2022. 35 Ill. Adm. Code 845.700(h)(1).

In order to identify areas of EJ concern, IEPA developed a Geographic Information System (GIS) mapping tool called EJ Start. This tool identifies census block groups and areas within one mile of census block groups that meet the Part 845 EJ demographic screening criteria. The Environmental Groups argue that EJ Start has the potential to omit communities that bear a disproportionate burden imposed by environmental pollution. To address this concern, the Environmental Groups proposed changes to the Part 845 EJ screening requirements.

Environmental Groups' Proposal

Environmental Justice Community Screening Tools

The Environmental Groups looked to USEPA, other states, and other Illinois agencies to evaluate other EJ mapping tools with the goal of improving the screening methods for environmental justice communities. PC 10 at 25-33. The Environmental Groups presented mapping tools used in California, Washington, New Jersey, Maryland, North Carolina, and USEPA's tool, EJSCREEN. *Id*. Of note, the Environmental Groups point out that other states use screening parameters other than income and race/ethnicity. Those parameters include pollution indicators, education level, and the age of the population. *Id*. at 32.

Other states use different screening indicators and methods to calculate the "environmental justice score" of an area. PC 10 at 25-33. For example, California's mapping tool, CalEnviroScreen, places indicators into one of two groups, "pollution indicators" and "population characteristics." An EJ score is then determined by multiplying the pollution indicator score by the population characteristic score. *Id*. at 29. Washington and Maryland use a similar formula to screen for EJ communities. *Id*. at 31. New Jersey uses a threshold based on race and ethnicity, income, and English proficiency to identify EJ communities. *Id*.

EJSCREEN was developed by USEPA and while USEPA acknowledges that EJSCREEN has limitations due to not providing "data on every environmental impact and demographic indicator that may be relevant to a particular location," it recommends that the tool be used as a supplement with other information in order to identify EJ communities. *Id*. at 28. EJSCREEN has most of the environmental and demographic indicators required by Part 845.700(g)(6)(C) available as filters and displays many of the indicators as percentiles in comparison to the rest of the state or country.

The Environmental Groups also highlight a tool developed by the Illinois Power Agency (IPA) to identify low-income communities. The intent of this tool is to equitably distribute electricity generation and community solar projects under the Illinois Solar for All Program. PC 10 at 29. IPA's tool relies on USEPA's EJSCREEN and components of CalEnviroScreen to identify EJ communities. *Id*. at 29-30. Similar to CalEnviroScreen, the IPA tool calculates the EJ score by multiplying the environmental indicators by the demographic indicators. *Id*. at 30. The communities with scores in the top 25 percent of the State are classified as EJ communities. Additionally, there is a self-designating mechanism where a community can propose to classify itself as an EJ community. *Id*. IPA's tool allows users to generate maps identifying EJ communities based on data collected by the IPA and has been updated so that it uses 2020 census data.

The Environmental Groups argue that IPA's tool has been supported by community and other environmental groups as a viable method to "identify areas of environmental justice concern". *Id.* The Groups also note that both the Climate and Equitable Jobs Act (20 ILCS 730/5-5 (2024) and the Environmental Justice Bill (HB 4093 (2021)) adopted IPA's framework for identifying EJ communities. *Id.* The Environmental Groups recommend that if time does not permit it to engage in further consultation with stakeholders from "communities near CCR surface impoundments and those in recognized environmental justice communities", the Board should adopt IPA's Illinois Solar for All Program methodology. *Id.* at 35. The Groups also recommend that the Board include a self-designation process as well as a three-mile radius around the census block to "capture how residents of an overburdened community that may be over a mile away use waterways affected by CCR." *Id.*

Selection of Indicators

The Environmental Groups argue that solely focusing on demographic data "may not paint the full picture of an area of environmental justice concern." PC 10 at 33. The Environmental Groups note that while using race and income as screening tools can identify vulnerable communities exposed to "environmental pollution due to structural racism and

inequities," it can exclude communities that may be similarly overburdened by pollution due to other factors. *Id*. at 25.

Additional indicators used by the tools could include: education level, linguistic isolation, population percentage of elders or children, pollution indicators (an example could be air quality), traffic density, and health indicators (examples could include diagnosis of asthma or cancer incidence). PC 10 at 32. The Environmental Groups argue that expanding the diversity of the indicators could help ensure, "that vulnerable communities are captured by screening tools to prevent demographic data from being diluted and overburdened areas from being ignored." *Id*.

Based on a review of the indicators used by other states, the Environmental Groups recommend the Board use environmental factors, including National-Scale Air Toxics Assessment (NATA) cancer risk, NATA respiratory hazard index, NATA diesel particulate matter, ozone level, traffic proximity and volume, lead paint indicator, wastewater discharges indicators, proximity to risk management plans sites, hazardous waste treatment/storage/disposal facilities and national priorities list, and demographic factors (population density, percent low income, percent black, indigenous and people of color, percent less than a high school education, linguistic isolation, age (under 5 or over 64), number of asthma-related emergency department visits, and frequency of low birth weight infants). PC 10 Appendix 4 at 1-2. The Environmental Groups note that the EJ community score for each census block group is determined by first ranking each demographic factor and each environmental factor and determining a percentile score for each census block group. Next, the percentile scores are averaged to determine an environmental score and a demographic score for each census block group. Finally, the EJ community score for each census block group is obtained by multiplying the environmental and demographic score. *Id.* at 2.

Revising the Definition of "Areas of Environmental Justice Concern"

The Environmental Groups argue that the current definition of "areas of environmental justice of concern" under Part 845 should be expanded to capture more overburdened communities in the screening process. PC 10 at 33. Under the current definition, an area of environmental justice concern is identified as an area "within one mile of a census block group where the number of low-income persons is twice the statewide average" or "where the number of minority persons is twice the statewide average." 35 Ill. Adm. Code 845.700(g)(6)(A) and (B). The Environmental Groups recommend an additional criterion under Section 845.700(g)(6) to require "any area that falls within the top 25 percent of scores based on a cumulative impacts assessment" based on the environmental and demographic factors in the proposed 845.700(6)(C). PC 10 Appendix 4 at 1. The Environmental Groups also request that the Board expand the buffer zone around a census block group from one mile to three miles to better identify overburdened communities. PC 10 at 35. The Environmental Groups believe that expanding the buffer zone would help capture people from "communities that travel to use polluted waterways for sustenance and that are then overburdened by environmental and health risks when returning home." *Id.*

Concerns Raised by Utilities, Industry Groups, and IEPA

IERG, Dynegy, and IEPA voiced opposition to the Environmental Groups' recommendation to amend the EJ tools used in Part 845. PC 15 at 17-18; PC 16 at 12; PC 19 at 11. Industry groups argue that a proposal to change the EJ tools is moot as the timeline under Part 845 to identify EJ communities has passed. Further, they argue that the Environmental Groups have not demonstrated the new tools would identify additional environmental justice communities.

IEPA also argues that any changes to the EJ process in Part 845 have been rendered moot since, "the date by which construction permit applications must be submitted has already occurred." PC 15 at 17. Including an additional EJ criterion in Part 845 at this point will not impact the outcome of determining whether a surface impoundment is located in an EJ community. *Id*. Further, IEPA argues that adding EJ criterions, "may not add any more CCR surface impoundments to the number of EJ areas of concern than are already covered by the current methodology." *Id*. at 18. However, IEPA notes that a self-designation process could add to the current areas of EJ concern identified by EJ START.

IEPA recommends that any changes to its EJ screening programs should be applied across all IEPA programs, not just the prioritization of surface impoundment closures. *Id*. at 18. The Agency also indicates that it is open to further discussing possible legislative changes to, "formalize various EJ actions in permitting transactions, including the exploration of an expanded EJ screening tool of general applicability." *Id*. at 19.

IERG and Dynegy argue that Part 845's procedure for screening for EJ communities is sufficient as written. PC 16 at 12; PC 19 at 11. IERG and Midwest concur with the Agency's assessment that it has not been demonstrated that the proposal amendments would identify more facilities as Category 3 (facilities located in environmental justice communities). PC 16 at 12; PC 18 at 7. Midwest also claims there is not enough information or technical justification to amend the environmental justice regulations under Part 845. PC 18 at 7.

Further, IEPA reports that the recommended indicators in proposed Sections 845.700(g)(6) and (g)(8) are outdated, therefore IEPA intends to use USEPA data and mapping tools instead. PC 15 at 18. Moreover, the Agency emphasized that any changes to the screening methodology would need to be changed across programs for consistency. *Id.* Additionally, the Agency claims that increasing the buffer zone surrounding the census block groups from one-mile to three-miles is unnecessary in context of "the expected off-site impacts from CCR surface impoundments." *Id.* at 23.

Finally, IEPA notes that a cumulative impacts assessment approach as recommended by the Environmental Groups is not equivalent to expanding the screening criteria using available data. PC 15 at 18. While helpful in conducting an assessment, an expanded EJ screening methodology is not a cumulative impact assessment. *Id*.

Environmental Groups' Response

In response to the industry and IEPA comments, the Environmental Groups argue their EJ proposal remains relevant because the expanded screening criteria can be used during the assessment process to determine whether the owner or operator, "improperly excluded CCR surface impoundments from Closure Prioritization Category 3." PC 20 at 17. The Groups maintain that the expanded screening methodology should be used to evaluate the category characterizations from the applications for accuracy and to prioritize the order of CCR clean ups. PC 24 at 25-26.

The Environmental Groups point to examples in the Part 845 permit application process, where an owner/operator submitted applications with a category designation that IEPA subsequently changed to Category 3. PC 24 at 26. Wood River's owner/operator classified the CCR surface impoundments under Category 7 (i.e., existing CCR surface impoundments in compliance with groundwater protection standards in 845.600) and later changed it to Category 3 (located in areas of environmental justice concern). *Id.* Additionally, Vistra classified their Edwards facility as Category 5 (i.e., existing CCR surface impoundments with exceedances of groundwater protection standards in 845.600), however IEPA has since classified the Edwards site as being in an area of environmental justice concern. *Id.*

Further, the Environmental Groups argue that EJ START is not adequate to screen for overburdened communities as it "has the potential to leave overburdened communities out of prioritization" and can "create ambiguity over what is an environmental justice community." PC 20 at 17. The Groups point to Wood River Power Station. When using EJ START, the buffer zone falls just short of the impoundments, however using the Solar For All program "there would likely would not be any ambiguity about the fact that the Wood River's ash ponds are located in an area of environmental justice concern." *Id.* at 18.

Lastly, the Environmental Groups argue their proposal would not cause confusion across Agency programs because there are similar environmental justice screening programs in Illinois. PC 24 at 27. Regarding technical feasibility and economic reasonableness of the proposed changes, the Environmental Groups note that the Illinois Supreme Court has held that there are no specific evidentiary requirements on the Board as long as it uses "technical expertise and judgment, under Section 27(a) [of the Act], when balancing any hardship that the regulations may cause to dischargers against its statutorily mandated purpose and function of protecting our environment and public health." *Id. citing* Granite City Division of National Steel Co. v. Illinois Pollution Control Board, 155 Ill. 2d 149 at 182–183 (1993). Further, they note that Section 27(a) of the Act does not limit the Board from consulting another agency in determining appropriate regulations. *Id.*

Attorney General's Response

The Attorney General supports the Environmental Groups' proposal to improve the screening process for EJ communities. PC 21 at 11. The AG cites USEPA's statement that linked higher exposure levels of pollution to "higher rates of morbidity and mortality" and emphasizes the importance of protecting the people who live and work in these communities. *Id.*

at 10 *citing* USEPA, *EPA Legal Tools to Advance Environmental Justice* (May 2022). Moreover, the AG notes that the Environmental Groups' recommendations mirror the methods used to develop the Illinois Solar for All Program to screen for EJ communities. *Id.* at 11. Further, the AG maintains that the proposal will make the EJ community screening procedures more like the methods followed in other states. *Id.* at 12. Regarding the expansion of the buffer zone, the AG agrees with IEPA that the Environmental Groups have not evaluated if the expansion from one to three miles would alter any of the classifications of the CCR surface impoundments regulated under Part 845. *Id.* at 11-12.

Board Discussion and Findings

The Board agrees with the Environmental Groups, IEPA and the Attorney General that environmental justice is a vitally important consideration in all areas of environmental law. The Environmental Groups have made persuasive arguments and provided supporting information for the use of EJ screening tools that account for environmental burden and demographic factors in order to improve the identification of environmental justice communities near CCR surface impoundments under Part 845. Currently, Part 845 requires identification of EJ communities based on race/ethnicity and income level relying on IEPA's EJ START tool. The Board agrees with the Environmental Groups that consideration of the environmental burden on communities is an important factor in identifying EJ communities.

However, before requiring the consideration of environmental burden on communities, the Board must consider if such a requirement is moot, here in Part 845. The sole purpose of identifying EJ communities under Part 845 is to create a prioritization schedule for the closure of CCR surface impoundments. Under Section 845.700(g)(6), CCR surface impoundments located in areas of environmental justice concern, as determined by the Agency, are considered as Category 3 impoundments. Under Section 845.700(h)(1), owners or operators of Category 3 impoundments were required to submit either a construction permit application containing a final closure plan or a construction permit application to retrofit the CCR surface impoundment by February 1, 2022. This deadline passed more than two years ago.

The record in this rulemaking sub-docket indicates that the Agency has adequately identified impoundments located in EJ communities relying on the current rules and methodologies. As noted by the Environmental Groups, IEPA revised closure priority category of several CCR surface impoundments during the permitting process based on EJ concerns. Therefore, given that the deadline for filing permit applications for all categories has passed, the Board does not find there is a direct benefit to amending Part 845 to allow the use of EJ screening tools other than EJ Start.

Regarding the Environmental Groups' recommended expansion of the buffer area around a census block group from one to three miles, the Board agrees that expansion would cover more areas that may be overburdened by environmental and health risks. However, considering the deadline to file permit applications has passed and IEPA's revision of closure priority categories of several CCR surface impoundments based on EJ concerns during the permitting process, the Board does not find it necessary to now expand the proposed buffer around the census block area for Section 845.700. The Board notes that under Section 845.230, closure priority list

designations must be included in permit applications. This allows for public participation and input on whether the classification is accurate and any relevant information may be added to the record at that time. R20-19 (Feb 4, 2021), slip op. at 87.

While the Board finds that making environmental justice methodology changes in Section 845.700 is moot at this point in the timeline of Part 845, the Board supports IEPA's stated goal of continuing the conversation to develop new tools to, "identify and support overburdened and vulnerable communities." PC 15 at 19. IEPA has argued that any changes to its EJ screening methodology should be applied across Agency platforms. *Id*. The Board agrees, however, that is a broader and more expansive goal than is appropriate for this sub-docket rulemaking. For that reason, the Board directs the Clerk to open a new rulemaking docket to explore the creation of a Board procedural rule that will provide guidance to the Board when considering environmental justice issues, including the selection of environmental justice screening tools for identifying areas of environmental justice concern, in its proceedings. The Board will hold this new docket open for six months until February 24, 2025, during which time a participant may file a rulemaking proposal. If it receives one or more proposals by that date, the Board will then determine how to proceed. The Board also directs the assigned hearing officer to expeditiously establish a public comment period during which time the Agency or other participants may file comments to develop the issues surrounding an environmental justice procedural rule. The Board will determine how to proceed in this matter after the end of the public comment period.

MOTION TO MODIFY

The Environmental Groups argue that Part 845, as adopted, is "inconsistent with, and less protective than, the federal CCR Rule." Motion to Modify at 2. As participants in the original rulemaking for Part 845, the Environmental Groups filed comments with the Board and with the Joint Committee on Administrative Rules (JCAR) arguing that Section 845.750(d) allows owner/operators to place more CCR in unlined impoundments before closure. *Id*. The Environmental Groups argue that this allowance was part of the *proposed* federal rules in Part 257, but were not included by USEPA in the final rule text. *Id*. The Environmental Groups ask the Board to delete Section 845.750(d) in its entirety. Mot. to Modify, Appendix A.

The Environmental Groups also point to a comment filed by Edward Nam, Director of the Land, Chemicals, and Redevelopment Division of USEPA Region V (PC 146). The comment is a March 3, 2021, one-page, three-paragraph letter directed at the JCAR during the second notice period of R20-19. Director Nam says that on March 2, 2021, JCAR provided USEPA with certain comments it had received from the environmental groups regarding the proposed Part 845 rules. The letter does not specify what comments were sent to USEPA or what comment they are responding to. Director Nam says, "As noted in the environmental groups' comments, 35 IAC 845.750(d) incorporates provisions allowing for the consolidation of coal ash from one pond into another. EPA agrees that JCAR should remove this language from 35 IAC 845.750 because the proposed requirements have not been incorporated into 40 CFR Part 257, Subpart D." PC 146.

The second issue raised in the motion to modify is a request that "background" groundwater monitoring wells not be affected by leakage from CCR units. The Environmental Groups argue that Part 845 is "less protective than the federal CCR rule concerning the placement of 'background' monitoring wells in areas impacted by coal ash." Memo at 5. The Environmental Groups argue the federal rules prohibit the siting of background wells in locations where groundwater quality has been affected by leaks from CCR. Memo at 6. The Environmental Groups propose adding "CCR landfill" as follows to Section 845.630(a)(1):

a) Performance Standard. The owner or operator of a CCR surface impoundment must install a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples that:

1) Accurately represent the quality of background groundwater that has not been affected by leakage from a CCR surface impoundment or CCR landfill as defined at 40 CFR 257.53. A determination of background quality may include sampling of wells that are not hydraulically upgradient of the CCR management area where:

IEPA, IERG, Midwest and Dynegy's Responses

IEPA asks the Board to deny the Environmental Groups' motion to modify, "because it raises issues outside the limited scope of this subdocket." IEPA Resp. at 2.

IERG, Midwest and Dynegy oppose the motion and each asks the Board to deny it as it exceeds the scope of the sub-docket. Dynegy Resp. at 3, Midwest Resp. at 1, IERG Resp. at 1-2. "The Environmental Groups' Motion to Modify is improper for this forum, improper as a matter of law, and dwells on past issues that have been raised, heard, and reviewed multiple times in the primary rulemaking." Dynegy Resp. at 3.

Environmental Groups' Reply

In their reply, the Environmental Groups argue that the modifications they seek are "either expressly within the scope of this sub-docket or based on evidence not yet available at the time Part 845 was finalized." EG Reply at 1. The Environmental Groups claim the sub-docket, while opened by the Board to address four distinct issues, is a "narrow approach." *Id*. at 4. "Contrary to those participants' assertions, the Board has the authority to determine the parameters of the sub-docket, and the four topics already named do not limit what the Board can consider." *Id*.

Board Discussion and Findings

The Board agrees with IEPA that the requested changes in the motion to modify fall well outside the scope of this sub-docket. As described in the order opening this sub-docket and in this order itself, the Board is investigating four limited issues here. The Environmental Groups availed themselves of the opportunity to comment, file testimony, have expert testimony

presented at hearing, and further commented to JCAR during the second notice period on the two issues in their motion. The Board did not make the requested changes in the Part 845 rulemaking and declines to do so here, in the sub-docket, as the issues stray beyond the limited scope of this sub-docket.

CONCLUSION

The Board today, on its own motion, proposes changes to 35 Ill. Adm. Code 845.120, 500, 550, 740 and 800 for first notice. The strikethrough and underlined proposed rule text is attached as an addendum to this order. This will begin a period of at least 45 days of public comment.

ORDER

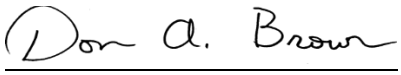
1. The Board directs the Clerk to provide first notice publication of the proposal in the *Illinois Register* under the Illinois Administrative Procedures Act. The proposed rules appear as an addendum to this order.

2. The Board directs IEPA, or participants, to file a new rulemaking proposal incorporating the federal rule amendments for Part 257 by May 5, 2025.

3. The Board directs the Clerk to open a rulemaking docket to explore the creation of a new Board procedural rule that will provide guidance to the Board when considering environmental justice issues, including the selection of environmental justice screening tools for identifying areas of environmental justice concern, in its proceedings. The Board will hold this new docket open for six months until February 24, 2025, during which time a participant may file a rulemaking proposal. The Board also directs the assigned hearing officer to expeditiously establish a public comment period during which time the Agency or other participants may file comments to develop the issues surrounding an environmental justice procedural rule.

IT IS SO ORDERED.

I, Don A. Brown, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on August 22, 2024, by a vote of 4-0.



Don A. Brown, Clerk
Illinois Pollution Control Board