

ILLINOIS POLLUTION CONTROL BOARD  
June 26, 2025

IN THE MATTER OF: )  
)  
PETITION OF ELECTRIC ENERGY, INC. ) AS 21-5  
FOR A FINDING OF INAPPLICABILITY ) (Adjusted Standard - Land)  
OR, IN THE ALTERNATIVE, AN )  
ADJUSTED STANDARD FROM 35 ILL. )  
ADM. CODE PART 845 )

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

Electric Energy, Inc. (EEI) originally requested that the Board find that the Joppa West Ash Pond at the Joppa Power Plant in Massac County is not a coal combustion residuals (CCR) surface impoundment and is not subject to CCR rules at 35 Ill. Adm. Code Part 845 (Part 845). In the alternative, EEI requested an adjusted standard from specified portions of Part 845.

The Illinois Environmental Protection Agency (IEPA) recommended that the Board deny EEI's request for a finding of inapplicability and that the Board conditionally grant its request for an adjusted standard. In its response to IEPA's recommendation, EEI withdrew its request for a finding of inapplicability and requested that the Board grant its proposed interim adjusted standard.

Based on the record before it, the Board grants EEI an interim adjusted standard with modifications to EEI's proposal.

In this opinion, the Board first provides the procedural history. The Board then reviews the factual background of EEI's operations at the Joppa Power Plant and the Joppa West Ash Pond before summarizing EEI's original requested relief. The Board reviews the legal framework for considering EEI's petition. The Board then summarizes EEI's petition and IEPA's recommendation. Next, the Board summarizes a public comment by the Environmental Law & Policy Center, Prairie Rivers Network, and Sierra Club (collectively, Environmental Groups). The Board then summarizes EEI's response to IEPA's recommendation and a second comment by Environmental Groups. The Board then discusses the issues presented, reaches its conclusion, and issues its order.

Because EEI withdrew its request for a finding of inapplicability, the Board does not summarize or address arguments related to that request.

**PROCEDURAL HISTORY**

On May 11, 2021, EEI filed a petition (Pet.) for a finding of inapplicability or, in the alternative, an adjusted standard from Part 845.

On May 19, 2021, IEPA filed a motion to extend the deadline to file its recommendation by 90 days to September 23, 2021. *See* 35 Ill. Adm. Code 104.416(a). On June 4, 2021, EEI

timely filed a certificate of publication of notice of filing the petition in the *Paducah Sun* on May 22, 2021, the *Southern Scene* on May 24, 2021, and the *Metropolis Planet* on May 27, 2021. See 415 ILCS 5/28.1(d)(1) (2024); 35 Ill. Adm. Code 104.408(a), 104.410.

On June 17, 2021, the Board found that EEI's notice and petition met the requirements of the Act and the Board's procedural rules and accepted the petition without making any determination on its sufficiency or merits. In the same order, the Board granted IEPA's motion and extended the deadline to file its recommendation to September 23, 2021.

On September 22, 2021, IEPA filed a motion requesting that the Board extend the deadline to file its recommendation to November 22, 2021. In an order on September 23, 2021, the Board's hearing officer granted the motion.

On November 22, 2021, IEPA filed its recommendation (Rec.).

On December 1, 2021, the hearing officer granted EEI's unopposed request and extended the deadline to respond to IEPA's recommendation to December 27, 2021. On January 3, 2022, the hearing officer granted EEI's unopposed request and extended the deadline to January 10, 2022. On January 31, 2022, the hearing officer extended the deadline to March 7, 2022.

On February 14, 2022, the Environmental Groups filed a public comment (PC 1).

On March 7, 2022, EEI filed a motion to stay. On March 17, 2022, the Board granted the motion and stayed the proceeding until June 6, 2022. On June 14, 2022, the hearing officer granted the parties' request to extend the stay to November 30, 2022. On December 6, 2022, the hearing officer granted EEI's request to extend the stay to June 1, 2023. On June 1, 2023, the hearing officer granted the parties' request to extend the stay to December 1, 2023. In a status report filed that day, EEI reported that the parties agreed to lift the stay. In a status conference on January 18, 2024, the hearing officer noted that the parties agreed on a deadline of May 17, 2024, for EEI to respond to IEPA's recommendation. On May 15, 2024, the hearing officer granted an unopposed request to extend the deadline.

On June 5, 2024, EEI filed its response to IEPA's recommendation (Resp.). In this response, EEI also withdrew its request for a finding of inapplicability. Resp. at 7.

On July 25, 2024, the Environmental Groups filed a comment addressing EEI's response to IEPA's recommendation (PC 2).

## **FACTUAL BACKGROUND**

### **Joppa Power Plant**

The Joppa Power Plant is a coal-fired power plant located in Massac County. Pet. at 12. The plant was constructed in the early 1950s and began operating in 1953. *Id.* At the time EEI filed its petition, the plant employed about 115 people, but EEI had announced plans to retire the plant by September 2022. *Id.* at 12-13.

### **Joppa West Ash Pond**

The Joppa West Ash Pond was constructed and used for the disposal of CCR by about 1957. Pet. at 12. The unit is estimated to hold about 3,400,000 cubic yards of CCR containing both bottom ash and fly ash. *Id.* at 13. The base elevation of CCR in Joppa West ranges from about 305 feet to 350 feet. *Id.*

Joppa West encompasses an area of about 103.5 acres. Pet. at 13. That area includes: 79 acres of the former ash pond's disposal area; about 17 acres for a concurrently constructed settling area for final clarification south of the disposal area; and a 7.5-acre area of crest roadways, including the perimeter of Joppa West and separator dikes. *Id.* The area between the disposal area and settling area is separated by a dike. *Id.*

The Joppa West site also includes a gas pipeline buried along the southern margin of the unit that serves a power generating station to the west of Joppa West. Pet. at 13. Several transmission lines cross Joppa West, and several towers and power poles associated with those lines are located on Joppa West. *Id.* The transmission lines and related equipment are owned and operated by a third party. *Id.*

Joppa West was closed in the early 1970s upon the construction and use of another ash pond on the east side of the power plant. Pet. at 12. EEI asserts that, at that time, there were no regulations governing the closure of surface impoundments. *Id.* at 13. EEI states that Joppa East Ash Pond is not at issue in this petition. *Id.* at 9 n.3.

### **Groundwater at Joppa West**

The Joppa Plant is located at the southern boundary of the Illinois Basin and the northern edge of the Mississippi Embayment in a relatively low-lying area. Pet. at 14. Groundwater generally flows from north to south at Joppa West, from the topographically elevated area at the north end of the unit towards the Ohio River, which is topographically lower. *Id.*

Joppa West and the area near it include three hydrostratigraphic units. Uppermost is the upper confining unit, which is about 50 feet thick and comprised of clay and silty clay with minor intervals of sandy material. Pet. at 14. EEI states that groundwater in this layer qualifies as Class II general resource groundwater. Pet. at 14, citing 35 Ill. Adm. Code 620.220; *see also* Pet. at 14 n.7, citing 35 Ill. Adm. Code 620.210 (petition stating that this groundwater does not meet the qualifications of Class I groundwater).

The second layer consists of the uppermost aquifer, and groundwater in this area qualifies as Class I potable resource groundwater. Pet. at 14, citing 35 Ill. Adm. Code 620.210, 845.120. Beneath this is another aquifer layer referred to as the bedrock groundwater unit. Pet. at 14.

### **Cover at Joppa West Ash Pond**

EEI states that when Joppa West stopped receiving CCR in the early 1970s, the unit's design changed with grading to prevent standing water and promote drainage. Pet. at 16.

Joppa West is currently covered by a cap consisting of a soil layer, ranging in depth from one to two inches to up to 15 inches in certain areas (primarily the transmission corridor), with vegetation, shrubs, and trees. Pet. at 15. Soil and clay were used to cover power line and pipe corridors crossing the unit. *Id.* Over the disposal area, the surface was graded to avoid standing water and ponding and to provide for a positive discharge of liquids. *Id.* In addition, sediments from the Ohio River were placed along the western portion. *Id.* The settling area was filled and covered with soil and clay in certain areas. *Id.* It also was graded to drain and avoid impounding water. *Id.* Grass vegetation was established in certain areas of Joppa West, and over the years additional areas were naturally vegetated. *Id.* EEI cites photos of Joppa West since 2015 showing “continuing thick vegetation coverage, including large trees with trunk diameters of more than 18 inches.” *Id.*

A March 2021 inspection of Joppa West by Geosyntec Consultants observed no evidence of erosion at the unit and found that the vegetative cap on top of Joppa West remains stable. Pet. at 15. Consultants further observed that topsoil currently covers essentially the entire surface of Joppa West, as well as the dike slopes surrounding the perimeter. *Id.* The inspection also showed that the dike slopes “are stable, not subject to erosion, and remain vegetated with a combination of grass, shrubs, and small trees.” *Id.* at 16.

EEI states that it has preserved and maintained the cap at Joppa West; digging or clearing activities do not occur on the site. Pet. at 16. The vegetative cover is allowed to grow without disturbance, except for some mowing that occurs along the road at the perimeter of Joppa West and under transmission lines to allow access for necessary inspections and maintenance activities. *Id.* EEI also conducts annual inspections of the diked area and has not observed erosion or other failures requiring repair. *Id.*

As to impounding water, EEI states that aerial photographs and a recent inspection show no issues at the unit. Pet. at 16. Plant personnel annually inspect Joppa West and have not observed impounding. *Id.* A recent investigation also showed no impounding of water, where the phreatic surface (depth to water) within Joppa West is greater than 10 feet below land surface and about four feet lower than upgradient groundwater elevations. *Id.*

### **Groundwater Sampling and Analysis at Joppa West**

Between 2010 and 2013, groundwater monitoring was conducted at Joppa West from seven wells for inorganic parameters. Pet. at 17. This sampling included parameters listed in Section 620.410 of the Board’s groundwater monitoring rules (35 Ill. Adm. Code Part 620) at the time the monitoring plan was developed and approved in 2010. Pet. at 17 n.8; *see also* 35 Ill. Adm. Code 620.410. The investigation analyzed samples and compared them to the groundwater quality standards for Class II groundwater at Section 620.420. Pet. at 17; *see also* 35 Ill. Adm. Code 620.420. Although the investigation found pH exceedances at two wells, they were determined to not be associated with coal ash leachate, “as that tends to be alkaline.” *Id.* The investigation also found three boron exceedances with concentrations ranging from 3.1 mg/L to 3.3 mg/L in monitoring Well G112C south of the southern end of Joppa West. *Id.* The Class II groundwater quality standard is 2 mg/L. Pet. at 17 n.9, citing 35 Ill. Adm. Code 620.420(a)(2). EEI contends that these boron exceedances were found in the upper confining unit, “indicating that they did not

impact any potable water source.” Pet. at 17.

Additional groundwater monitoring at Joppa West took place in 2021. The investigation redeveloped wells that had been previously sampled and added five temporary monitoring wells. Pet. at 17. These additional wells were placed in areas selected to evaluate the presence or absence of CCR impacts to water downgradient of Joppa West. *Id.* The investigation compared groundwater data to both the Class I groundwater quality standards in Section 620.410 and standards in Section 845.600. *Id.* at 18.

The 2021 sampling found exceedances attributable to CCR only at Well G112C. Four boron exceedances there ranged from 3.09 mg/L to 4.24 mg/L. Pet. at 18. One sulfate exceedance was detected there at 532 mg/L. *Id.* EEI contends that these exceedances at Well G112C were in the upper confining unit, “which is not a viable source of potable water.” *Id.*

Sampling conducted at greater depths did not show exceedances of boron, sulfate, or other constituents related to CCR. Pet. at 18. Groundwater monitoring collected samples from well TPZ117D, located in the uppermost aquifer area downgradient from Joppa West. *Id.* Sampling results from that well did not show any impacts from CCR in the uppermost aquifer area. *Id.*

EEI contends that the groundwater analysis shows that CCR constituents in groundwater are stable, and that groundwater flow conditions in and near Joppa West have reached a state of equilibrium in the almost 50 years since it was closed. Pet. at 18.

In addition, EEI conducted a well survey to identify the following: private, semi-private, and non-community water supply wells within a 2,500-foot radius of the Joppa Plant; community water supply wells and surface water intakes within one mile of the Joppa Plant; and wellhead protection areas within the property boundaries of Joppa West. Pet. at 18-19. The survey found no wells serving as potable water sources that are downgradient of and potentially impacted by Joppa West. *Id.* at 19.

### **EEI’S ORIGINAL REQUESTED RELIEF**

EEI initially requested a Board finding that Joppa West is not a “CCR surface impoundment” under Section 845.120 and is, therefore, not subject to Part 845. Pet. at 10. EEI also requested that the Board find that Joppa West would continue to be subject to the applicable requirements in Part 620 Groundwater Quality. Pet. at 10; *see also* 35 Ill. Adm. Code Part 620. Finally, EEI requested a Board finding that, as necessary to comply with Part 620, EEI must apply for a groundwater management zone (GMZ) under Section 620.250. Pet. at 10-11.

In the alternative, EEI requested that the Board grant an adjusted standard from Part 845 for Joppa West. Pet. at 11, citing 415 ILCS 5/28.1 (2024). EEI asserted that this was “simply requesting that Joppa West be exempt from the closure requirements in Part 845 given the unique circumstances of the unit.” Pet. at 12. EEI requested that, under its proposed adjusted standard, Joppa West would be subject only to specified requirements under Part 845:

- a) All of Subpart A [General Provisions].

- b) The following Sections of Subpart B [Permitting]: 845.200, 845.210, 845.220(a), (c), (g)(1); 845.230(c) and (d)(4), 845.240, 845.250, 845.270, 845.280, 845.290.
- c) The following Sections of Subpart F [Groundwater Monitoring and Corrective Action]: 845.600(a), 845.610, 845.620, 845.630(a)-(e), (g), 645.640, 845.650, 845.660, 845.670, 845.680.
- d) The following Sections of Subpart G [Closure and Post-Closure Care]: 845.760(h), 845.780(b)-(f).
- e) All of Subpart I [Financial Assurance]. *Id.* at 11, 27-28.

EEI asserted that, if the Board grants its requested adjusted standard, it would still be required to perform post-closure care, install a groundwater monitoring network, and perform corrective action under Part 845. *Id.* at 6-7.

EEI's petition requested that the Board hold a hearing. Pet. at 40, citing 35 Ill. Adm. Code 104.406(j). EEI later withdrew this request in its response to IEPA's recommendation. Resp. at 18, 26.

## **LEGAL FRAMEWORK**

### **Statutory and Regulatory Authorities**

#### **Federal Authorities**

**2015 Federal Rules.** In 2015, USEPA published CCR rules addressing disposal of CCR from electric utilities. Pet. at 7, citing 80 Fed. Reg. 21302 (Apr. 17, 2015). Under those rules, "USEPA developed national minimum criteria for new and existing CCR landfills and surface impoundments," including groundwater monitoring, corrective action, and closure. Pet. at 7.

**WIIN Act.** The Water Infrastructure Improvements for the Nation (WIIN) Act was signed into law in 2016. Pet. at 7, citing Pub. L. 114-322. The WIIN Act created a process for states to adopt permit programs or other systems approved by USEPA to regulate CCR surface impoundments, as long as the program is at least as protective as the requirements contained in the federal CCR rule. Pet. at 7, citing 42 U.S.C. § 6945(d)(1)(B).

**Utility Solid Waste Activities Group v. USEPA.** In Util. Solid Waste Activities Grp. v. EPA, 901 F.3d 414 (D.C. Cir 2018) (USWAG), the U.S. Court of Appeals for the D. C. Circuit considered consolidated petitions challenging various provisions of the 2015 federal CCR rules. The court held that USEPA acted arbitrarily and capriciously and contrary to the Resource Conservation and Recovery Act (RCRA) in failing to require closure of unlined surface impoundments, in classifying "clay-lined" impoundments as lined, and in exempting inactive surface impoundments at inactive power plants from regulation (later defined by USEPA as "legacy CCR surface impoundments"). *Id.* at 449. The court vacated and remanded these

provisions of the 2015 federal CCR rules. *Id.*

**2020 Federal Rule Revision.** In 2020, USEPA finalized amendments to the CCR rules in response to the D.C. Circuit’s decision in USWAG. 85 Fed. Reg. 53516 (Aug. 28, 2020). Among its provisions, the amendments changed the classification of compacted soil-lined or clay-lined surface impoundments from lined to unlined. *Id.* at 53516-53517, 53561. The amendments also finalized a new deadline of April 11, 2021, for CCR units to cease receiving waste and initiate closure because the unit is an unlined or formerly clay-lined CCR surface impoundment. *Id.* at 53517, 53561. The amendments also established a process for facilities to extend their deadline to cease receiving wastes and initiate closure. *Id.* at 53517, 53561-53565.

**2024 Federal Rule Revision.** USEPA recently finalized amendments to the CCR rules, which took effect on November 8, 2024. 89 Fed. Reg. 38950 (May 8, 2024). The amended rules respond to the USWAG opinion that vacated the exemption for legacy CCR surface impoundments and remanded the issue back to EPA to take further action consistent with the opinion. 89 Fed. Reg. 38950 (May 8, 2024); USWAG, 901 F.3d at 449. As part of these amendments, USEPA established requirements for CCR management units at active CCR facilities and at inactive CCR facilities with a legacy CCR surface impoundment. 89 Fed. Reg. 38950 (May 8, 2024). The amended rule defines a “CCR management unit” in pertinent part as “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[.]” *Id.* at 38950, 39100.

### **State Authorities**

**Public Act 101-171.** On July 30, 2019, the Governor signed Senate Bill 9 into law as Public Act 101-171. Among its provisions, Public Act 101-171 added to the Environmental Protection Act (Act) a Section 3.143 defining “CCR surface impoundment” as “a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the unit treats, stores, or disposes of CCR.” 415 ILCS 5/3.143 (2024); P.A. 101-171, eff. July 30, 2019.

**415 ILCS 5/22.59.** Public Act 101-171 also added to the Act a Section 22.59 entitled “CCR surface impoundments.” Public Act 101-171, eff. July 30, 2019. Section 22.59 states that

the purpose of this Section is to promote a healthful environment, including clean water, air, and land, meaningful public involvement, and the responsible disposal and storage of coal combustion residuals, so as to protect public health and to prevent pollution of the environment of this State. The provisions of this Section shall be liberally construed to carry out the purposes of this Section. 415 ILCS 5/22.59(a) (2024).

Section 22.59(g) set deadlines for IEPA to propose and the Board to adopt specified standards and requirements for CCR surface impoundments. 415 ILCS 5/22.59(g) (2024). The rules must establish “construction permit requirements, operating permit requirements, design standards, reporting, financial assurance, and closure and post-closure care requirements for CCR

surface impoundments.” *Id.* The rules must, “at a minimum, be at least as protective and comprehensive as the federal regulations or amendments thereto promulgated by the Administrator of the United States Environmental Protection Agency in Subpart D of 40 CFR 257 governing CCR surface impoundments.” *Id.*

**35 Ill. Adm. Code 845.** On April 15, 2021, the Board adopted CCR surface impoundment requirements as Part 845 of its waste disposal regulations. Standards for the Disposal of Coal Ash Combustion Residuals in Surface Impoundments: Proposed New 35 Ill. Adm. Code 845, R20-19 (Apr. 15, 2021). The rules became effective on April 21, 2021. 45 Ill. Reg. 5884 (May 7, 2021).

The Board’s rules establish the CCR units subject to its requirements. Pet. at 8. They define a “CCR surface impoundment” as “a natural topographic depression, man-made excavation, or diked area, which is designed to hold an accumulation of CCR and liquids, and the surface impoundment treats, stores, or disposes of CCR.” 35 Ill. Adm. Code 845.120, citing 415 ILCS 5/3.143 (2024). In addition to “new and existing CCR surface impoundments,” the rules apply to “inactive CCR surface impoundments at active and inactive electric utilities or independent power producers, regardless of the fuel currently used at the facility to produce electricity.” 35 Ill. Adm. Code 845.100(c). The rules define an “inactive CCR surface impoundment” as “a CCR surface impoundment in which CCR was placed before but not after October 19, 2015 and still contains CCR on or after October 19, 2015. Inactive CCR surface impoundments may be located at an active facility or inactive facility.” 35 Ill. Adm. Code 845.120.

### **Adjusted Standards**

A petitioner may request, and the Board may grant, an adjusted environmental standard that is different from the generally applicable standard that would otherwise apply to the petitioner. 415 ILCS 5/28.1 (2024); 35 Ill. Adm. Code 104.400-104.428.

Once granted, the adjusted standard, instead of the rule of general applicability, applies to the petitioner. *See* 415 ILCS 5/28.1(a) (2024); 35 Ill. Adm. Code 101.202, 104.400(a). In granting adjusted standards, the Board may impose conditions as may be necessary to accomplish the purposes of the Act. 415 ILCS 5/28.1(a) (2024); 35 Ill. Adm. Code 104.428(a).

### **Standard of Review**

EEI seeks an adjusted standard from Part 845. Pet. at 1, 10. Because Part 845 does not specify the level of justification that must be met by a petitioner for an adjusted standard, the Board must consider, and EEI has the burden to prove that:

- 1) factors relating to that petitioner are substantially and significantly different from the factors relied upon by the Board in adopting the general regulation applicable to the petitioner;
- 2) the existence of those factors justifies an adjusted standard;
- 3) the requested standard will not result in environmental or health effects

substantially and significantly more adverse than the effects considered by the Board in adopting the rule of general applicability; and

- 4) the adjusted standard is consistent with any applicable federal law. 415 ILCS 5/28.1(c) (2024).

Section 28.1(a) of the Act (415 ILCS 5/28.1(a) (2024)) provides that the Board may grant, consistent with Section 27(a) of the Act (415 ILCS 5/27(a) (2024)), an adjusted standard “for persons who can justify such an adjustment.” Section 27(a) provides in pertinent part that, when adopting regulations under the Act, “the Board shall take into account the existing physical conditions, the character of the area involved, including the character of surrounding land uses, zoning classifications, the nature of the existing air quality, or receiving body of water, as the case may be, and the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution.” 415 ILCS 5/27(a) (2024).

### **Burden of Proof**

The burden of proof in an adjusted standard proceeding is on the petitioner. *See* 415 ILCS 5/28.1(b), (c) (2024); 35 Ill. Adm. Code 104.426.

### **EEI’S ORIGINAL PETITION**

EEI acknowledges that inactive CCR surface impoundments are subject to Part 845, including the closure requirements at 35 Ill. Adm. Code 845.700 through 845.770. Pet. at 9. In December 2019, IEPA indicated its intent to regulate Joppa West as an inactive CCR surface impoundment when it issued an invoice under Section 22.59(j)(1) of the Act for initial fees associated with CCR surface impoundments. *Id.* When IEPA filed its CCR rulemaking proposal in March 2020, it identified EEI as the owner or operator of two units “that may be affected by the Illinois EPA’s proposed rule,” indicating that it intended to regulate Joppa West under Part 845. *Id.*

### **Request for Adjusted Standard**

EEI requested that the Board grant it an adjusted standard from Part 845. Pet. at 26. EEI set forth its argument using the factors from Section 28.1(c) of the Act.

### **Section 28.1 Criteria**

**Section 28.1(c)(1): Substantially and Significantly Different Factors.** EEI asserted that several factors distinguish Joppa West from other units regulated under Part 845. First, EEI argued that Joppa West is not regulated under the federal CCR rule, and units subject to that rule have had time to comply with it. Pet. at 28. IEPA relied on USEPA’s technical feasibility and economic reasonableness determinations for the federal rule when proposing Part 845 and did not consider units such as Joppa West that are not subject to it. *Id.*

Second, EEI argued that on the effective date of Part 845, Joppa West was closed and had

been closed since the 1970s. Pet. at 28-29. When it closed, there were no regulatory requirements for closing the pond. *Id.* at 29.

Third, EEI argued that Joppa West has been inactive for over 50 years and is stabilized under a layer of placed and natural cover. “[V]irtually all of Joppa West is covered with forest, grassland, and shrubs consisting of a variety of plant life and wildlife.” Pet. at 29. Thus, closing Joppa West under Part 845 will result in environmental harm from digging up the existing forest. *Id.* at 30. EEI estimated that removing the vegetation would cost about \$2.6 million. *Id.*

Fourth, EEI argued that other characteristics of Joppa West make it unique, including transmission towers owned and operated by a third party. These factors would cause technical challenges and require special consideration if EEI is required to close Joppa West under Part 845. Pet. at 30.

**Section 28.1(c)(2): Factors Justify Adjusted Standard.** EEI supported its request for an adjusted standard by pointing to the many years since Joppa West closed and the stability of and minimal risk posed by the cover in place. Pet. at 30-31. EEI argued that closing Joppa West under Part 845 would require about \$2.6 million to clear vegetation, which would not be required to close other CCR surface impoundments. *Id.* at 31. EEI acknowledged that closing Joppa West under Part 845 may have some environmental benefit by addressing potential infiltration of CCR to groundwater. *Id.* However, this “minimal” benefit would be outweighed by destroying nearly 100 acres of vegetation. *Id.* EEI further argued that its proposal can address the same infiltration risk but without disrupting a stable unit and its nearly 50 years of forest growth. *Id.* EEI concluded that the “unique characteristics” of Joppa West justify the adjusted standard. *Id.*

**Section 28.1(c)(3): Environmental or Health Effects.** EEI stated that its proposed adjusted standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board in adopting Part 845, and that its requested relief “will have a new economic benefit.” Pet. at 31, citing 415 ILCS 5/28.1(c)(3) (2024).

As to environmental effects, EEI reiterated that closing Joppa West under Part 845 requires removing about 100 acres of forest and prairie vegetation and the wildlife habitat they provide for federally endangered and threatened bat species. Pet. at 31-32. Closure with the current cover in place will avoid that destruction as well as adverse air quality impacts from construction activities. *Id.* Additionally, an evaluation of exposure pathways in the Ohio River for ecological receptors, “including aquatic life exposed to surface water and avian and mammalian life exposed to bioaccumulative constituents in surface water and dietary items,” found that none of the exposure pathways pose an unacceptable risk. *Id.* at 33.

As to human health effects, EEI argued the site no longer impounds water and poses little risk of leaching or runoff to groundwater. Pet. at 32. Groundwater monitoring has shown no exceedances of limits for CCR-related contaminants, except for boron and sulfate at a single well in a shallow upper layer that is not a viable source of drinking water. *Id.* “No downstream impacts of CCR from Joppa West have been observed in the uppermost aquifer, indicating there is minimal hydraulic connectivity between Joppa West and the shallowest usable water bearing unit.” *Id.* Additionally, a well survey showed no drinking water wells that may be affected by Joppa West.

*Id.* at 32-33.

EEI asserted that Joppa West also does not present a risk to human health through the Ohio River. Pet. at 33. There is no risk of residential exposure because the river is not used as a source of drinking water. *Id.* While groundwater containing CCR constituents from Joppa West could potentially interface with surface water in the Ohio River, it is unlikely that CCR-impacted groundwater is migrating from Joppa West underneath or beyond the river. *Id.* Modeling shows concentrations of CCR contaminants do not pose a risk to human health through other pathways in the river, such as recreational users or anglers consuming local fish. *Id.*

EEI conducted a relative impact assessment (RIA) to compare the potential impact of granting its proposed adjusted standard versus closure under Part 845 with a new final cover or removal of CCR. After evaluating nine factors under the different closure options, the RIA demonstrated that the adjusted standard “will result in the greatest environmental benefit (or least adverse impact) for the majority of the metrics evaluated.” Pet at 34. EEI asserted that, despite the absence of these risks, its proposed adjusted standard addresses potential risks through the groundwater monitoring and post-closure care requirements of Part 845. *Id.* EEI added that it would provide financial assurance under Section 845.900 to ensure the performance of post-closure care and the remediation of releases, if necessary. *Id.* at 35.

**Section 28.1(c)(4): Consistency with Federal Law.** EEI argued that its proposed adjusted standard will not result in any inconsistency with federal law because Joppa West is not regulated under the federal CCR rule. Pet. at 35.

**Comparing Closure Options.** EEI noted that under Section 28.1 of the Act, the Board may grant an adjusted standard to petitioners who can justify their proposal consistent with Section 27(a) of the Act. Pet. at 27, citing 415 ILCS 5/27(a), 28.1(a) (2024). Under Section 27(a), the Board considers factors including “the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution.” 415 ILCS 5/27(a) (2024).

EEI argued that any benefits of closing Joppa West under Part 845, which would require either a new cover or removal of all CCR, “are outweighed by the technical feasibility, costs, and environmental impacts of such closure.” Pet. at 35. Although closure by removal or closure in place with a new cover would involve significant capital costs, EEI expected that annual operating and maintenance costs will be similar for each of the three closure alternatives it considered. *Id.* at 39 n.13.

**Closure By Removal.** For Joppa West, this option generally involves removing the existing cover, excavating an estimated 3.4 million cubic yards of CCR, and transporting it by truck for off-site disposal. Pet. at 35-36. This option also involves removing transmission towers at the site, replacing them, and relocating power lines to the new towers, which in turn requires the permission of the lines’ owner (which is not guaranteed). *Id.* at 36. As an alternative, EEI stated that it may implement in-situ stabilization, where the CCR at the base of each transmission tower is stabilized by mixing the CCR with grout. *Id.* However, this method has not been applied before and may not be feasible. *Id.* It also further complicates closure and raises uncertainty about whether EEI will be allowed to remove CCR around the towers. *Id.*

EEl argued that closure by removal entails significant costs, including a projected \$2.6 million to remove the current cover. Pet. at 36. According to the Board's record in the Part 845 rulemaking, closure by removal may cost \$152 million for a unit of about 60 acres containing 2.7 million cubic yards of CCR. *Id.* Because Joppa West is larger, EEl expected higher costs and nine years to close it. *Id.* at 36-37.

EEl argued that closure by removal will also create adverse environmental impacts through the amount of vegetation removed and the construction dust and vehicle emissions generated during the process. Pet. at 37. Although removal may have the greatest impact on reducing infiltration into Joppa West, the environmental and financial costs and questions about technical feasibility outweigh this benefit. EEl argued that its proposed adjusted standard manages this risk "through post-closure care, monitoring, and corrective action under Part 845." *Id.*

**Closure in Place with New Cover.** EEl stated that this closure option entails removing the existing cover, as with closure by removal. It then requires constructing a geomembrane low permeability layer and protective silty clay soil layer and then installing additional topsoil. Pet. at 37, citing 35 Ill. Adm. Code 845.750.

EEl asserted that existing transmission towers present technical complications because the area surrounding the transmission towers will require special cover details. A final cover design will have to account for an increase in ground surface elevation and a corresponding decrease in the distance between the ground surface and the power transmission lines. Pet. at 37-38.

EEl argued that costs associated with a new cover vary based on the thickness of the system. As noted above, removing the current cover is projected to cost \$2.6 million. Pet. at 38. According to the Board's record in the Part 845 rulemaking, a new cover under Section 845.750 may cost \$28 million for a unit of about 60 acres containing 2.7 million cubic yards of CCR. *Id.* Because Joppa West is larger, EEl expected higher costs and five years to close it with a new cover. *Id.*

EEl argued that a new cover will create the same adverse environmental impacts as closure by removal. Pet. at 37-38. Although closing Joppa West with a cover system may reduce infiltration, this method is not likely to have a significant impact compared to the existing cover, particularly given the lack of current groundwater impacts. *Id.* at 38.

**Closure Under Proposed Adjusted Standard.** EEl argued that any environmental benefit achieved by closing Joppa West under Part 845 can be obtained through its proposed adjusted standard and by performing post-closure care, groundwater monitoring, and corrective action as necessary under Part 845. Pet. at 39. It argues that Joppa West does not present a risk to human health or the environment, and the proposed adjusted standard allows the cover that has developed at Joppa West to remain in place. *Id.* The proposal is the least expensive option because it does not require removing the existing cover or create other costs associated with removal or a new cover. *Id.* EEl also argued that the proposal takes less time to implement than the other options. *Id.*

**Relative Impact Assessment.** The RIA compared the benefits and adverse impacts

associated with closure through removal, a new cover, and the proposed adjusted standard. Pet. at 39. EEI stated that in almost every category evaluated, the proposed adjusted standard results in the least amount of risk or negative impact. *Id.* at 39-40. Furthermore, the three options pose comparable risks to human health and the environment. *Id.* at 40. Although closing Joppa West under Part 845 performs better on the risk of potential future CCR releases than closing it with the existing cover, EEI argued that this risk is low under all three closure options considered. *Id.* EEI concluded that any benefit to closing under Part 845 “is outweighed by the cost of that closure, technical feasibility issues, and by the relative environmental impacts.” *Id.*

### **IEPA RECOMMENDATION**

IEPA recommended that the Board conditionally grant original EEI’s request for an adjusted standard from specified requirements of 35 Ill. Adm. Code 845. Rec. at 5; *see also* Resp. at 4-5.

### **EEI’s Request for Adjusted Standard**

IEPA summarized that EEI effectively requested an adjusted standard exempting Joppa West from design criteria, closure and cover requirements, and recordkeeping requirements. Rec. at 25. If the Board finds that Part 845 applies to Joppa West, EEI agreed to “comply with operating permit and corrective action construction permit requirements, public participation requirements, groundwater monitoring requirements, groundwater protection standards, corrective action requirements, deed notations, post-closure maintenance, and financial assurance requirements.” *Id.*

IEPA agreed with EEI that Part 845 was not promulgated to implement, in whole or in part, the requirements of the federal Clean Air Act (CAA), Safe Drinking Water Act, (SDWA) or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), or the State RCRA, Underground Injection Control (UIC), or NPDES programs. Rec. at 26, citing 35 Ill. Adm. Code 104.406(b); Pet. at 10 n.4. EEI asserted that “Part 845 was promulgated to implement Section 22.59 of the Act and the federal RCRA, Section 4005.” Pet. at 10 n.4 (emphasis in original).

### **Nature of EEI’s Activity**

IEPA’s recommendation addressed EEI’s description of its activity at Joppa West. Rec. at 27-31.

**Description of Facilities and Activities.** IEPA noted EEI’s position that Joppa West is not designed to impound water and has not been since October 19, 2015, and that it has been capped and maintained. Rec. at 27. IEPA stated that Joppa West was constructed as an ash pond for disposal of the ash or CCR produced from operations at the Joppa Station. *Id.* In 1972, EEI submitted a permit application that included discharging surface water from Joppa West through Outfall 011 to the Ohio River. *Id.*

Joppa West is more than 100 acres in size and contains 3.4 million cubic yards of CCR.

Rec. at 27. Test pits and borings show that ash remains below the surface and that half of that ash volume is below the static groundwater table. *Id.* IEPA asserted that Joppa West “is fully saturated with static groundwater recharged directly through the CCR materials.” *Id.*

As to the current cover of soil and vegetation, IEPA asserted that topsoil “is not a clay material with a hydraulic conductivity that would prevent infiltration.” Rec. at 27. IEPA also noted EEI’s statement that Joppa West as graded at the time of closure to prevent standing water and to promote drainage. Rec. at 28. However, only portions of Joppa West were graded, leaving low areas with standing water as shown in aerial photographs taken over the years. *Id.*

The clay cover is one to two inches except for the utility corridor, which has about one foot of clay cover. Rec. at 28. EEI’s exhibits included aerial photographs, topographic contours, test pit logs, and photos of standing water at Joppa West. *Id.* IEPA cited its own exhibits showing erosional pathways leading to low areas. *Id.* With increased vegetation, these pathways may become covered, but they have heavier vegetation following paths similar to those seen in earlier photographs. *Id.* IEPA concluded that, with the lack of cover and exposed CCR sediments, CCR is likely traveling out of Joppa West toward the outfall. *Id.*

Although the mass of heavy metals and other constituents may have reduced because of mass transport and geochemical processes over the last 45 years, IEPA argued that the extent to which those constituents remain above groundwater protection standards should be fully investigated. Rec. at 27-28, citing 35 Ill. Adm. Code 845.600, 845.640(i).

**Nature of Emissions, Discharges, or Releases.** IEPA asserted that the Hydrogeologic Assessment did not evaluate the CCR in Joppa West for “leaching, geochemical changes to the groundwater over distance or for exposed sediments.” Rec. at 29, citing Rec. Ex. A at 13, Ex. B. Although there is about one foot of clay over the utility corridor, a suitable evaluation requires sufficient groundwater monitoring results to show the efficacy of that cover or the lack of remaining heavy metals for transport in the groundwater. Rec. at 29. IEPA argued the evaluation should include five years of quarterly data for total metals and general chemical parameters under 35 Ill. Adm. Code 845.600. *Id.* Additionally, the Board should require an evaluation demonstrating “a geochemical pathway to resolution of heavy metal transport within a 30-year period in order to allow the vegetation to stay in place without further action” beyond monitored natural attenuation. *Id.* at 29-30.

IEPA further argued that the groundwater investigation to date does not substantiate EEI’s Human Health Risk Assessment (HHRA). Rec. at 30. The HHRA was based chiefly on dissolved metals and general parameters listed in Section 620.410. *Id.* It also excluded data from a well that had been abandoned and replaced with Well G112C for a hydrogeologic assessment under Section 620.420. *Id.* Furthermore, Well G112C has exceedances under Section 845.600 for cobalt and boron and exceeds standards under Section 620.420 for cobalt, boron, and other parameters. *Id.*

IEPA argued that the HHRA reports uses concentration of dissolved metals to compare to groundwater quality standards, while Section 845.640(i) requires using total recoverable metals concentrations. Rec. at 30. Only one round of sampling for total metals concentrations has been performed in March 2021 at Joppa West. *Id.* IEPA noted “an extreme change in pH” between the

source well and downstream wells at Joppa West, and that the source well is not exceeding all the same constituents as the downgradient wells. *Id.* at 30-31. IEPA believed there are potential geochemical complexities that need further investigation. *Id.* at 31.

Based on these factors, IEPA concluded that the assessment to date does not accurately weigh risks associated with downgradient exceedance of numerous standards. Rec. at 30.

### **Efforts to Comply with Generally Applicable Regulation**

EEI projected a cost of \$500,000 for natural attenuation for 50 years. Rec. at 31. IEPA argued that this projection assumes there is no significant infiltration of precipitation through the impoundment and that the groundwater chemistry is homogeneous and stable. IEPA asserted that these assumptions are not supported by data collected in March 2021. *Id.* Rather, that data shows an acidic groundwater environment with potential leaching of heavy metals. *Id.* at 31-32. IEPA concluded that EEI's projected cost does not include corrective action that could be required based on additional data. Rec. at 31, citing 35 Ill. Adm. Code Parts 620, 845.

As to the cost of closure in place with a new cover system, IEPA noted that EEI's consultant had not determined the cost of a new cover. Rec. at 32. IEPA argued that gains from harvesting the existing forest and a period of post-closure care reduced from 50 to 30 years would offset the cost of the new final cover system. *Id.* Additionally, the cost of clay for a cover could be reduced by using materials that may be available onsite. *Id.*

As to the cost of closure by removal, IEPA noted that EEI's consultant had not determined the cost of removal. Rec. at 32. IEPA acknowledged that the cost of removal may be great depending on where the CCR material is transported, as well as the proximity of a suitable landfill. *Id.* at 32-33. Finally, IEPA noted that EEI did not consider retrofitting Joppa West for use as a CCR surface impoundment. *Id.* at 33.

### **Efforts to Comply with Proposed Adjusted Standard**

IEPA asserted that EEI's petition does not directly address the cost of implementing the proposed adjusted standard. Rec. at 33, citing 35 Ill. Adm. Code 104.406(f). IEPA did not object to the Board granting the proposed adjusted standard if EEI sufficiently demonstrates that Joppa West does not pose a threat to human health or the environment. Rec. at 33.

### **Impact on the Environment**

IEPA argued that EEI's data shows Joppa West has an acidic groundwater environment with potential leaching of heavy metals. Rec. at 35. Cobalt, lead, beryllium, antimony, and sulfate occur downgradient of the source well at levels above groundwater protection standards. *Id.* IEPA asserted that, at best, Joppa West has not been fully characterized to determine from where these originate. *Id.*

Until 2021, groundwater samples were filtered and reported as dissolved, "and are not representative of the total metals and general chemistry constituents." Rec. at 35-36. IEPA added

that the geochemistry of the groundwater has not been characterized, which is necessary to eliminate reactive transport of metals at Joppa West. *Id.* at 36.

IEPA argued that adequate characterization of Joppa West and the groundwater requires “sufficient groundwater results exhibiting the efficacy of the cover, geochemistry of the groundwater environment, and groundwater transport potential.” Rec. at 34. This data should include five years of quarterly analytical data for total metals and general chemical parameters compared to Section 845.600. *Id.* at 35. The data must show that the reactive transport geochemistry within and downgradient from Joppa West is stable and that the groundwater protection standards of Section 845.600 are not exceeded. *Id.*

IEPA stated that the Ohio River flows northwest from the Joppa West discharge and enters a Community Supply Well River Intake Zone 1 Protection Area within five miles. Rec. at 36. IEPA asserted that EEI’s petition has not fully examined this discharge pathway. *Id.* Surface water sampling included mercury only at Outfall 011, and sampling ended before 2015. *Id.* Also, EEI has not addressed the potential for constituents associated with Joppa West CCR to be present on the discharge from Outfall 011 to the Ohio River. *Id.*

As for the impact on trees, vegetation, and the endangered Indiana bat and threatened long-eared bat, the U.S. Fish & Wildlife Service (USFWS) indicates that trees at Joppa West are subject to a review before clearing. Rec. at 36. IEPA stated that, under strict interpretation of USFWS guidance, the trees cannot be removed between April 1 and October 14 of any calendar year due to the hibernation and mating habits of the Indiana bat. *Id.*

### **Justification of Proposed Adjusted Standard**

IEPA agreed with EEI that the applicable level of justification is meeting the factors identified in Section 28.1(c) of the Act. Rec. at 37, citing 415 ILCS 5/28.1(c) (2024); *see also* 35 Ill. Adm. Code 104.406(c), (h).

**Whether Factors Relating to Joppa West Are Substantially and Significantly Different.** IEPA argued that EEI failed to prove that the factors relating to Joppa West are substantially and significantly different from the factors relied upon by the Board in adopting Part 845. Rec. at 37. IEPA asserted that Joppa West contains 3.4 million cubic yards of CCR, “much of which is saturated with groundwater, and is covered with material that is not designed to prevent infiltration of precipitation.” *Id.* Moreover, Joppa West has not been adequately characterized, so the Board should grant an adjusted standard only on a conditional basis. *Id.*

**Whether Factors Relating to Joppa West Justify Adjusted Standard.** IEPA argued that granting an adjusted standard should be conditioned on “whether geochemistry data and the groundwater analytical data support stable geochemistry and natural attenuation at the site, or if further corrective action is needed.” Rec. at 38.

**Environmental or Health Effects.** IEPA argued that Joppa West has not been adequately characterized to determine whether leaching of heavy metals is occurring in groundwater within and downgradient from it and whether natural attenuation is an appropriate solution. Rec. at 38.

**Consistency with Federal Law.** IEPA stated that EEI does not consider Joppa West to be subject to or regulated by 40 CFR 257, Subpart D, which is a self-implementing program that is not enforced by USEPA. Rec. at 38, citing 35 Ill. Adm. Code 104.406(i). IEPA stated that, for this reason, the Board may grant the proposed adjusted standard consistent with federal law. Rec. at 38.

### **Recommendation**

IEPA did not object to the Board granting EEI's proposed adjusted standard, subject to conditions demonstrating that Joppa West does not pose a threat to human health or the environment. Rec. at 33.

**Duration.** If the Board grants EEI's requested adjusted standard, IEPA recommended the Board limit the adjusted standard to a six-year duration. Rec. at 39.

**Groundwater Monitoring.** If the Board grants EEI's requested adjusted standard for a six-year period, IEPA recommended that the Board require EEI to perform groundwater monitoring under Part 845 Subpart F to collect five years of quarterly analytical data for total metals and general chemical constituents. Rec. at 39. A minimum of 10 data points for each season is typically sufficient to properly characterize the effects of precipitation, infiltration, potential flooding, and other potential groundwater recharge impacts. *Id.* Because Illinois groundwater elevations are typically higher in spring and summer than fall and winter, five years of quarterly sampling will provide 10 samples from the high groundwater elevations season and 10 samples from the low groundwater elevation season. Rec. at 39 n.1.

IEPA requested that the Board require EEI to collect sufficient data to provide a mass transport model, a geochemical model, and a flow model showing that any groundwater contamination exceeding the groundwater protection standards at Joppa West is "naturally attenuating in a manner protective of human health and the environment." Rec. at 39, citing 35 Ill. Adm. Code 845.600. EEI must conduct source monitoring and characterize the CCR for purposes of geochemical modeling and sufficiently evaluating leaching potential. Rec. at 39. EEI must also provide a report evaluating the remaining heavy metals for transport in the groundwater. *Id.*

**Recordkeeping.** If the Board grants the requested adjusted standard, IEPA recommended that the Board require EEI to comply with the recordkeeping requirements in Subpart H that correspond with the requirements of the adjusted standard. Rec. at 40; *see also* 35 Ill. Adm. Code 845.800, 845.810.

**Corrective Action.** IEPA recommended that, if the groundwater monitoring triggers corrective action, EEI must notify IEPA and place the notice in its operating record. Rec. at 40, citing 35 Ill. Adm. Code 845.650(d). EEI must also characterize the release, but IEPA believed that groundwater sampling and evaluation under the conditional adjusted standard would provide the required assessment of corrective measures. Rec. at 40, citing 35 Ill. Adm. Code 845.660. During the six-year duration of the adjusted standard, IEPA would consider monitored natural attenuation as EEI's required corrective action. Rec. at 40, citing 35 Ill. Adm. Code 845.670,

845.680.

**Closure.** If EEI sufficiently demonstrates that the current cover and monitored natural attenuation will achieve compliance with groundwater protection standards within 30 years after a six-year adjusted standard, then IEPA was amenable to a renewed adjusted standard. Rec. at 41, citing 35 Ill. Adm. Code 845.600. The new standard would confirm that the unit is “closed” and require post-closure care under Section 845.780 and continued monitoring until groundwater protection standards are met. *Id.*

If EEI fails to demonstrate that the current cover and monitored natural attenuation will achieve compliance with groundwater protection standards within 30 years after a six-year adjusted standard, then IEPA was amendable to a renewed adjusted standard allowing for an alternative closure method. Rec. at 40, citing 35 Ill. Adm. Code 845.600. The alternative could consist of either an alternative cover system, if its long-term efficacy and durability are maintained, or a combination of an alternative cover system and corrective action beyond monitored natural attenuation. Rec. at 40-41.

IEPA explained that, at the end of the six-year adjusted standard, the primary goal is for EEI to demonstrate that the closure method and any necessary corrective action resolve any heavy metal transport within 30 years. Rec. at 43. As part of a petition for a renewed adjusted standard, EEI would provide a closure alternative analysis demonstrating that the closure method protects human health and the environment and complies with the groundwater protection standards. *Id.*, citing 35 Ill. Adm. Code 845.600, 845.710(b)-(d). The closure alternatives analysis would then be submitted as part of a construction permit application for closure or corrective action. Rec. at 43.

Overall, IEPA stated that Joppa West will not be considered closed until one of the following occurs: EEI demonstrates that the site will comply with groundwater protection standard within a 30-year closure period; EEI completes an approved alternative closure method; or Joppa West is closed under Part 845. *Id.*

### **ENVIRONMENTAL GROUPS’ COMMENT (PC 1)**

The Environmental Groups assert that they can submit comments on EEI’s petition based on both the Board’s procedural rules and Section 22.59 of the Act. PC 1 at 7. The General Assembly also required that CCR rules adopted by the Board must include procedures for “meaningful public participation” in issuing permits, including the opportunity to submit public comment. PC 1 at 7, citing 415 ILCS 5/22.59(g)(6) (2024); *see also* 35 Ill. Adm. Code 845.240, 845.260. Based on these authorities on regulating CCR impoundments, the Environmental Groups argue that they “must also have the opportunity to submit comment in adjusted standard proceedings that could *exempt* an impoundment from Illinois’ coal ash regulations.” PC 1 at 7 (emphasis in original).

The Environmental Groups’ comment addressed EEI’s original request, arguing that Joppa West is an “inactive CCR surface impoundment” and should be regulated as one. PC 1 at 3, citing Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 Ill. Adm. Code 845, R20-19, slip op. at 16 (Feb. 24, 2021). The comment added that

Joppa West may meet the definition of an “existing CCR surface impoundment,” a finding the Environmental Groups would support. PC 1 at 3 n.6. The Environmental Groups asserted that granting EEI’s request for an adjusted standard would be inconsistent with Part 845, “would render Illinois’ coal ash regulations less protective than the federal CCR rule, and would threaten Illinois’ people and the environment.” PC 1 at 3. The comment argued that the Board should deny EEI’s petition and require it to comply with Part 845 at Joppa West. *Id.*

### **Consistency with Part 845**

#### **Compatibility of Adjusted Standards with Federal Rules**

The Environmental Groups emphasized that, under Section 22.59 of the Act, Illinois’ CCR rules must be at least as protective and comprehensive as the federal regulations. PC 1 at 12, citing 415 ILCS 5/22.59(g)(1) (2024). Part 845 includes all requirements of the federal CCR rule plus provisions that are more stringent. PC 1 at 12. The Environmental Groups argued that an adjusted standard could “exempt a coal ash pond from requirements that are codified in *both* Part 845 *and* the federal CCR rule.” *Id.* (emphasis in original). This would make Part 845 less protective than the federal rule and contrary to the Act. *Id.*

Additionally, the Environmental Groups noted that IEPA has stated its intention to seek USEPA approval to operate a state permitting program in place of the federal CCR program. PC 1 at 12, citing Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 Ill. Adm Code 845, R 20-19, slip op at 10 (Mar. 2, 2020) (IEPA Statement of Reasons), slip op. at 36 (Nov. 6, 2020) (IEPA response to comments). This approval requires state rules to be at least as protective as the federal rule. PC 1 at 12, citing 42 USC §§ 6945(d)(1)(B), (C). Because adjusted standards from Part 845 in general and EEI’s specific proposal could cause Illinois’ CCR program to be less protective than the federal program, the Environmental Groups argued that it jeopardizes USEPA approval of the state program.

The Environmental Groups further argued that an adjusted standard would have little value even if Part 845 does not take the place of the federal CCR rule. PC 1 at 13. In that situation, an adjusted standard could exempt a coal ash pond from specific state requirements while federal CCR requirements still apply. *Id.*

The Environmental Groups acknowledged that an adjusted standard from Part 845 could conceivably be consistent with Section 22.59 of the Act if the adjustment is “at least as protective and comprehensive” as the federal requirements. PC 1 at 13 n.65. However, they argued that this is not the case here. *Id.* Aside from that possible exception, adjusted standards from Part 845 are impermissible because they are incompatible with the Act’s requirement that Illinois’ program be at least as protective as the federal CCR rule. PC 1 at 13-14.

**Federal Approvability of EEI Proposal.** The Environmental Groups argued that approving EEI’s requested adjusted standard would risk precluding federal approval of Illinois’ coal ash program. PC 1 at 14. They contended that USEPA “expects federally-approved programs to ensure *site-specific* compliance with all federal CCR rule requirements.” *Id.* at 14-15, citing 42 USC § 6945(d)(1)(D)(ii)(I).

The Environmental Groups concluded that, even if the Board does not accept their position that adjusted standards from Part 845 should not be available, it should deny EEI's petition because the proposal does not satisfy the federal CCR rule and is therefore inconsistent with the Act. PC 1 at 14.

**Assessment and Selection of Corrective Action.** In terms of required corrective action, the Environmental Groups asserted that EEI's proposal does not satisfy the federal CCR rule and is therefore inconsistent with the Act. PC 1 at 15.

**Monitored Natural Attenuation.** The Environmental Groups noted that IEPA's initial recommendation considered monitored natural attenuation to be EEI's required corrective action during the proposed six-year adjusted standard. PC 1 at 15. They characterized it as "a purported clean-up method that take a 'do-nothing' approach to addressing coal ash pollution." *Id.* at 16.

To find that monitored natural attenuation is adequate corrective action, the Environmental Groups asserted that USEPA requires "site-specific data and characteristics that control and sustain naturally occurring attenuation." PC 1 at 15-16. They argued that IEPA's recommendation does not satisfy this requirement. *Id.* at 16. Also, because EEI did not request a finding that monitored natural attenuation is adequate corrective action, EEI's request would still require an assessment of corrective action measures under Section 845.660. *Id.* Without the detailed demonstration USEPA requires, relying on this method as corrective action at Joppa West does not satisfy the federal CCR rule and thus is inconsistent with the Act. *Id.*

**Removal.** Based on a recent USEPA permitting decision, the Environmental Groups argued that the federal CCR rule requires assessing removal of coal ash more favorably than other possible corrective actions. PC 1 at 16.

The Environmental Groups argued that EEI's petition sought an exemption from most of the closure requirements in Subpart G of Part 845, including the requirement to consider removal as part of its closure alternatives analysis. PC 1 at 17. At the same time, IEPA's recommendation did not require EEI to analyze any corrective action other than MNA. Depending on the results of the recommended six years of data collection, IEPA would not require EEI to perform a closure alternatives analysis under Subpart G. *Id.*

The Environmental Groups concluded that the petition and recommendation did not require EEI to assess removal of the coal ash from groundwater more favorably than other potential corrective action, rendering them inconsistent with the Act. PC 1 at 17.

**Delaying Assessment and Corrective Action.** The Environmental Groups asserted that the federal CCR rule requires EEI to implement corrective action much more quickly than deadlines in IEPA's recommendation. PC 1 at 18, citing 40 CFR §§ 257.94(b), 257.94(d), 257.94(e)(1), 257.94(g). IEPA's recommendation would place Joppa West nearly 10 years behind federal deadlines by requiring EEI to collect five years of groundwater data before assessing corrective measures or closure alternatives. PC 1 at 19. The Environmental Groups argued the Board should deny the petition or instead allow EEI three years maximum to collect data, as additional time is inconsistent with the Act. *Id.*

**Groundwater Receptors.** The Environmental Groups noted USEPA’s position that selecting a method of corrective action is not affected by the presence or absence of groundwater receptors. PC 1 at 19. They argued that IEPA shares this position. *Id.* They concluded that the Board should reject any argument by EEI that “the purported absence of groundwater receptors near Joppa West is relevant to the selection of a corrective action.” *Id.*

**Closure.** The Environmental Groups stated that exceptions to closure requirements do not apply to Joppa West. PC 1 at 20 n.93, citing 415 ILCS 5/22.59(e) (2024); 35 Ill. Adm. Code 845.100(i). Any allowable exceptions require an IEPA-approved closure, and Joppa West did not receive IEPA approval when EEI stopped using it in the 1970s. PC 1 at 20 n.93.

The Environmental Groups argued that both the federal and Illinois CCR rules require eliminating “free liquids” from Joppa West before it can be closed by capping coal ash in place. PC 1 at 19, citing 40 CFR § 257.102(d)(2)(i), 35 Ill. Adm. Code 845.750. Furthermore, USEPA has clarified that the federal CCR rule defines “free liquids” to include groundwater. PC 1 at 19. Based on these factors, the Environmental Groups contended that EEI must demonstrate that it has eliminated groundwater from Joppa West before closing by capping in place. *Id.* Any adjusted standard without this requirement does not satisfy Section 22.59 of the Act. *Id.* at 20. Nothing in EEI’s petition contemplated removing the groundwater from Joppa West prior to closure. *Id.* Similarly, IEPA’s recommendation did not require removing free liquids (including groundwater) before capping the site with coal ash in place. *Id.*

The Environmental Groups concluded that, because neither EEI’s petition nor IEPA’s recommendation required removing groundwater from Joppa West before closing it with coal ash in place, they are inconsistent with the requirements of the Act. PC 1 at 20.

**Consideration of Cost.** The Environmental Groups argued that the federal CCR rule does not allow considering costs when choosing a method of corrective action or closure. PC 1 at 20-21, citing USWAG, 901 F.3d at 448-49. Additionally, the Board cited the D.C. Circuit when it declined during its rulemaking proceeding to include cost considerations in the closure analysis section. PC 1 at 21, citing Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 Ill. Adm. Code 845, R20-19, slip op. at 93 (Feb. 4, 2021) (second-notice opinion).

The Environmental Groups asserted that EEI’s petition asked the Board to “consider the cost of different corrective measures and closure alternative,” and that IEPA’s recommendation appeared to validate this request. PC 1 at 21. Board rules that are generally applicable to adjusted standards refer to costs. PC 1 at 21, citing 35 Ill. Adm. Code 104.406(e). However, if costs are relevant when deciding whether to grant an adjusted standard from Part 845, then Illinois’ program becomes less protective than the federal CCR rules and conflicts with Section 22.59 of the Act. PC 1 at 21.

**Public Participation.** IEPA’s recommendation provided two ways in which EEI could satisfy the closure requirements at Joppa West. First, EEI could demonstrate that monitored natural attenuation achieves groundwater protection standards within 30 years, at which time it would be considered closed. PC 1 at 21. The Environmental Groups argued that this option

“would entirely prevent the public from weighing in on a closure plan for Joppa West, except to the extent that members of the public submit comments in this proceeding.” *Id.* Second, EEI could obtain approval for an “alternative closure system.” *Id.* The Environmental Groups argued that this option precludes meaningful public participation because the public could comment on a closure plan only after the Board had approved it. *Id.*

### **Burden of Proof for Adjusted Standard**

The Environmental Groups argued that EEI failed to meet its burden and that the Board should deny its petition. PC 1 at 22.

### **Substantially and Significantly Different**

The Environmental Groups first noted IEPA’s statement that the factors relating to Joppa West have not been proven substantially and significantly different from the factors relied upon by the Board in adopting the regulation applicable to the site. PC 1 at 22. “This alone compels denial of the adjusted standard.” *Id.*

The Environmental Groups disputed EEI’s arguments on this factor. Although EEI claimed that Joppa West differs because it is not regulated by the federal CCR rule, the Environmental Groups emphasized that Joppa West is an “inactive CCR surface impoundment” under the federal and Illinois rules. PC 1 at 22. They also discounted EEI’s position that it has had less time to comply with Part 845, in that the delay does not itself make Joppa West “substantially and significantly different” from other ponds regulated by Part 845. *Id.*

The Environmental Groups argued that other characteristics of Joppa West also do not distinguish it from other ash ponds regulated under Part 845. PC 1 at 23. Federal and Illinois CCR rules already account for these characteristics, such as vegetation and wildlife. *Id.* Finally, the Environmental Groups asserted that corrective action and closure costs vary from site to site. Even if the Board could consider costs, that factor does not distinguish Joppa West from others regulated by Part 845. *Id.*

### **Whether Factors Justify Adjusted Standard**

The Environmental Groups argued that, because EEI failed to prove that Joppa West is “substantially and significantly different,” it failed to meet its burden of proving that an adjusted standard is justified for Joppa West. PC 1 at 23.

### **Environmental or Health Effects**

The Environmental Groups argued that anything short of “full compliance” with federal and Illinois CCR standards means that, by definition, Joppa West poses a reasonable probability of adverse effects on health or the environment. PC 1 at 23-24. In addition, the record shows – and EEI and IEPA acknowledged – that Joppa West is already causing groundwater contamination. *Id.* at 24. The Environmental Groups also cited IEPA’s explanation that EEI has failed to adequately assess groundwater contamination at the site. *Id.*

The Environmental Groups argued that any possible harms that might result from removing coal ash from Joppa West could be mitigated or eliminated during the permitting process and development of corrective action. PC 1 at 25. Any potential impacts must be weighed against the impacts of continuing groundwater contamination. The Environmental Groups concluded that these potential impacts do not justify an adjusted standard.

### **Consistent with Applicable Federal Law**

The Environmental Groups asserted that EEI cannot prove that its proposed adjusted standard is consistent with federal law. PC 1 at 25. They again emphasized that Joppa West is an “inactive CCR surface impoundment” subject to regulation under the federal CCR rule. Because EEI’s proposal sought to exempt Joppa West from requirements under Part 845 that are also requirements under the federal CCR rule, it is inconsistent with federal law. *Id.*

### **EEI’S RESPONSE TO IEPA RECOMMENDATION**

EEI states that, after receiving IEPA’s recommendation, it met and reached an agreement that reflects many of the conditions IEPA recommended. Resp. at 5.

### **Revised Proposed Adjusted Standard**

EEI now requests that the Board grant an interim adjusted standard consistent with IEPA’s recommendation. Resp. at 8. EEI states that IEPA agrees the revised adjusted standard addresses issues raised in IEPA’s recommendation and is justified under Section 28.1 of the Act. *Id.* at 3, 5, 8, 26-27. The proposed language of the agreed standard is as follows:

The Board hereby grants an interim adjusted standard for a period lasting six years from the submission of a Part 845 operating permit application by Petitioner to the Illinois Environmental Protection Agency (“IEPA” or the “Agency”) in accordance with this interim adjusted standard, except, in the event Petitioner files for a permanent adjusted standard in accordance with paragraph (h) below within that same six year period, this interim adjusted standard shall apply until the conclusion of that permanent adjusted standard proceeding. During the interim adjusted standard period, the Joppa West Pond (“JW”) shall be exempt from the requirements of 35 Ill. Admin. Code Part 845, except for the following requirements, which shall apply subject to the modifications described below.

- a) All of Subpart A [General Provisions]
- b) Subpart B [Permitting]:
  - 1. 845.200(a)(2)
  - 2. 845.200(b)
  - 3. All of 845.210

4. 845.230(d)(1) modified such that Petitioner's initial operating permit application for JW shall be due to the Agency within 12 months after entry of this interim adjusted standard and shall include the information set forth in Section b.5, below.
  5. 845.230(d)(2)(A), (C), (E), (G), (I)(i)–(iv), (J), (K), (M), (N), and (S)
  6. 845.230(e)
  7. 845.250
  8. 845.260
  9. 845.270
  10. Within 30 days of approval of an operating permit by IEPA, Petitioner shall provide notice to the Board of its issuance.
  11. 845.280
  12. 845.290
- c) Subpart F [Groundwater Monitoring and Corrective Action]:
1. 845.600
  2. 845.610(a), (b)(1), (b)(3). 845.610(b)(3) shall apply as of the quarter after submittal of Petitioner's operating permit application in accordance with b.4, above. Additionally, Petitioner shall provide a copy of lab reports and field sheets to the Agency within 60 days after the receipt of final laboratory reports.
  3. 845.610(c)
  4. 845.610(d)
  5. 845.620
  6. 845.630, with 845.630(c)(1) modified to require a minimum of one upgradient and three downgradient wells in the upper most aquifer.
  7. 845.640
  8. 845.650(a)

9. 845.650(b), except (b)(1)(A) and (B)
10. 845.650(c)
11. 845.650(d), which shall apply as of the quarter after submittal of Petitioner's operating permit application in accordance with b.4, above.
12. 845.650(e), which shall apply as of the quarter after submittal of Petitioner's operating permit application in accordance with b.4, above.
13. 845.660(a), except 845.660(a)(1) is modified to require an assessment of corrective measures to be initiated within 90 days of detecting a constituent at a statistically significant level above the groundwater protection standards listed in 845.600 at the downgradient waste boundary, as follows. Detection of a constituent at a statistically significant level above groundwater protection standards listed in 845.600 shall be based on sampling conducted as of the quarter after submittal of and pursuant to the proposed groundwater monitoring plan submitted with Petitioner's operating permit application until such time as the Agency issues an operating permit with an approved groundwater monitoring plan. Upon the Agency's issuance of an operating permit with an approved groundwater monitoring plan, detection of a constituent at a statistically significant level above groundwater protection standards listed in 845.600 shall be determined based on the Agency-approved groundwater monitoring plan.
14. 845.660(b), (c)
15. 845.670(a)
16. 845.670(b) shall not apply, except within one year of completing the assessment of corrective measures required in (c)(13), Petitioner must submit to IEPA for its review and approval a corrective action plan that identifies the selected remedy.
17. 845.670(c) - (f)
18. 845.680
19. Petitioner must conduct sufficient sampling to represent source concentrations of CCR for purposes of performing geochemical modeling and evaluation of leaching potential from JW.

20. Petitioner shall (1) identify the 845.600(a) chemical constituents within the CCR in JW through solids sampling and (2) perform Synthetic Precipitation Leaching Procedure (SPLP, SW846 Test Method 1312) or Toxicity Characteristic Leaching Procedure (TCLP, SW846 Test Method 1311) analysis of the CCR within JW for the 845.600(a) constituents detected in the solids sampling. The minimum detection limits must be at least the groundwater protection standards in 845.600(a). The number of solids samples must include a minimum of one sample per 10 percent of the volume with at least three of the samples being collected in the upper one third of the CCR by depth from ground surface, at least three of the samples being collected in the middle one-third of the CCR by depth from ground surface, and at least three of the samples being collected in the bottom one-third of the CCR by depth from ground surface.
  21. Upon collecting five years of quarterly monitoring data, Petitioner shall prepare and submit a report to IEPA evaluating the remaining heavy metals for transport in the groundwater. That report shall include a mass transport model, a geochemical model, and a flow model demonstrating (1) whether groundwater contamination from JW exceeding the groundwater protection standards in 845.600 is dispersing or diffusing in a manner that does not contribute to an exceedance of the groundwater protection standards in 845.600 outside of the facility property boundary, and, if applicable, (2) whether the corrective action implementation is protective of human health and the environment. The report shall also include a human health risk assessment and ecological risk assessment verifying that Joppa West Ash Pond that the above actions are protective of human health and the environment.
- d) Subpart G [Closure and Post-Closure Care]:
1. 845.720(a)
  2. 845.780(d)
- e) Subpart H [Recordkeeping]:
1. 845.800(a), except Petitioner must maintain only that information required under 845.800(d)(1), (2), (15), (16), (17), (18), and (33).
  2. 845.800(b)
  3. 845.800(c)

4. 845.800(d)(1), (2), (15), (16), (17), (18), and (33)
  5. 845.810(a) - (e) and (g), except for purposes of 845.810(e), Petitioner shall be required to post to its CCR website only that information it is required to include in its facility operating record under 845.800.
- f) Subpart I [Financial Assurance]:
1. 845.900, except for purposes of 845.900(d) financial assurance for closure and post-closure care shall be due 90 days after submittal of Petitioner's initial operating permit application.
  2. 845.910
  3. 845.920
  4. 845.930
  5. 845.940
  6. 845.950, except for purposes of 845.950(c)(1) financial assurance for closure and post-closure care shall be due 90 days after submittal of Petitioner's initial operating permit application.
- g) Nothing in this interim adjusted standard shall exempt Petitioner from applicable requirements contained in other state or federal laws.
- h) Petitioner must submit the report required under (c)(21) to the Agency within 180 days of completion of the five years of monitoring required under this interim adjusted standard. Following submission of the report, Petitioner may apply for a permanent adjusted standard. If Petitioner makes such a petition and it is granted, the new adjusted standard shall apply. If not, JW shall be subject to Part 845, as it may be amended and subject to any other adjusted standards or variances that may apply. *Id.* at 8-12.

### **Updated Discussion of Statutory and Petition Content Requirements**

EEI's response addresses each of the petition content requirements by updating them in response to IEPA's recommendation and the agreed interim adjusted standard. Resp. at 12.

### **Section 104.406(a): Standard for Which Adjusted Standard Sought**

EEI states that it seeks relief from Part 845, which became effective on April 21, 2021. Resp. at 12.

**Section 104.406(b): Whether Regulation Promulgated Under Specified Federal Authorities**

EEI states that Part 845 was not promulgated to implement in whole or in part the requirements of the federal CAA, SDWA, or CERCLA programs or the State RCRA, UIC, or NPDES programs. Resp. at 12.

**Section 104.406(c): Level of Justification**

EEI restates that, because the generally applicable rule does not specify one, the level of justification is meeting the factors under Section 28.1 of the Act. Resp. at 13, citing 415 ILCS 5/28.1(c) (2024).

**Section 104.406(d): Nature of EEI's Activity**

EEI states that the nature of its activity at Joppa West is the same as described in its petition. Resp. at 13. EEI notes IEPA's view of the current state of and potential releases from Joppa West. *Id.* IEPA's recommendation sought additional groundwater sampling to support EEI's HHRA. *Id.*

Although EEI does not necessarily agree with IEPA's positions or conclusions, it is willing to conduct the additional investigation recommended by IEPA to further characterize Joppa West and determine the impact, if any, of CCR from Joppa West. Resp. at 13. The proposal now requires the investigation requested by IEPA, including: collecting sampling data for the Section 845.600 parameters in accordance with a groundwater monitoring plan; evaluating the geochemistry of Joppa West; performing fate and transport modeling; and developing a human health and ecological risk assessment. *Id.* at 13-14. The proposal does not include an adjustment from the groundwater monitoring and corrective action requirements of Part 845. *Id.* at 14. If a release from Joppa West causes an exceedance of the groundwater protection standards, EEI will address the impact of the release. *Id.*

**Section 104.406(e): Efforts Necessary to Comply with Part 845**

As described above, EEI still estimates high costs for closure methods under Part 845. Although IEPA suggested that EEI might recover some costs by selling wood after clearing the site, EEI argues that IEPA has not disputed the projected costs to clear it. Resp. at 15. These options will also require removing and relocating existing electrical transmission infrastructure at the site. *Id.* Finally, EEI again stresses that any option other than its proposed adjusted standard may affect habitat for the Indiana bat and the northern long-eared bat. *Id.* When EEI filed its petition, the northern long-eared bat was federally threatened but has since been re-designated as federally endangered. Resp. at 15, citing 87 Fed. Reg. 73488 (Nov. 30, 2022).

EEI states that the Act requires an adjusted standard proceeding to consider economic reasonableness, despite the Environmental Groups' belief that the Board should ignore costs. Resp. at 14 n.3, citing 415 ILCS 5/27(a) (2024). EEI argues that the Board acknowledged the availability of adjusted standards when it promulgated Part 845. At that time, the Board did not indicate it would ignore economic reasonableness, including the cost of compliance alternatives,

and did not adopt a different level of justification for Part 845. Resp. at 14 n.3.

#### **Section 104.406(f): Narrative Description of Proposed Standard**

EEI states that its revised interim adjusted standard will exempt it from closure requirements under Part 845 but will still require groundwater standards and monitoring, corrective action, recordkeeping, and financial assurance. Resp. at 15. The interim adjusted standard will not relieve it from complying with statutory requirements. Resp. at 15, citing 415 ILCS 5/22.59 (2024).

EEI states that the adjusted standard will be effective for six years after EEI submits an operating permit application for Joppa West under Part 845. If EEI files a petition for a permanent adjusted standard during that six-year period, then the interim standard would apply until the Board completes proceedings on that petition. Resp. at 8, 15-16.

EEI argues that its revised proposal is more stringent than Part 845 because it requires EEI to collect information to further characterize and evaluate Joppa West, and to further analyze whether there is support for a permanent adjusted standard from Part 845 closure requirements. Resp. at 16. Consistent with IEPA's recommendation, EEI must report on five years of quarterly data and evaluate the transport of heavy metals in groundwater. *Id.* "Significantly, while IEPA's Recommendation suggested that this demonstration be based on the current cover system and natural attenuation (Recommendation at 40), IEPA and Petitioner agreed that, if applicable, Petitioner will be subject to the groundwater corrective action requirements in Part 845 during the interim adjusted standard period, including additional corrective actions beyond natural attenuation." *Id.* The proposal does not change the requirement to evaluate and perform groundwater corrective action under Part 845 if Joppa West is found to cause or contribute to an exceedance of the groundwater protection standard. *Id.* at 16-17.

After EEI submits the required report, it may petition the Board for a permanent adjusted standard based on information obtained during the interim adjusted standard period. Resp. at 17. EEI acknowledges that it bears the burden of demonstrating that an adjusted standard is justified. *Id.* If EEI does not apply for a permanent adjusted standard or its petition is not granted, Part 845 will apply to Joppa West in its entirety. *Id.*

#### **Section 104.406(g): Environmental Impact**

EEI asserts that its revised proposal protects the environment. Resp. at 17. First, Joppa West will be subject to groundwater protection standards and the requirement to establish a groundwater monitoring program for the duration of its proposed standard. Resp. at 17, citing 35 Ill. Adm. Code 845.Subpart F. If groundwater monitoring shows exceedances attributable to Joppa West, EEI will be required to assess and plan corrective action under Part 845. Resp. at 17. The proposal also requires EEI to collect data and characterize Joppa West and its surrounding groundwater to perform an evaluation and issue a report. *Id.* at 17-18.

Additionally, the proposal allows the existing vegetative cover at Joppa West to remain in place for the interim adjusted standard and, if justified by data developed during that period, to

remain in place permanently. Resp. at 17. EEI notes that this preserves a potential habitat of the federally endangered Indiana bat and northern long-eared bat. Resp. at 17, citing 87 Fed. Reg. 73488 (Nov. 30, 2022).

#### **Section 104.406(h): Justification**

As described previously and below, EEI again argues that its proposed adjusted standard is justified under the factors of Section 28.1(c) of the Act. Resp. at 18.

#### **Section 104.406(i): Consistency with Federal Law**

As described previously and below, EEI again asserts that the Board can grant the proposed adjusted standard consistent with federal law. Resp. at 18.

#### **Section 104.406(k): Citation to Supporting Documents**

EEI states that it had cited documents and other information it has relied upon in its petition and cited any additional documents and information it relied upon its response to IEPA's recommendation. Resp. at 18. EEI adds that it has attached relevant portions of these sources "other than Board decisions, State regulations, statutes, and reported cases." *Id.*

### **Section 28.1 Factors**

#### **Section 28.1(c)(1): Substantially and Significantly Different Factors**

EEI disputes the Environmental Groups' comment that Section 845.670(d) contemplates vegetation and wildlife on or near an impoundment. Resp. at 19 n.6. EEI contends that this provision addresses corrective action, not closure, and that EEI does not propose to adjust corrective action requirements. Resp. at 19. Neither closure by removal nor closure in place under Part 845 consider vegetation or wildlife, as EEI cannot perform either alternative at Joppa West without removing the forest growth and transmission lines. Resp. at 19 n.6.

EEI argues that "most of the units regulated under Part 845 are not forested, not home to infrastructure, and contained ponded water and CCR under a hydraulic head as of October 2015, or at the very least more recently than Joppa West." Resp. at 19. EEI asserts that the presence of hydraulic head poses different risks than a unit such as Joppa West. *Id.*

EEI disputes the Environmental Groups' comment that older ponds pose the same risk as ponds that stopped accepting CCR more recently. Resp. at 19 n.7. Even assuming Joppa West poses any risk to groundwater, EEI argues the comment "presents no evidence that it is the *same* level of risk as the units primarily relied upon to promulgate Part 845." *Id.* (emphasis in original). Additionally, the agreed interim standard includes a condition requiring EEI to further characterize Joppa West, as recommended by IEPA, to determine whether those factors support a permanent adjusted standard. Resp. at 19.

### **Section 28.1(c)(2): Whether Factors Justify Adjusted Standard**

EEI notes IEPA's position that granting an adjusted standard should depend on whether data shows stable geochemistry and natural attenuation at the site or whether the site requires corrective action. Resp. at 20. The proposed interim standard allows time to collect data to determine whether Joppa West can meet groundwater protection standards without undergoing closure under Part 845. *Id.* EEI stresses that it revised the proposal so that Joppa West is still subject to Part 845's corrective action requirements as necessary. *Id.* at 20-21.

### **Section 28.1(c)(3): Environmental or Health Effects**

EEI argues that the primary purpose of Part 845 is to protect groundwater against impacts from CCR surface impoundments. Furthermore, Part 845 relies upon groundwater protection standards. Resp. at 21, citing Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 Ill. Adm. Code 845, R20-19, slip op. at 1 (Feb. 4, 2021) (second-notice opinion). EEI asserts that, under its proposal, Joppa West will be subject to these standards at Section 845.600, as well as corrective action requirements when necessary. Resp. at 21.

IEPA and the Environmental Groups both noted that demonstrating a lack of impact on human health and the environment based on a lack of current groundwater receptors does not preclude the existence of a receptor in the future. Resp. at 21. EEI argues that if Joppa West presents a potential future risk, the revised proposal addresses that concern through the requirement for corrective action under Part 845. *Id.*

The revised proposal also requires collecting five years of data to show whether contamination from Joppa West is dispersing or diffusing in a manner that does not contribute to exceeding standards in Section 845.600 beyond the facility's boundary, and whether implementing corrective action protects human health and the environment. Resp. at 22. If EEI cannot make this demonstration, it will be required to meet the groundwater protection standards through alternative closure requirements approved in a subsequent adjusted standard proceeding or through full closure under Part 845. *Id.* EEI believes that on these points, the proposal is as protective and possibly more protective than Part 845. *Id.* at 21.

### **Section 28.1(c)(4): Consistency with Federal Law**

**Summary of Federal Authorities.** EEI asserts that both the 2015 federal rules and Part 845 apply independently in Illinois. Resp. at 23.

EEI further argues that Part 845 is more stringent than the 2015 federal CCR rules, including the scope of the units it regulates. Resp. at 23, citing Midwest Generation, LLC v. IPCB, 2024 IL App (4th) 210304 at 16-17, 20-21 (Rule 23 opinion). As a result, units such as Joppa West may be regulated under Part 845 but not under the 2015 federal rules. Resp. at 23. As to USEPA's 2024 revisions to the federal rules, EEI asserts that Part 845 does not currently regulate "CCR management units" (which are newly subject under the federal rules). *Id.* at 24. EEI stresses that its revised proposal seeks to adjust state and not federal standards. *Id.* at 5 n.1.

**Consistency with Federal Authorities.** EEI first asserts that Part 845 applies independently of federal rules. Resp. at 24. Although USEPA can approve state CCR permit programs to operate in place of the 2015 federal rules, USEPA has not yet approved Illinois’ program. *Id.* EEI argues that granting an adjusted standard from Part 845 will not place Illinois out of compliance with any federal requirement. *Id.*

EEI acknowledges that IEPA intends to submit Part 845 rules to USEPA for approval to implement them in place of the 2015 federal CCR rules. Resp. at 24. When IEPA does so, USEPA will review the Illinois rules and any adjusted standard from them to ensure that they are at least as stringent as the federal rules. *Id.* at 24-25, citing Petition of Royal Fiberglass Pools, Inc. for an Adjusted Standard from 35 IAC 215.301, AS 09-4, slip op at 16 (Feb 19, 2010); Petition of Vonco Products, Inc. for an Adjusted Standard from 35 Ill. Adm. Code Sections 218.401(a), (b), and (c), AS 00-12, slip op. at 7 (Jan. 18, 2001). The WIIN Act allows states to deviate from Part 257 requirements “if, based on site-specific conditions, the Administrator determines that the technical standards established pursuant to a State permit program or other system are at least as protective as the criteria under that part.” Resp. at 25, citing 42 USC § 6945(d)(1)(C). USEPA would address this question if IEPA submits Part 845 to it for approval; thus, EEI states it need not be addressed in this proceeding. Resp. at 25.

Next, EEI argues that, if the Board determines an adjusted standard from Part 845 must be consistent with the 2015 federal rules, its proposal meets that standard. Resp. at 25. EEI reiterates that Joppa West is not subject to the 2015 federal rules. *Id.* IEPA states the Board may grant the proposed adjusted standard consistent with federal law and previously identified Joppa West to USEPA as a unit not regulated by 40 CFR § 257.53. *Id.* When USEPA finalized its 2024 CCR rule amendments, it included Joppa West on a published list of CCR management units that are not regulated by the 2015 federal CCR rules. *Id.* at 25-26.

EEI disputes the Environmental Groups’ comment that Joppa West is an “inactive CCR surface impoundment” under 2015 federal rules. Resp. at 26 n.9. EEI argues that its revised proposal does not make Part 845 inconsistent with or less stringent than Part 257. *Id.* Rather, the proposal requires compliance with the Part 845 groundwater corrective action program. *Id.* The proposal also does not relieve Joppa West from complying with Part 845 closure requirements – “it merely defers a decision on the application of the closure requirements.” *Id.*

Finally, EEI argues that its proposal is not affected by the federal 2024 revisions because they are separate and apart from Part 845. Resp. at 26. If the revised rules apply to Joppa West, EEI states this will occur under a different process and timeline. *Id.*

### **ENVIRONMENTAL GROUPS’ COMMENTS ON EEI’S RESPONSE (PC 2)**

The Environmental Groups argue that exempting EEI from certain requirements of Part 845 and allowing it to “cherry pick the provisions it wants to adhere to” is incompatible with Section 22.59 of the Act, makes Illinois’ rules less protective than the federal CCR rules, and poses risks to human health and the environment. PC 2 at 1. For these reasons, the Environmental Groups ask the Board to deny EEI’s request for an adjusted standard and decline to follow IEPA’s recommendation. *Id.*

### **Joppa West is Not “Substantially and Significantly Different”**

The Environmental Groups conclude that both USEPA’s analysis of similar impoundments and IEPA’s detailed, site-specific review of Joppa West strongly suggest that this site is just as dangerous – if not more so – to human health and the environment than other regulated sites. PC 2 at 7.

The Environmental Groups argue that USEPA has not accepted the position that “ponds that have stopped operating and stopped holding ponded water are different or less risky.” PC 2 at 5. They further argue that EEI’s proposal would not require it to dewater Joppa West. *Id.* The Environmental Groups also assert that USEPA and the Board have not accepted the position that ponds with soil and mature vegetation are different and less risky. PC 2 at 6, citing 89 Fed. Reg 38985 (May 8, 2024).

### **Requested Adjusted Standard Risks Adverse Effects on Health and Environment**

The Environmental Groups dispute EEI’s position that the Part 845 groundwater requirements in the adjusted standard will protect the environment, because these were essentially the requirements that applied before the Board adopted Part 845. PC 2 at 2. The Illinois General Assembly and the Board later determined that CCR surface impoundments needed additional requirements. PC 2 at 2, citing 415 ILCS 5/22.59(a)(3), (4) (2024); Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 Ill. Adm. Code 845, R 20-19, slip op. at 3 (Feb. 4, 2021) (second-notice opinion).

The Environmental Groups argue that allowing unlined CCR surface impoundment to remain open (i.e. not closed under state or federal rules) until monitoring reveals groundwater contamination is inadequately protective under RCRA. PC 2 at 2, citing USWAG, 901 F.3d at 427. EEI’s proposal would relieve it of the obligation to close Joppa West under the federal and Illinois CCR rules and provides no clear deadline for doing so. PC 2 at 3. They assert that this poses “unacceptable and unlawful risks to communities and the environment.” *Id.*

The Environmental Groups argue that EEI’s proposal to perform a human health and ecological risk assessment does nothing to overcome the grave risks posed by older unlined impoundment such as Joppa West and addressed by USEPA and the Illinois General Assembly. PC 2 at 3. The Board has concluded that “contamination of groundwater alone establishes environmental risk. There need not be receptors to establish environmental or health risk.” PC 2 at 4, citing 35 Ill. Adm. Code Part 620; Groundwater Quality Standards: 35 Ill. Adm. Code 620, R89-14(b), slip op. at 11 (Nov. 7, 1991). They note the Illinois Supreme Court’s similar conclusion that “water pollution exists not only when actual harm has occurred or will occur, but rather whenever harm would occur if the contaminated water were to be used.” PC 2 at 4 (emphasis in original), citing Cent. Ill. Pub. Serv. Co. v. PCB, 116 Ill.2d 397, 409 (Ill. 1987).

### **Proposed Adjusted Standard is Not Consistent with Federal Requirements**

The Environmental Groups argue that USEPA has confirmed that “a coal ash unit is ‘designed to hold an accumulation of CCR and liquids’ under the federal CCR rule – and therefore

meets the federal definition of a ‘CCR surface impoundment’ – even if the unit does not impound water on its surface.” PC 2 at 8. Additionally, USEPA explains that “a coal ash unit ‘still contains both CCR and liquid’ – and therefore meet the federal definition of an ‘inactive CCR surface impoundment’ – when its base (or any part of its base) is in contact with groundwater.” *Id* (emphasis in original).

The Environmental Groups argue that Illinois’ rule must at a minimum regulate the same coal ash ponds as the federal rules because Section 22.59 of the Act requires Illinois’ program to be “at least as protective and comprehensive” as the federal rules. PC 2 at 9, citing 415 ILCS 5/22.59(g)(1) (2024). They conclude that in seeking to exempt Joppa West from state requirements that are also requirements under the federal CCR rule, EEI’s proposal “is inconsistent with federal law.” PC 2 at 9.

The Environmental Groups dispute EEI’s position that the 2024 federal CCR revisions will not impact the proposal even if Joppa West may be subject to Part 257 at a future date. PC 1 at 8, citing Resp. at 26. They argue that, because Joppa West meets the definition of an “inactive CCR surface impoundment” under Part 845 and the 2015 federal rules, “the scope and effective date of the 2024 Federal CCR Rules have no bearing here.” PC 1 at 8.

### **Requested Adjusted Standard Does Not Satisfy Public Participation Objectives**

The Environmental Groups suggest that EEI’s proposal impermissibly selects elements of Part 845 with which EEI is willing to comply while selecting others with which it is not. PC 2 at 4. EEI’s proposal “eliminates the pre-application public notification and public meeting requirements of Part 845.240 and eliminates all of Part 845.710 on closure alternatives.” *Id*. The Environmental Groups conclude that EEI’s proposal “would impermissibly evade some of the meaningful public participation provisions of Part 845.” *Id*.

### **Proposed Adjusted Standard and Approval of Illinois Program**

The Environmental Groups cite their previous comment that Illinois’ coal ash rules must be “at least as protective and comprehensive as” the federal CCR rule. PC 2 at 9, citing 415 ILCS 5/22.59(g)(1) (2024); PC 1 at 13-15. They note that IEPA seeks authorization from USEPA for Illinois to operate its own CCR permitting program. PC 2 at 10, citing Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 Ill. Adm Code 845, R 20-19, slip op at 10 (Mar. 2, 2020) (IEPA Statement of Reasons). Because federal and state rules share many requirements, they argue that an adjusted standard from Part 845 could make it less protective than the federal rules and jeopardize approval of Illinois’ program. PC 2 at 10.

## **DISCUSSION**

The Board concludes that EEI has met the burden for its proposed interim adjusted standard. The Board will address each factor from Section 28.1(c) as applied to the proposal.<sup>1</sup>

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<sup>1</sup> From this point, “the proposal” means the revised proposal submitted by EEI in its response.

**Section 28.1(c)(1): Substantially and Significantly Different Factors**

IEPA and the Environmental Groups assert that Joppa West is an inactive CCR surface impoundment under Part 845, though largely in the context of whether Part 845 should apply to Joppa West in the first place. EEI waived the inapplicability argument but did not elaborate on how to define Joppa West under Part 845. Nevertheless, to determine whether the proposed adjusted standard satisfies the remaining Section 28.1(c) factors, the Board deems it necessary to determine how Part 845 initially applies to Joppa West.

**Definition under Part 845**

To be a “CCR surface impoundment,” a site must: (1) be a natural topographic depression, man-made excavation or diked area; (2) be designed to hold an accumulation of CCR and liquids; and (3) treat, store, or dispose of CCR. 35 Ill. Adm. Code 845.120. EEI focused on the second criterion, arguing that the definition’s use of the present tense effectively excludes Joppa West because it has not been “designed” to hold an accumulation of liquids since October 19, 2015. Pet. at 19. When Joppa West stopped receiving CCR in the early 1970s, the unit’s design changed with grading to prevent standing water and promote drainage. *Id.* at 15-16. Since then, there has been no significant disturbance to the cap. *Id.* at 16.

IEPA asserted that the definition does not require Joppa West to contain liquids during its entire active life, and that the holding can be temporary. Rec. at 13. IEPA used the D.C. Circuit’s discussion of “is disposed of” in USWAG to argue that the design continues to exist “even if the initial design was in the past.” Rec. at 15. Additionally, based on photographs of the site and minimal organic sediments in some areas, IEPA asserted that Joppa West contains standing water and erosional pathways, where liquids that flow to low areas likely carry eroded CCR material. Rec. at 9-10, 21-23.

The Board agrees with IEPA that Joppa West is a CCR surface impoundment under Part 845. EEI’s own exhibits show areas of standing water, in contrast with its claim that the site does not hold liquids. Pet. Ex. 2 App. C. The Board further agrees that Joppa West is an inactive CCR surface impoundment under Part 845. The record indicates Joppa West did not receive CCR after October 19, 2015, and it is undisputed that the site still contained CCR on or after that date. EEI claims that even though Part 845 does not require an inactive CCR surface impoundment to hold liquids, Joppa West cannot be an inactive impoundment because it must first be a surface impoundment (and be designed to hold liquids) – which, EEI argues, it is not. Pet. at 24. The Board is not persuaded. Even if the intent of the altered “design” was to prevent standing water, that was not the result.

The Board also notes that Joppa West was not closed under an IEPA-approved plan. Rec. at 20. Thus, Joppa West is not an “inactive closed CCR surface impoundment” and cannot escape certain provisions of Part 845. 35 Ill. Adm. Code 845.120, 845.170. While the Board understands that the site stopped receiving CCR long before IEPA or USEPA began regulating surface impoundments, the language of Part 845 is clear.

### **Substantially and Significantly Different**

The next question is whether Joppa West presents substantially and significantly different factors from what the Board considered during the Part 845 rulemaking. The Board finds that it does. The record of that proceeding indicates that the Board limited its review to general regulations over CCR, rather than site-specific concerns. *See, e.g., Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed new 35 Ill. Adm. Code 845*, R20-19, Transcript at 17, 215-216 (Aug. 13, 2020), Transcript at 48-52, 70-71, 80-81 (Sept. 30, 2020). Additionally, the Board noted numerous times that interested parties could petition for variances or adjusted standards. R20-19, slip op. at 14 (de minimis definition), 17 (inactive closed CCR surface impoundment definition), 97 (final cover system standards) (Feb. 4, 2021). While this did not guarantee that a site would receive the requested relief, it reflected the Board's intent to focus on broader issues.

Joppa West is unlike most sites that were considered during the Part 845 rulemaking – over 100 acres, decades of inactivity, mature vegetative growth, potential habitats for two federally endangered species, gas lines, and transmission lines and equipment owned by third parties, to name a few factors. The Board acknowledges that to close the site under Part 845, either through removal or capping in place, would be a significant environmental, logistical, and economic project.

The Part 845 rulemaking record does not reflect that EEI presented these particular circumstances to the Board, nor that the Board considered them when adopting CCR rules of general applicability. Moreover, as IEPA noted, EEI does not yet have enough data to fully characterize the site, including the extent of contamination and the impact on groundwater. For these reasons, the Board finds that EEI has satisfied the first factor under Section 28.1(c).

### **Section 28.1(c)(2): Whether Factors Justify Adjusted Standard**

The Board finds that the situation at Joppa West justifies an adjusted standard – albeit a temporary one – for the same reasons described above. A temporary adjusted standard allows EEI and IEPA to address the site-specific concerns that were not part of the Part 845 rulemaking. Among other things, EEI will have enough time to conduct proper groundwater monitoring and collect data to characterize the site. This in turn will help determine an appropriate closure method that accounts for the forest growth, wildlife, and human health risks. For these reasons, the Board finds that EEI has satisfied the second factor under Section 28.1(c).

### **Section 28.1(c)(3): Environmental or Health Effects**

As described above, IEPA raised several environmental and health concerns based on EEI's petition, particularly the groundwater investigation to date. Overall, IEPA believes that Joppa West has not been fully characterized. Among other things, this would involve determining where heavy metal contaminants are originating, whether CCR constituents are present in the Outfall 011 discharge to the Ohio River, and whether contaminants are migrating through the upper confining unit to the upper aquifer. Rec. at 16, 30, 34-36. IEPA also notes that EEI's data shows exceedances of groundwater protection standards, and without enough monitoring to confirm that

exceedances are limited to the upper confining unit and not reaching the upper aquifer. *Id.* at 16-18, 29-31, 34.

Initially, IEPA agreed that groundwater sampling and evaluation would be the required assessment of corrective measures, and that it would consider monitored natural attenuation to be corrective action during the adjusted standard period. The Environmental Groups raised concerns about this approach, albeit in the context of consistency with federal rules. The Environmental Groups also stressed weighing the potential impact of harm caused by removal against the impact of ongoing groundwater contamination.

Below, the Board addresses the proposal by subpart.

### **Subparts C, D, and E**

EEI did not include these subparts in its proposal. The Board finds the omission appropriate, as these subparts cover location restrictions, design criteria, and operating criteria, respectively. Because Joppa West was constructed, operated, and left inactive long before the Board adopted Part 845, these particular rules are not relevant to the site at this time.

### **Subpart A: General Provisions**

This subpart includes key definitions and the scope of Part 845. The proposal includes all of Subpart A. The Board finds this inclusion appropriate.

### **Subpart B: Permitting**

The Board finds that including the following unmodified Subpart B provisions, as proposed by EEI, is appropriate:

- 845.200(a)(2) and (b)
- 845.210
- 845.230(e)
- 845.250 through 845.290

The Board finds that including the following modified Subpart B provisions and additional requirements, as proposed by EEI, is appropriate:

- 845.230(d)(1), modified: EEI must submit its initial operating permit application for Joppa West to IEPA within 12 months after entry of this interim adjusted standard and must include the information from 845.230(d)(2) below.
- 845.230(d)(2)(A), (C), (E), (G), (I)(i)-(iv), (J), (K), (M), (N), and (S)
- Within 30 days of approval of an operating permit by IEPA, EEI must provide notice to the Board of its issuance.

**Further Modifications and Additions.** In its proposal, EEI modified or omitted certain Subpart B provisions. For the reasons discussed below, the Board finds this part of the proposal

insufficient. The Board modifies and adds Subpart B provisions to the interim adjusted standard as follows.

**Adding Section 845.200(a)(1) and (a)(3).** Section 845.200(a)(1) requires a construction permit for activities, including corrective action measures under Subpart F. Under Section 845.200(a)(3), no person may perform corrective action without obtaining a construction permit for corrective action and modifying the facility's operating permit, or without modifying the operating permit when the approved corrective action does not involve activities that would require a construction permit. For corrective action measures, EEI's proposal merely requires it to submit a plan to IEPA. However, at this time, it is unclear what type of corrective actions EEI may need to perform and whether those measures would require a construction permit. Furthermore, these construction permit requirements include opportunities for public participation under Sections 845.240 and 845.260.

**Adding Section 845.220(c) and (g)(1).** Section 845.220(c) sets forth what to include in a construction permit application for corrective action, and Section 845.220(g)(1) sets the duration of construction permits. For corrective action measures, EEI's proposal merely requires it to submit a plan to IEPA, with no standards of review proposed. If EEI needs a construction permit to implement corrective action, then EEI and IEPA must follow standards for submission and review that meet or exceed what Part 845 typically requires. The Board sees no reason for them to deviate from current requirements.

**Adding Section 845.240.** Section 845.240 requires pre-application public notification and a public meeting before submitting a construction permit application. EEI's proposal omits this provision, even though the proposal also requires EEI to keep records of those public meetings. For the same reasons discussed above regarding corrective action, the Board finds it appropriate to include this provision in the adjusted standard. More importantly, during the rulemaking for Part 845, the Board stressed the importance of public participation during review of construction permits. Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed new 35 Ill. Adm. Code 845, R20-19, slip. op. at 25-28 (Feb. 4, 2021). EEI has not presented any reasons why Joppa West should escape public scrutiny, even temporarily.

**Remaining provisions of Subpart B.** The Board finds that the remaining provisions of Subpart B do not apply to Joppa West's situation and need not be included in the adjusted standard.

### **Subpart F: Groundwater Monitoring and Corrective Action**

The Board finds that including the following unmodified Subpart F provisions, as proposed by EEI, is appropriate:

- 845.600
- 845.610(a), (b)(1), (c), (d)
- 845.620
- 845.630 except for 845.630(c)(1)
- 845.640
- 845.650(a), (c)

- 845.650(b) except for 845.650(b)(1)(A) and (B)
- 845.660(b), (c)
- 845.670(a), (c) through (f)
- 845.680

The Board finds that including the following modified Subpart F provisions and additional requirements, as proposed by EEI, is appropriate:

- 845.610(b)(3): Will apply beginning the quarter after EEI submits its operating permit application.
- 845.630(c)(1): Modified to require a minimum of one upgradient and three downgradient wells in the uppermost aquifer.
- 856.650(d), (e): Will apply beginning the quarter after EEI submits its operating permit application.
- EEI must provide a copy of lab reports and field sheets to IEPA within 60 days after receipt of final laboratory reports.
- EEI must conduct sufficient sampling to represent source concentrations of CCR for performing geochemical modeling and evaluation of leaching potential from Joppa West.
- EEI must: (1) identify the 845.600(a) chemical constituents within the CCR in Joppa West through solids sampling; and (2) perform Synthetic Precipitation Leaching Procedure (SPLP, SW846 Test Method 1312) or Toxicity Characteristic Leaching Procedure (TCLP, SW846 Test Method 1311) analysis of the CCR within Joppa West for the 845.600(a) constituents detected in the solids sampling. The minimum detection limits must be at least the groundwater protection standards in 845.600(a). The number of solids samples must include a minimum of one sample per 10 percent of the volume, with at least three samples from each of the following areas – the upper one-third, middle one-third, and lower one-third of the CCR measured by depth from ground surface.
- Upon collecting five years of quarterly monitoring data, EEI must prepare and submit a report to IEPA evaluating the remaining heavy metals for transport in the groundwater.<sup>2</sup> That report must include a mass transport model, a geochemical model, and a flow model demonstrating: (1) whether groundwater contamination from Joppa West that exceeds the groundwater protection standards in 845.600 is dispersing or diffusing in a manner that does not contribute to an exceedance of those same standards outside of the facility property boundary; and, if applicable, (2) whether implementing corrective action protects human health and the environment. The report must also

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<sup>2</sup> The Environmental Groups argue that the Board should allow only three years of data collection, as five years would place Joppa West nearly 10 years behind federal deadlines. PC 1 at 19. In the context of reducing the frequency of quarterly groundwater monitoring under Section 845.650(b), the Board previously found that “the 5-year monitoring period allows for collecting sufficient data to characterize groundwater.” Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed new 35 Ill. Adm. Code 845, R20-19, slip. op. at 73 (Feb. 4, 2021).

include a human health risk assessment and ecological risk assessment verifying that the above actions protect human health and the environment.

**Further Modifications and Additions.** In its proposal, EEI modified or omitted certain Subpart F provisions. For the reasons discussed below, the Board finds this part of the proposal insufficient. The Board modifies and adds Subpart F provisions to the interim adjusted standard as follows.

**Adding Section 845.610(e).** This section requires an owner or operator to submit an annual groundwater monitoring and corrective action report. EEI's proposal omits this section, instead requiring EEI to provide IEPA with lab reports and field sheets within 60 days after receiving final lab reports. EEI's proposal also requires a semiannual report describing "the progress in selecting a remedy and developing a corrective action plan." 35 Ill. Adm. Code 845.670(a). However, EEI and IEPA do not address why the annual report is unnecessary. Without further explanation in the record, the Board finds it appropriate to include Section 845.610(e).

**Clarifying Section 845.650(b)(1).** The beginning portion of subsection (b)(1) requires quarterly monitoring for certain constituents. Subsections (b)(1)(A) and (b)(1)(B) then set forth sampling requirements, but only for existing and new CCR surface impoundments, respectively. EEI's proposal specifies that subsections (b)(1)(A) and (b)(1)(B) will not apply. Although other parts of the proposal mention quarterly monitoring, EEI does not expressly address the requirement in this section. The Board finds it appropriate to include the quarterly monitoring requirement from this section, which states in pertinent part:

b) Monitoring Frequency

- 1) The monitoring frequency for all constituents with a groundwater protection standard in Section 845.600(a), calcium, and turbidity must be at least quarterly during the active life of the CCR surface impoundment and the post-closure care period or period specified in Section 845.740(b) when closure is by removal except as allowed in subsection (b)(4). 35 Ill. Adm. Code 845.650(b)(1).

**Modifying Section 845.660(a)(1).** This section requires in part an assessment of corrective measures to be initiated within 90 days after finding that "any constituent listed in Section 845.600 has been detected *in exceedance of* the groundwater protection standards in Section 845.600, at the downgradient waste boundary or immediately upon detection of a release of CCR from a CCR surface impoundment." 35 Ill. Adm. Code 845.660(a)(1) (emphasis added).

EEI's proposal modifies this section. In particular, the proposal requires initiation within 90 days of "detecting a constituent *at a statistically significant level above* the groundwater protection standards listed in 845.600 at the downgradient waste boundary" (emphasis added). Both EEI's original petition and IEPA's recommendation used the term "exceedance" to describe EEI's data compared to groundwater protection standards. Pet. at 17-18, 32, 34; Rec. at 16-18, 30-31. EEI asserts that it will be following Subpart F, but it does not explain why the proposal now uses "statistically significant" as a benchmark for the downgradient waste boundary.

Furthermore, “statistically significant” is not defined in Part 845.

Without further explanation in the record, the Board finds it appropriate to replace “at a statistically significant level above” with “in exceedance of” in EEI’s proposal. To the extent IEPA is concerned about statistically significant increases, the annual report required by Section 845.610(e) (and added by the Board, as discussed above) must include certain details of any statistically significant increases. 35 Ill. Adm. Code 845.610(e)(3)(E), (e)(4)(A)-(B). Additionally, the Board notes that the adjusted standard includes Subpart A. As such, the definition of “Exceedance of the groundwater protection standard” will control when EEI may rely on a statistically significant increase. *See* 35 Ill. Adm. Code 845.120.

**Adding Section 845.660(d).** This section requires the owner or operator to discuss the corrective measures assessment in a public meeting. EEI’s proposal omits this section. As with Section 845.240, the Board finds it appropriate to include this section. Again, the Board has previously stressed the importance of public participation and sees no reason to deviate from the existing requirements.

**Adding Section 845.670(b).** This section requires the owner or operator to submit a corrective action plan to IEPA in a construction permit application, within one year after completing an assessment under Section 845.660 and after completing the public meeting in Section 845.660(d). EEI’s proposal states this section will not apply and instead requires EEI to submit a plan to IEPA within one year of completing an assessment (under a proposed modified Section 845.660(a)(1)).

The Board finds it appropriate to include Section 845.670(b) as written. Any corrective action will be subject to the public participation and permitting requirements already described and included above. Again, EEI does not explain what standards of review will apply to a corrective action plan under its proposal. If EEI needs a construction permit to implement corrective action, then EEI and IEPA must follow standards for submission and review that meet or exceed what Part 845 typically requires. The Board sees no reason for them to deviate from current requirements.

**Remaining provisions of Subpart F.** The Board finds that the remaining provisions of Subpart F do not apply to Joppa West’s situation and need not be included in the adjusted standard.

### **Subpart G: Closure and Post-Closure Care**

The Board finds that including the following unmodified Subpart G provisions, as proposed by EEI, is appropriate.

- 845.720(a)
- 845.780(d)

The Board further finds it unnecessary to discuss or require the remainder of Subpart G at this time. Among other things, those provisions detail requirements for particular methods of closure. The purpose of the interim adjusted standard is to gather data that will later help EEI and

IEPA to determine the best closure method for Joppa West.

### **Subpart H: Recordkeeping**

The Board finds that including the following unmodified Subpart H provisions, as proposed by EEI, is appropriate.

- 845.800(b) and (c)
- 845.810(a) through (d), (g)

The Board finds that including the following modified Subpart H provisions, as proposed by EEI, is appropriate.

- 845.810(e): EEI must post to its CCR website only the information it is required to include in its facility operating record under 845.800.

**Further Modifications and Additions.** In its proposal, EEI modifies or omits certain Subpart H provisions. For the reasons discussed below, the Board finds this part of the proposal insufficient. The Board modifies and adds Subpart H provisions to the interim adjusted standard as follows.

**Modifying Sections 845.800(a) and (d).** These sections require the owner or operator to maintain certain information in the facility's operating record. EEI's proposal modifies these sections to require recordkeeping for only the following – though the language for the individual requirements is unmodified.

- (d)(1): Copies of all permit applications and permits issued under Part 845.
- (d)(2): Documentation recording the public meetings held under Section 845.240.
- (d)(15): All groundwater monitoring data submitted to the Agency and any analysis performed (citing Section 845.610(b)(3)(D)).
- (d)(16): Within 30 days after detecting one or more monitored constituents above the groundwater protection standard, the notifications required by Section 845.650(d) and (e).
- (d)(17): The semi-annual report describing the progress in selecting and designing the remedy (see Section 845.670(a)).
- (d)(18): Within 30 days after completing the corrective action plan, the notification required by Section 845.680(e).
- (d)(33): The most current cost estimates (see Section 845.940(d)).

The Board finds it appropriate to also require recordkeeping for the following, as EEI's proposal already requires them for an operating permit application. The language for the individual requirements remains unmodified. This additional recordkeeping will also be subject to the modified website posting requirement under Section 845.810(e).

- (d)(9): Emergency Action Plan (citing Section 845.520(a)), except that only the most recent EAP must be maintained in the facility's operating record irrespective of the time

requirement specified in subsection (b).

- (d)(12): Safety and Health Plan (citing Section 845.530(a)).
- (d)(20): The preliminary written closure plan and any amendment of the plan (citing Section 845.720(a)), except that only the most recent closure plan must be maintained in the facility's operating record, irrespective of the time requirement specified in subsection (b).

**Adding Section 845.810(f).** This section requires an owner or operator to post all the information specified in Section 845.240(e) on the owner's or operator's CCR website at least 30 days before the public meeting. Because the Board requires EEI to adhere to Section 845.240, the Board finds it appropriate to include this recordkeeping requirement as well.

### **Subpart I: Financial Assurance**

The Board finds that including the following unmodified Subpart I provisions, as proposed by EEI, is appropriate.

- 845.900 except for 845.900(d)
- 845.910 through 845.940
- 845.950 except for 845.950(c)(1)

**Further Modifications and Additions.** In its proposal, EEI modifies or omits certain Subpart I provisions. For the reasons discussed below, the Board finds this part of the proposal insufficient. The Board modifies and adds Subpart I provisions to the interim adjusted standard as follows.

**Modifying Sections 845.900(d) and 845.950(c)(1).** This section requires the owner or operator to provide financial assurance for closure and post-closure care to IEPA within the timeframes in Section 845.950(c). In turn, Section 845.950(c)(1) requires financial assistance within 60 days of April 21, 2021. EEI's proposal includes these provisions but modifies the deadline to 90 days after submittal of its operating permit application. Without further explanation from EEI, the Board sees no reason to deviate from a 60-day deadline. Accordingly, financial assurance under these provisions will be due 60 days after EEI submits its operating permit application.

**Adding Sections 845.960 through 845.990.** These sections describe the requirements for the forms of financial assurance allowed under Part 845 – trust fund, surety bond guaranteeing payment, surety bond guaranteeing performance, and letter of credit. EEI's proposal omits these sections. There is no record of what type EEI intends to use or whether EEI already obtained financial assurance. Accordingly, the Board finds it appropriate to include these sections to ensure that standards are in place for whatever method EEI obtains.

### **Conclusion**

The Board acknowledges and shares the Environmental Groups' concerns over human and environmental health and public participation. The Board also notes the double-edged sword in

this case – destroying an established habitat versus removing decades of contamination. The primary concern, as always, is the health, safety, and welfare of humans and the environment. At this time, EEI does not have enough data to properly characterize the site. Without sufficient data, IEPA cannot determine the best closure method for the site. In turn, the Board cannot find that strict adherence to Part 845 is appropriate or beneficial. As EEI notes, the Board’s decision here is not the final word on Joppa West’s future – rather, the interim adjusted standard will allow EEI to collect the necessary data and IEPA to determine the necessary approach. Should EEI request a permanent adjusted standard in the future, the Board anticipates EEI will be able to present a clearer picture of the site and its impact on human and environmental health.

With the Board’s modifications and additions described above, the Board is satisfied that the requested standard will not result in environmental or health effects substantially and significantly more adverse than the effects considered by the Board during the Part 845 rulemaking. For these reasons, the Board finds that EEI has satisfied the third factor under Section 28.1(c).

#### **Section 28.1(c)(4): Consistency with Federal Law**

EEI, IEPA, and the Environmental Groups devote significant discussion to the interplay between federal and state laws regulating CCR surface impoundments. To date, IEPA has not yet submitted Part 845 to USEPA for approval as a “substitute” for Part 257, thereby potentially subjecting sites such as Joppa West to two separate regulatory schemes.

While IEPA and the Environmental Groups argue that Joppa West is subject to Part 257, the Board acknowledges that Part 257 is self-implementing. As such, it is up to EEI (and USEPA) to determine whether Joppa West is subject to federal CCR rules – either as an inactive CCR surface impoundment or a CCRMU. The Board does not have the authority to impose Part 257 requirements on Joppa West.

Because EEI believes Joppa West is not subject to Part 257, the Board finds that the interim adjusted standard is consistent with federal law. To the extent EEI believes Joppa West may be regulated under Part 257 as a CCRMU, the interim adjusted standard is still consistent with – and may be more stringent than – the applicable federal requirements. *See, e.g.,* 40 C.F.R. 257.50(d)(2), 257.75, 257.90(b)(3), (e), 257.102(b)(2)(iii).

For these reasons, the Board finds that EEI has satisfied the fourth factor under Section 28.1(c).

#### **Timeframe**

EEI requests that the adjusted standard last for six years from the date it submits a Part 845 operating permit application to IEPA. However, EEI also requests 12 months “after entry of this interim adjusted standard” to submit the application. The timing appears to be circular. Additionally, EEI does not specify what standards – if any – would apply between the date of this order and date it submits the application.

Accordingly, the Board orders that the interim adjusted standard will last seven years from the date of this order. This seven-year period will include:

- 12 months from the date of this order for EEI to submit an operating permit application to IEPA;
- 5 years of groundwater monitoring (as described above), starting the quarter after EEI submits its application; and
- 180 days after completing the 5-year monitoring to submit a report (as described above) to IEPA.

### **CONCLUSION**

The Board concludes that EEI has met the burden for its proposed interim adjusted standard. The interim adjusted standard is effective for seven years from the date of this order, with the specific provisions detailed below.

### **ORDER**

The Board grants Electric Energy, Inc. (EEI), an interim adjusted standard for the Joppa West Ash Pond, a coal combustion residuals (CCR) surface impoundment at the Joppa Power Plant in Massac County. This interim adjusted standard will expire on June 26, 2032, which is seven years from the date of this order. During this period, the following requirements will apply:

1. The Joppa West Pond will be exempt from the requirements of 35 Ill. Adm. Code Part 845, except for the following requirements, which will apply subject to the modifications described below.
  - a) All of Subpart A (General Provisions)
  - b) Subpart B (Permitting):
    - 1) 845.200(a)(1) – (a)(3), (b)
    - 2) 845.210
    - 3) 845.220(c), (g)(1)
    - 4) 845.230(d)(1), modified: EEI must submit its initial operating permit application for Joppa West to the Illinois Environmental Protection Agency (IEPA) by June 26, 2026, which is 12 months after the date of this order, and must include the information in paragraph 1.b.5 below.
    - 5) 845.230(d)(2)(A), (C), (E), (G), (I)(i) – (iv), (J), (K), (M), (N), and (S)

- 6) 845.230(e)
  - 7) 845.240 through 845.290
  - 8) Within 30 days of receiving an operating permit from IEPA, EEI must provide notice to the Board of its issuance.
- c) Subpart F (Groundwater Monitoring and Corrective Action):
- 1) 845.600
  - 2) 845.610(a), (b)(1), (c) – (e)
  - 3) 845.610(b)(3), modified: This section will apply beginning the quarter after EEI submits its operating permit application as required by paragraph 1.b.4 above. EEI must provide a copy of lab reports and field sheets to IEPA within 60 days after receipt of final laboratory reports.
  - 4) 845.620
  - 5) 845.630, with 845.630(c)(1) modified: The groundwater monitoring system must contain a minimum of one upgradient and three downgradient wells in the uppermost aquifer.
  - 6) 845.640
  - 7) 845.650(a)
  - 8) 845.650(b), but not (b)(1)(A) and (B). The monitoring frequency under 845.650(b)(1) will still apply: “The monitoring frequency for all constituents with a groundwater protection standard in Section 845.600(a), calcium, and turbidity must be at least quarterly during the active life of the CCR surface impoundment and the post-closure care period or period specified in Section 845.740(b) when closure is by removal except as allowed in subsection (b)(4).”
  - 9) 845.650(c)
  - 10) 845.650(d) – (e), modified: These sections will apply beginning the quarter after EEI submits its operating permit application under paragraph 1.b.4 above.
  - 11) 845.660(a), with 845.660(a)(1) modified: The assessment of corrective measures must be initiated within 90 days of detecting a constituent in exceedance of the groundwater protection standards

listed in 845.600 at the downgradient waste boundary, as follows. Detection of a constituent in exceedance of groundwater protection standards listed in 845.600 must be based on sampling conducted beginning the quarter after EEI submits its proposed groundwater monitoring plan with its operating permit application and based on that monitoring plan, until IEPA issues an operating permit with an approved groundwater monitoring plan. Once IEPA issues an operating permit with an approved groundwater monitoring plan, detection of a constituent in exceedance of groundwater protection standards listed in 845.600 must be determined based on the IEPA-approved monitoring plan.

- 12) 845.660(b) – (d)
- 13) 845.670 through 845.680
- 14) EEI must conduct sufficient sampling to represent source concentrations of CCR for performing geochemical modeling and evaluation of leaching potential from Joppa West.
- 15) EEI must (1) identify the 845.600(a) chemical constituents within the CCR in Joppa West through solids sampling and (2) perform Synthetic Precipitation Leaching Procedure (SPLP, SW846 Test Method 1312) or Toxicity Characteristic Leaching Procedure (TCLP, SW846 Test Method 1311) analysis of the CCR within Joppa West for the 845.600(a) constituents detected in the solids sampling. The minimum detection limits must be at least the groundwater protection standards in 845.600(a). The number of solids samples must include a minimum of one sample per 10 percent of the volume, with at least three samples from each of the following areas – the upper one-third, the middle one-third, and the bottom one-third of the CCR by depth from ground surface.
- 16) Upon collecting five years of quarterly monitoring data, EEI must prepare and submit a report to IEPA evaluating the remaining heavy metals for transport in the groundwater. That report must include a mass transport model, a geochemical model, and a flow model demonstrating (1) whether groundwater contamination from Joppa West that exceeds the groundwater protection standards in 845.600 is dispersing or diffusing in a manner that does not contribute to an exceedance those same standards in 845.600 outside of the facility property boundary, and, if applicable, (2) whether implementing corrective action protects human health and the environment. The report must also include a human health risk assessment and ecological risk assessment verifying that the above actions protect human health and the environment.

- d) Subpart G (Closure and Post-Closure Care):
    - 1) 845.720(a)
    - 2) 845.780(d)
  - e) Subpart H (Recordkeeping):
    - 1) 845.800(a), modified: EEI must maintain only the information required under 845.800(d)(1), (2), (9), (12), (15), (16), (17), (18), (20), and (33).
    - 2) 845.800(b) – (c)
    - 3) 845.800(d)(1), (2), (9), (12), (15), (16), (17), (18), (20), and (33)
    - 4) 845.810, with 845.810(e) modified: EEI must post to its CCR website only the information it is required to include in its facility operating record under paragraph 1.e.1 above.
  - f) Subpart I (Financial Assurance):
    - 1) 845.900, with 845.900(d) modified: Financial assurance for closure and post-closure care is due 60 days after EEI submits its initial operating permit application to IEPA.
    - 2) 845.910 through 845.940
    - 3) 845.950, with 845.950(c)(1) modified: Financial assurance for closure and post-closure care is due 60 days after EEI submits its initial operating permit application to IEPA.
4. Nothing in this interim adjusted standard exempts EEI from applicable requirements contained in other state or federal laws.
  5. EEI must submit the report required under paragraph 1.c.16 above to IEPA within 180 days after completing the five years of monitoring required under this interim adjusted standard.
  6. After submitting the report required under paragraph 1.c.16 above, EEI may apply for a permanent adjusted standard. If EEI files a petition before the interim adjusted standard expires, the interim adjusted standard will apply until the permanent adjusted standard proceeding concludes. If EEI's petition is granted, the new adjusted standard will apply. If not, Joppa West will be subject to Part 845 as it may be amended and subject to any other adjusted standards or variances that may apply.

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) (2024); *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.

| <b>Names and Addresses for Receiving Service of<br/>Any Petition for Review Filed with the Appellate Court</b>   |  |
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| <b>Parties</b>   | <b>Board</b>   |
| Electric Energy, Inc<br>Attn.: Joshua More, Bina Joshi, Sarah L. Lode<br>ArentFox Schiff<br>233 South Wacker Drive, Suite 7100<br>Chicago, Illinois 60606<br>joshua.more@afslaw.com<br>bina.joshi@afslaw.com<br>sarah.lode@afs.law | Illinois Pollution Control Board<br>Attn.: Don A. Brown, Clerk<br>60 East Van Buren Street, Suite 630<br>Chicago, Illinois 60605<br>don.brown@illinois.gov |
| Illinois Environmental Protection Agency<br>Attn.: Rebecca Strauss, Stefanie Diers<br>2520 West Iles Avenue<br>PO Box 19276<br>Springfield, Illinois 62794-9276<br>Rebecca.Strauss@illinois.gov<br>Stefanie.Diers@illinois.gov     |  |

I, Don A. Brown, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on June 26, 2025, by a vote of 5-0.



Don A. Brown, Clerk  
 Illinois Pollution Control Board