

ILLINOIS POLLUTION CONTROL BOARD

February 17, 2022

IN THE MATTER OF:)
)
MIDWEST GENERATION LLC'S) AS 21-2
PETITION FOR AN ADJUSTED) (Adjusted Standard)
STANDARD AND FINDING OF)
INAPPLICABILITY FOR THE POWERTON)
STATION)

OPINION AND ORDER OF THE BOARD (by M. Gibson):

Midwest Generation, LLC (MWG) filed a petition (Pet.) for an adjusted standard pursuant to Section 28.1 of the Environmental Protection Act (Act) and Part 104 of the Board's procedural rules seeking an adjusted standard from Board's rules governing Coal Combustion Residuals (CCR) in Illinois. *See* 415 ILCS 5/28.1 (2020); 35 Ill. Adm. Code 104.Subpart D. MWG seeks a finding that the Service Water Basin at its Powerton Station in Pekin, Tazewell County is not subject to the CCR rules at 35 Ill. Adm. Code 845. MWG's original petition sought additional relief; however, MWG filed an amended petition withdrawing its other requests for relief.

The Illinois Environmental Protection Agency (IEPA) filed a recommendation agreeing that Part 845 is inapplicable to the Service Water Basin at Powerton. After reviewing the records and arguments by the parties, the Board finds that the Service Water Basin is not subject to the provisions of Part 845, as long as the Service Water Basin is not used in the future for the treatment or storage of CCR.

The Board will briefly describe the procedural background, and then move on to the regulatory background. The Board will then iterate the factual background before proceeding to the requested relief and recommendation. The Board will conclude by discussing its decision and stating the conclusion.

PROCEDURAL BACKGROUND

On May 11, 2021, MWG filed a petition requesting an adjusted standard and finding of inapplicability.. On May 15, 2021 notice of the adjusted standard petition was timely published in the *Pekin Daily Times*. On November 16, 2021, notice of the amended petition was timely published in the *Pekin Daily Times*.

IEPA timely filed its recommendation on September 22, 2021.

On November 11, 2021, MWG filed an amended petition. On November 16, 2021, notice of the amended petition was timely published in the *Pekin Daily Times*. The amended petition withdrew MWG's request for an adjusted standard to allow MWG to decontaminate and

retain the existing liners of the Ash Surge Basin, Bypass Basin, and Metal Cleaning Basin at its Powerton Station. Am. Pet. at 1.

REGULATORY BACKGROUND

The Board adopted new Part 845 creating Illinois' first Statewide standards for the disposal in surface impoundments of CCR, commonly called "coal ash," which is generated by coal-fired power plants. The Board adopted the rules pursuant to the Coal Ash Pollution Prevention Act, which the General Assembly passed and Governor JB Pritzker signed into law in 2019 as Public Act 101-171. 415 ILCS 5/22.59 (2020). The rules of general applicability provide for the protection of public health and the environment in Illinois by establishing a comprehensive State permitting program to govern all aspects of CCR surface impoundments. For example, Part 845 regulates the location, design, construction, operation, closure, and post-closure care of CCR surface impoundments, as well as the remediation of releases from those impoundments. Part 845 also requires that impoundment owners or operators supply financial assurance to ensure payment of closure, post-closure care, and remediation costs. In addition, Part 845 provides for meaningful public participation in the permitting process, along with requirements to prioritize CCR surface impoundment closures in areas of environmental justice concern.

Part 845 applies "to owners and operators of new and existing CCR surface impoundments, including any lateral expansions of CCR surface impoundments that dispose of or otherwise engage in solid waste management of CCR generated from the combustion of coal at electric utilities and independent power producers." 35 Ill. Adm. Code 845.100(b). CCR surface impoundments are defined by the Act as:

"CCR surface impoundment" or "impoundment" means a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the surface impoundment treats, stores, or disposes of CCR. 415 ILCS 5/3.143 (2020).

The rules define existing CCR surface impoundment as:

A CCR surface impoundment in which CCR is placed both before and after October 19, 2015, or for which construction started before October 19, 2015 and in which CCR is placed on or after October 19, 2015. A CCR surface impoundment has started construction if the owner or operator has obtained the federal, State, and local approvals or permits necessary to begin physical construction and a continuous on-site, physical construction program had begun before October 19, 2015. 35 Ill. Adm. Code 845.120.

FACTUAL BACKGROUND

The Board first describes the facility and then sets forth IEPA's action regarding the Service Water Basin. Finally, the Board explains the investigation undertaken to determine the nature of the Service Water Basin.

Facility

MWG's Powerton Station is located in an industrial and agricultural area in Pekin, Tazewell County. Pet. at 6. Powerton Station began operations in the late 1920s. *Id.*; Pet. at Ex. 1, ¶¶ 4, 5. In 1999, MWG began operating the Powerton Station. *Id.* Powerton has various environmental permits, including an NPDES permit for its wastewater discharges. Pet. at 6; Pet. Exh. 10.

The Powerton Station is a coal fired electric generating station. Pet. at 18. The Station produces two different types of coal ash, fly ash and bottom ash. *Id.* Fly ash is composed of lightweight particles and collected via dry systems using electrostatic precipitators. *Id.* Bottom ash is composed of heavier particles that fall to the bottom of furnace and is then mixed with transport water and conveyed out of the plant into the dewatering bins located next to the Station. *Id.* The Service Water Basin receives process water after ash has been collected from either the Ash Surge Basin or the Ash Bypass Basin. *Id.* at 12. The process water is then sent to the cooling water pond to either be recycled or discharged. *Id.*

The Service Water Basin was constructed in 1978 and the contents emptied in 2013 to install a new HDPE liner. Pet. at 12. Prior to 2013, the Service Water Basin was not emptied. *Id.* When the Service Water Basin was emptied there was less than a foot of material accumulated at the bottom. The material was not CCR, but it was soil and biologic debris that had accumulated over time. *Id.*

Violation Notice

IEPA issued an invoice to MWG for the Service Water Basin in December 2019. Pet. at 2; Rec. at 6. IEPA issued the invoice pursuant to Section 22.59(j) of the Act (415 ILCS 5/22.59(j) (2020)) and without consulting with MWG. *Id.* Section 22.59(j) of the Act required owners of CCR surface impoundments to post a performance bond or security to cover potential closure and remediation of the CCR surface impoundments. On March 25, 2020, IEPA notified MWG that MWG would be allowed to demonstrate that the Service Water Basin does not contain CCR. Rec. at 6. On July 28, 2020, IEPA issued a violation notice to MWG for failure to comply with Section 22.59(j) of the Act. *Id.*

Service Water Basin Investigation

To demonstrate an absence of any accumulated CCR, MWG conducted a multifaceted investigation of the Service Water Basin. Pet. at 12. MWG notes that the investigation found little to no material was present in the Service Water Basin. *Id.* This investigation included a bathymetric survey of the bottom of the Service Water Basin. *Id.* at 13. The survey found that material was either only marginally present or not present at all at the bottom of the Service Water Basin. *Id.* Further, the calculated volume of material at the base of the Service Water Basin is consistent with the volume of material expected to fall into the Service Water Basin from air dispersion and stormwater flow. *Id.* at 12-13.

MWG hired KPRG and Associates, LLC (KPRG) to evaluate the contents of the Service Water Basin. Exh. 19 at 1. KPRG relied on a bathymetric survey of the Service Water Basin performed in July 2020 by Ruettiger, Tonelli & Associates, Inc (RT&A). *Id.* at 2. The survey was conducted by navigating the unit using a boat and an electronic depth finder to determine water depth to the bottom of the unit. *Id.* The water elevation in feet above sea level at the time was determined using state plane horizontal and vertical data. *Id.* The results of the survey were compared to the known existing condition of Service Water Basin to determine whether material had accumulated to a measured quantity above the base of the unit. If present, the accumulation quantity was calculated. Exh. 19 at 3.

The survey found the average bottom elevation of the Service Water Basin was 0.2 feet (approx. 2.4 inches) of material. Pet. at 13. Based on the size of the Service Water Basin, KPRG calculated the total volume of material present was 52 cubic yards (CY). *Id.* Pet. at 12 and Exh. 19 at 6. 12. Further, relying on an accepted guideline¹ that 2 tons/acre/year falls onto the land, KPRG calculated that approximately 24.9 tons of non-CCR material fell into the Service Water Basin from air deposition and stormwater runoff since it was emptied in 2013. *Id.* This amount was found to be consistent with the estimate of sediment based on dry density of non-organic material in the Service Water Basin, which was 28.7 tons.

Additionally, the sediment samples from the bottom were analyzed for grain size, weight-to-volume ratio of the sediment, and ASTM 2974, Standard Test Methods for Moisture, Ash, and Organic Matter of Peat and Other Organic Soils. Exh. 19 at 3. The grain size comparison showed the material at the bottom of the Service Water Basin is not similar to CCR. Pet. at 14. KPRG compared the CCR from the Joliet 9 Station to the material found in the Service Water Basin at the Powerton Station, because the Joliet 9 CCR and Powerton CCR are effectively the same. *Id.*, Exh. 19 at 6. The material in the Service Water Basin was black/gray silty sand and 46% fine sand and fines. *Id.* In comparison, the Joliet 9 CCR was classified as brown sand and was 80% gravel and coarse to medium sand. *Id.* The weight to volume comparison showed the material within the Service Water Basin was 48% water and 52% solids (of which 92% was non-organic matter). Exh. 19 at 6. Based on these results KPRG concluded the Service Water Basin does not contain CCR. Pet. at 13.

REQUESTED RELIEF

MWG filed an amended petition to withdraw its request for an adjusted standard to allow MWG to decontaminate and retain the existing liners of the Ash Surge Service Water Basin, Bypass Basin, and Metal Cleaning Basin at its Powerton Station. Am. Pet. at 1. MWG determined it is no longer necessary to close the Ash Surge Basin, Bypass Basin, and Metal Cleaning Basin and reuse their liners. *Id.* Thus, MWG no longer needs an adjusted standard from the closure by removal requirements for these three ponds. *Id.*

¹ The estimate of two tons per acre per year is based upon the U.S. Dept. of Agriculture Report soil loss equation in the Department's "Predicting Rainfall Erosion Losses", December 1978.

MWG maintains its request for an adjusted standard from Part 845 of the Board's rules finding that the rules are inapplicable to the Powerton the Service Water Basin. Am. Pet. at 1. MWG suggests the following for the Board's order:

Part 845 of the Illinois Pollution Control Board Regulations does not apply to the Service Water Basin, located at the MWG Powerton Generating Station, 13082 East Manito Road, Pekin, Tazewell County, IL 61554. Pet. at 26.

RECOMMENDATION

IEPA does not object to the Board granting MWG's request for relief regarding the Service Water Basin, with the stipulation that it will not be used to treat, store, or dispose of CCR in the future. Rec. at 11. In December 2019 IEPA identified the Service Water Basin as a CCR surface impoundment based on historic records on file. *Id.* at 6. MWG disagreed with this classification. Later, IEPA allowed MWG to demonstrate that the Service Water Basin does not contain CCR. *Id.* MWG submitted a demonstration, including a bathymetric survey, a calculation of estimated sediment at the bottom of the Service Water Basin, laboratory analysis of samples from the Service Water Basin, and a comparison of the samples to CCR. *Id.* at 7.

IEPA notes that the results of the bathymetric survey did not indicate sediment accumulation or a delta-like alluvial structure, which is typical of CCR, in the basin. Rec. at 7. If CCR had been sluiced into the Service Water Basin since 2013, the IEPA would expect to see a measurable accumulation of sediment and/or a delta-like alluvial structure in the Service Water Basin. *Id.* Additionally, the IEPA reviewed historic aerial photos of the Service Water Basin taken between 1995 and 2017 (see Exh. E). *Id.* The appearance of the Service Water Basin did not change during the twenty-year period. *Id.* This finding, IEPA notes, contrasts with the other known CCR surface impoundments at the Powerton Station that had various changes in appearance, including deltas and removals, over the same time period. *Id.* at 7-8. MWG estimated the Service Water Basin had 52 cubic yards of material at the bottom of the unit. *Id.* at 8. IEPA asked for a comparison to an amount removed from a known CCR surface impoundment of a similar size at Powerton. *Id.* MWG replied that Bypass Basin had 310 cubic yards removed in the most recent removal. *Id.* Considering that the Service Water Basin has not been emptied since 2013, the IEPA concluded the Service Water Basin does not have enough material to indicate any appreciable amounts of CCR. *Id.* The laboratory analysis showed the material in the Service Water Basin is different from the CCR in both Joliet 9 and Powerton Stations. *Id.* For these reasons, IEPA is convinced that the MWG demonstrated that the Service Water Basin is not a CCR surface impoundment subject to Part 845's requirements. *Id.* at 10.

DISCUSSION

The Board will first discuss its authority to make a finding of inapplicability, and then discuss the issue of inapplicability.

Board Authority

The Board previously adopted orders in adjusted standard proceedings that examined the applicability of the Board's Solid Waste rules. See Petition of Apex Material Technologies, LLC for an Adjusted Standard from Portions of 35 Ill. Adm. Code 807.104 and 810.103, or, in the Alternative, a Finding of Inapplicability, AS 15-2, slip op. at 51-52 (June 18, 2015); Westwood Lands, Inc. for an Adjusted Standard from Portions of 35 Ill. Adm. Code 807.104 and 35 Ill. Adm. Code 810.103 or, in the Alternative, a Finding of Inapplicability, AS09-3, slip- op at 16 (Oct. 7, 2010); Jo'Lyn Corporation and Falcon Waste and Recycling for an Adjusted Standard from 35 Ill. Adm. Code Part 807 or, in the Alternative, a Finding of Inapplicability, AS 04-2, slip op. at 13-14 (Apr. 7, 2005).

In Jo'Lyn, the Board found that the petitioner's processes of grinding granulate bituminous shingle material (GBSM) into dust control and paving applications did not constitute a waste, and the solid waste rules did not apply. Jo'Lyn, slip op. at 14. Likewise, in Westwood, the Board found that steelmaking slag fines Westwood processes to produce coarse and fine metallic fractions in bulk, nugget, and briquette form to be used for steel manufacturing are not a waste under specified conditions. Westwood, slip op. at 16. In Apex, the Board found that the solid waste rules were applicable as the petitioner failed to demonstrate that the process was outside the solid waste regulations. Apex, slip op. at 52.

In each case the Board examined the record to determine if the Board's Solid Waste regulations applied to the materials or processes at issue. The Board will follow the same analysis here to determine if Part 845 applies to the Service Water Basin.

Part 845 Applicability to Service Water Basin

The Board adopted Part 845 to address the issues facing the State from CCR impoundments in the State. The definition of Surface Impoundment in Part 845 and in the enabling statute specifically defines a CCR surface impoundment as an area designed to hold an accumulation of CCR and liquids, and the surface impoundment treats, stores, or disposes of CCR. 415 ILCS 5/3.143 (2020); 35 Ill. Adm. Code 845.100(b). The evidence before the Board demonstrates that the Service Water Basin is used for process water and does not accumulate CCR. The Service Water Basin was not an area designed to hold an accumulation of CCR and liquids, and the Service Water Basin does not treat, store, or dispose of CCR. The Board notes MWG's position that, because the Service Water Basin does not contain CCR, it would be practically impossible to comply with many of the requirements of Part 845. Pet at 22, 23. Further, the Service Water Basin collect only soil and biologic debris. Therefore, by definition, the Service Water Basin is not a CCR surface impoundment. Because the Service Water Basin is not a CCR surface impoundment, Part 845 of the Board's rules does not apply to the operation of the Service Water Basin.

The Board is cognizant of IEPA's concern that the Service Water Basin is not used in the future for CCR and will condition this finding by requiring that the Service Water Basin never be used for the treatment, storage, or disposal of CCR.

CONCLUSION

After reviewing the record and arguments by the parties, the Board finds that the Service Water Basin is not subject to the provisions of Part 845, as long as the Service Water Basin is not used in the future for the treatment, storage, or disposal of CCR.

ORDER

Part 845 of the Illinois Pollution Control Board Regulations does not apply to the Service Water Basin, located at the MWG Powerton Generating Station, 13082 East Manito Road, Pekin, Tazewell County, IL 61554. The Service Water Basin must never be used for the treatment, storage, or disposal of coal combustion residuals

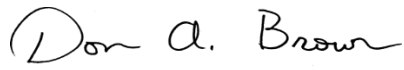
IT IS SO ORDERED.

Section 41(a) of the Environmental Protection Act provides that final Board orders may be appealed directly to the Illinois Appellate Court within 35 days after the Board serves the order. 415 ILCS 5/41(a) (2018); *see also* 35 Ill. Adm. Code 101.300(d)(2), 101.906, 102.706. Illinois Supreme Court Rule 335 establishes filing requirements that apply when the Illinois Appellate Court, by statute, directly reviews administrative orders. 172 Ill. 2d R. 335. The Board's procedural rules provide that motions for the Board to reconsider or modify its final orders may be filed with the Board within 35 days after the order is received. 35 Ill. Adm. Code 101.520; *see also* 35 Ill. Adm. Code 101.902, 102.700, 102.702. Filing a motion asking that the Board reconsider this final order is not a prerequisite to appealing the order. 35 Ill. Adm. Code 101.902.

| Names and Addresses for Receiving Service of Any Petition for Review Filed with the Appellate Court | |
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| Parties | Board |
| Midwest Generation, LLC Attn: Susan M. Franzetti Kristen Laughridge Gale Molly H. Snittner Nijman Franzetti LLP 10 South LaSalle Street, Suite 3600 Chicago, IL 60603 sf@nijmanfranzetti.com kg@nijmanfranzetti.com ms@nijmanfranzetti.com | Illinois Pollution Control Board Attn: Don A. Brown, Clerk James R. Thompson Center 100 West Randolph Street, Suite 11-500 Chicago, Illinois 60601 |
| Illinois Environmental Protection Agency Division of Legal Counsel Attn: Christine Zeivel 1021 North Grand Avenue East P.O. Box 19276 | |

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I, Don A. Brown, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above order on February 17, 2022, by a vote of 5-0.



Don A. Brown, Clerk
Illinois Pollution Control Board