

CERTIFICATE OF SERVICE

I, the undersigned attorney, certify that I have filed the documents described above electronically with the Illinois Pollution Control Board and served the Illinois Environmental Protection Agency with the same documents by First Class Mail, postage prepaid, on May 11, 2021.

Dated: May 11, 2021

Respectfully submitted,
**Ameren Energy Medina Valley Cogen, LLC,
Petitioner.**

By: /s/ CLAIRES A. MANNING
One of Its Attorneys

BROWN, HAY & STEPHENS, LLP

Claire A. Manning, #3124724
Anthony D. Schuering, #6333319
Garrett L. Kinkelaar, # 6334441
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
cmanning@bhslaw.com
aschuering@bhslaw.com
gkinkelaar@bhslaw.com

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
PETITION OF AMEREN ENERGY MEDINA) AS 21-_____
VALLEY COGEN, LLC (HUTSONVILLE D)) (Adjusted Standard - Land)
FOR ADJUSTED STANDARDS)
FROM 35 ILL. ADMIN. CODE PART 845)

PETITION FOR ADJUSTED STANDARDS

Ameren Energy Medina Valley Cogen, LLC ("Ameren" or "the Company"), by and through its attorneys, Claire A Manning, Anthony D. Schuering, and Garrett L. Kinkelaar of Brown, Hay + Stephens, LLP, and pursuant to Section 28.1 of the Environmental Protection Act, 415 ILSC 5/28.1 (the "Act") and 35 Ill. Admin. Code § 104.400 *et seq.*, requests that the Illinois Pollution Control Board (the "Board") adopt adjusted standards from certain standards set forth in 35 Ill. Admin. Code Part 845 as that Part otherwise applies to Hutsonville D, one of two coal combustion residuals surface impoundments ("CCRSI") at Ameren's former and now inactive Hutsonville Power Station in Crawford County.

I. BACKGROUND

Hutsonville D is located at the former Hutsonville Power Station, now inactive, with all of its former power station infrastructure decommissioned and removed, with the exception of two closed and inactive CCRSI's, Hutsonville D, the subject of this proposed Adjusted Standard ("AS") and Hutsonville Pond A.¹

Ameren seeks this relief in order to manage post-closure care of Hutsonville D in accordance with existing Board regulations, specifically Part 840, a site-specific regulation

¹ While the Hutsonville Power Station originally contained five ash ponds, three in addition to the Hutsonville Ponds A and D (specifically, Ponds B, C, and the Bottom Ash Pond), those three ponds were closed by removal of all coal ash in 2015—well prior to June 30, 2019, the effective date of P.A. 101-171, the enabling statute for Part 845. Ameren maintains that those three ponds do not constitute CCRSI's as defined in new Section 3.143 of the Act, and therefore are not subject to regulation under Section 22.59 of the Act or the Board's regulations at Part 845.

adopted by the Board in R09-21, Final Opinion and Order, January 20, 2011. Like all Board regulations, Part 840 was developed pursuant to the procedures of both the Act and the Illinois Administrative Review Act, 415 ILCS 5/26-29 and 5 ILCS 100/5-5 through 5-165, and included public hearing and input. Given the unusual nature of this petition, which seeks to reconcile two competing sets of Board regulation for one CCRSI, Ameren here requests that the Board incorporate into its record in this AS proceeding the Board's record in that proceeding, in particular the documents prepared and filed by Ameren – as well as its testimony given in that proceeding.

A. Procedural History of Hutsonville D and Ameren's closure of its ash ponds

As Ameren is the only company in Illinois to have ceased operations of all its former coal fired power plants here, having done so in 2011, it has spent the last decade diligently pursuing closure in an environmentally responsible manner—one acceptable to the State of Illinois. Yet, despite these efforts and these site-specific closures, it now finds itself caught in a “rule of general applicability” having just participated in a regulatory proceeding that declined to address the special circumstances relevant to each of these state- authorized closures. Below is the regulatory history relevant to Ameren's attempted closures of its former ash ponds, in particular the one relevant here: Hutsonville D.

On August 11, 2008, in a Board case docketed under case number AS-2009-01, Ameren filed a Petition for Adjusted Standards (the “Adjusted Standards Petition”) from Landfill regulations set forth in 35 Ill. Admin. Code parts 811, 814, and 815 for Hutsonville D. *See generally* Adjusted Standards Petition, AS-09-01 (Aug. 11, 2008).

On September 16, 2008, the Board entered an Order directing Ameren to file a brief which discussed whether an adjusted standard was the appropriate procedural mechanism for

the relief it sought, or whether a site-specific rulemaking was “the appropriate regulatory relief mechanism for Ameren to pursue in seeking to close” Hutsonville D. Sept. 16, 2008 Order, AS-09-01, pp. 3–4. On October 17, 2008, Ameren filed its brief, explaining that the Adjusted Standards Petition was “prepared after years of discussion between Ameren and the [IEPA] about the proper vehicle” to close Hutsonville D. Resp., AS-09-01, p. 2. Ameren further explained that the Adjusted Standards Petition was filed “because the [IEPA] believes it is the proper mechanism for pursuing closure” of Hutsonville D.” Id. Ameren also noted its support of the belief that a site-specific rulemaking “amending the water pollution regulations” was “a more appropriate solution” for the closure of Hutsonville D, explaining that this mechanism would “incorporate concepts applicable to in-place closures, such as groundwater monitoring and a closure plan.” Id. at p. 3. After further briefing from the IEPA and a reply from Ameren, the Board dismissed Ameren’s Adjusted Standards Petition on March 5, 2009, explaining in its order that a site-specific rulemaking was “the appropriate source of regulatory relief under which to close” Hutsonville D. Mar. 5, 2009 Order, AS-09-01, p. 11.

In response, on May 19, 2009, in a Board case docketed under case number R-2009-21, Ameren filed a proposal for a site-specific rulemaking (the “Rulemaking Petition”) related to the closure of Hutsonville D. *See generally* Rulemaking Petition, R09-21 (May 19, 2009). In the Rulemaking Petition and its associated Statement of Reasons, Ameren explained that the purpose of this rulemaking was to “cover a gap in the Board’s existing Waste Disposal regulations and allow for the closure” of Hutsonville D. Statement of Reasons, R09-21, p. 1. Ameren explained that the absence of regulations governing the closure of ash ponds, coupled with the regulated community’s need for regulatory certainty and the prescient belief that “a number of ash ponds” in the coming years “could reach the end of their operating lives and

cease to be regulated by the Board's Water Pollution Control requirements", which would, in turn, trigger closure obligations. *Id.* at p. 4.

On January 20, 2011, after holding a full public hearing on Ameren's proposal for Site Specific regulation, the Board adopted Part 840, codifying closure obligations for Hutsonville D at 35 Ill. Admin. Code §§ 840.101 through 840.152. See Jan. 20, 2011 Order, R09-21 (Jan. 20, 2011). Those site-specific closure regulations "appl[y] exclusively to the closure and post-closure care" of Hutsonville D. See 35 Ill. Admin. Code § 840.102. As shown in the record in R-2020-19, Ameren has closed, and continues post-closure care of, Hutsonville D based on these site-specific regulations since 2011. See, e.g., Ameren's Index of Exhibits and Second Hearing Exhibits, R20-19, pp. 4915–5463 (2019 Annual Report on Post-Closure care for Hutsonville Pond D).

Additionally, following its experience with Hutsonville Pond D and upon Ameren's decision to cease its coal fired operations in Illinois in 2011, and over the course of the next ten years, at a time when the federal CCR Rules at 40 C.F.R. Part 257 did not apply² Ameren sought regulatory oversight from the State of Illinois for the responsible closure of each of its inactive ash ponds. Ameren sought and achieved closure authorization from the IEPA.

Now, all of Ameren's former ash ponds are closed, at a cost of over \$28 million dollars³ and yet Ameren finds itself in another regulatory quagmire: here, the applicability of a Board site specific regulations established in 2009 (Part 840) and the State's intended applicability

² Indeed, the USEPA still has an open regulatory docket in this matter. See Advanced Notice of Proposed Rulemaking for Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments, United States Environmental Protection Agency (last updated Mar. 3, 2021) (<https://www.epa.gov/coalash/advanced-notice-proposed-rulemaking-disposal-coal-combustion-residuals-electric-utilities>). This suggests that Part 257 still does not apply to Ameren or to any ash ponds that achieved closure pursuant to state authority during the federal regulatory hiatus relevant to legacy ash ponds.

³ The figure denotes only the technical costs of closure, not the legal and operational costs associated with Ameren's attempts to achieve state authorization for its closures.

of the Board's new regulations found at Part 845 to Hutsonville Pond D. As the Board declined to address the duality of regulations as to Hutsonville Pond D in its Opinion and Order (as urged by the IEPA and Office of Attorney General, who asserted such consideration was inappropriate in the context of a rule of general applicability), the Board suggested Ameren address this duality in a follow-up petition for regulatory relief, such as an Adjusted Standard. *See* Order, R20-19, at 13 (Feb. 4, 2021) ("If Ameren believes Part 845 rules duplicate or contradict Part 840 rules, Ameren may attempt to demonstrate that before the Board by filing a site-specific rulemaking proposal to repeal portions of Part 840. Similarly, Ameren may also file a petition for an Adjusted Standard from Part 845."). Accordingly, Ameren respectfully requests the Board's full consideration of its petitioned for Adjusted Standard.

B. Regulatory Implementation Under Part 840 for Hutsonville D's Closure and Post-Closure Care Obligations.

Following the Board's promulgation of Part 840, Ameren closed Hutsonville D in accordance with Part 840 and a Closure and Post Closure Plans approved by the Illinois Environmental Protection Agency ("IEPA") which Ameren submitted pursuant to 35 Ill. Admin. Code §§ 840.128 and 840.138, respectively, dated July 26, 2011 and revisions thereto dated February 15, 2012 and March 30, 2012. The Hutsonville D Closure Plan Documents are attached as **Exhibit 1**.

The Hutsonville D Closure Plan Documents included the following:

- Closure Plan Submittal
- Closure Plan
- Construction Quality Assurance Plan;
- Hydrogeologic Site Investigation Report;

- Groundwater Monitoring Plan;
- Plans and Specifications; and
- Post-Closure Care Plan.

IEPA approved Ameren's closure plan for Hutsonville D on April 18, 2012, pursuant to Part 840. The IEPA reviewed the required elements of the Closure Plan and Post Closure Care Plan pursuant to the requirements of 35 Ill. Admin. Code §§ 840.130 and 840.140, respectively. The IEPA found that the Plans included all the required elements and approved all elements of the Plans pursuant to 35 Ill. Admin. Code § 840.148. The IEPA Approval Letter of Closure Plan for Hutsonville D is attached as **Exhibit 2**.

Major closure activities included the placement of the final cover system, establishment of vegetative cover and surface water control features on the surface of Hutsonville D, and installation of a groundwater collection trench and recovery system. Closure activities were conducted in accordance with the Construction Quality Assurance (CQA) Plan prepared for this project meeting the requirements of Part 840 as documented by a Professional Engineer licensed in Illinois.

Final cover components included approximately 992,000 ft² of low permeability geosynthetic membrane cover and 106,500 yd³ of final protective soil material. The low permeability layer consists of a textured high-density polyethylene (HDPE) geomembrane with a 40-mil minimum nominal thickness. Geomembrane seams were welded to form one continuous membrane covering the entire area of exposed ash. The perimeter edges of the HDPE geomembrane were finished in an anchor trench excavated in soil materials to keep the membrane anchored in place and prevent any lateral migration of surface water into the cap.

The low permeability geomembrane was covered with a minimum of three feet of soil materials, as required by Part 840. These soils were compacted only to the extent required for

equipment traffic and construction of overlying drainage structures. Soils used for the final protective cover were fertilized, seeded, and mulched to facilitate and support a permanent self-sustaining vegetative cover.

Installation of the low permeability geomembrane and the overlying soils were conducted in accordance with the approved CQA program.

Operation of the groundwater Collection Trench began in April 2015 under Hutsonville's renewed National Pollutant Discharge Elimination System (NPDES) permit (IL0004120) with an effective date of March 1, 2015.

Ameren completed capping of the Hutsonville D in January 2013 and sent a letter to the IEPA on January 30, 2013 documenting completion of closure for Hutsonville D consistent with the IEPA's approved closure plan. Ameren's Closure Completion Letter to the IEPA is attached as **Exhibit 3**. The approved Closure Plan included provisions for post-closure care of Hutsonville D. In accordance with Part 840 and the approved post-closure plan, Ameren reports annually to IEPA with regards to post-closure care of Hutsonville D. Hutsonville D has been in post-closure care since 2013. Ameren submitted its first annual Post-Closure Care report in January 2014. Ameren has submitted an annual Post-closure Care Report each year since January 2014. The most recent annual Post-Closure Report was submitted in January 2021. The Hutsonville D Post-Closure Report for 2020 is attached as **Exhibit 4**. Ameren has not received any comments from IEPA with regards to any of the Annual Post-Closure Reports it has submitted for Hutsonville D.

II. REGULATIONS FROM WHICH ADJUSTED STANDARDS ARE SOUGHT (35 ILL. ADMIN. CODE 104.406(A))

Part 840 effectively constitutes a "permit by rule". In other words, Ameren is obligated pursuant to Part 840 to perform all of the activities the Board prescribed in Part 840. These

obligations are enforceable; failure to follow any of the activities required under Part 840 constitutes a violation of the Act. Ameren has followed the regulatory framework established by the Board in Part 840 as it relates to closure – and continues to do so as it relates to post-closure care. Essentially this Adjusted Standard seeks to allow Ameren to continue to follow the regulatory path set out for it by the Board in Part 840 – but to allow for any “new” requirements in Part 845 that the Board did not have the authority to adopt under Part 840 – specifically, the financial assurance provisions as prescribed in Part 845, Subpart I. As further described below, Ameren requests adjustments to all sections of 35 Ill. Admin. Code Part 845, except for the provisions of Part 845, Subpart H: Recordkeeping, Section 810, Publicly Accessible Internet Site Requirements, and Subpart I: Financial Assurance., effective April 21, 2021.

III. PART 845 IS A REGULATION OF GENERAL APPLICABILITY DESIGNED TO IMPLEMENT PART OF THE STATE RCRA PROGRAM (35 ILL. ADMIN. CODE 104.406(B))

35 Ill. Admin. Code Part 845 was promulgated to implement part of the State’s programs related to the Resources Conservation and Recovery Act ("RCRA"). *See* 415 ILCS 5/28.1 (2006). 40 CFR 257, as currently in effect, does not apply to Hutsonville D because the Hutsonville Station was an inactive facility as of December 2011, years before the October 19, 2015 effective date of 40 CFR 257. 35 Ill. Admin. Code § 840.152 addresses the potential for the adoption of federal regulations that could impact Part 840.

IV. THE LEVEL OF JUSTIFICATION REQUIRED FOR THESE ADJUSTED STANDARDS (35 ILL. ADMIN. CODE 104.406(C))

The regulations from which Ameren seeks the adjusted standards do not specify a level of justification. Therefore, the level of justification specified by Section 28.1(c) of the Act applies:

- (1) factors relating to the 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). Ameren must also justify all the requested adjustments consistent with Section 27(a) of the Act. 415 ILCS 5/28.1(a) (2006). Section 27(a) of the Act requires the Board to consider the following factors in promulgating regulations:

[T]he 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).

V. DESCRIPTION OF THE NATURE OF PETITIONER'S ACTIVITIES (35 ILL. ADMIN. CODE 104.406(D))

For more than sixty years, Ameren or its corporate predecessor generated electricity at a power plant known as the Hutsonville Power Station ("the facility" or "the Station"). The Station is located in Crawford County, near Hutsonville, Illinois, on approximately 205 acres (the "Site"). The Wabash River forms its eastern border while farmland comprises the southern and western borders. The northern border is undeveloped, wooded land. The closest residence is approximately one-half mile from the Station. (*See* Hutsonville Site Map, attached hereto as **Figure 1-1 of Exhibit 4**). When operational, up to fifty-eight employees worked at the Station. which was staffed twenty-four hours per day, seven days per week. The Station has been inactive in terms of generating electricity since December 2011. It is now entirely decommissioned, with all of its infrastructure removed, with the exception of

two remaining CCRSI's, as described on page 1 and footnote 1. Those CCRSI's, only one of which is relevant here, have been closed pursuant to IEPA approval and oversight and are now in post-closure care.

Principal equipment at the Station included coal-fired boilers for steam production and steam driven turbine generators. The facility drew water from the Wabash River through a circulating water system that was used in the boiler and turbine equipment systems. Ash, a by-product of coal combustion, was removed from the boilers and sluiced to an ash impoundment system via pipelines. The impoundment system comprised a series of Ponds (Ponds A-D) and the bottom ash pond in which solids settled and sluicewater decanted from pond to pond before discharging to the Wabash River via an NPDES permitted outfall. The ash ponds accepted only coal combustion waste (fly ash and bottom ash) and low-volume waste from the Hutsonville facility. A diagram depicting the various site features is appended hereto as **Figure 1-2 of Exhibit 4**.

The subject of this petition, Hutsonville D, is located in the center of the South 1/2 of Section 17, Township 8 North, Range 11 West, all in Crawford County, Illinois, and located on the west bank of the Wabash River. Covering an area of approximately twenty-two (22) acres, Hutsonville D was constructed from indigenous earthen materials in 1968 and operated as the Station's wastewater treatment unit (receiving bottom and fly ash transport water and miscellaneous low-volume wastes) until the construction of a synthetically-lined pond ("Pond A") in 1986—which remains in existence as a closed and inactive CCRSI. In 2000, Ameren excavated all coal ash from the former laydown area and constructed two lined ponds ("Ponds B and C") to supplement the ash management capabilities and to improve surface water management at the property. Upon completion of Ponds B and C, Hutsonville D was removed

from service and allowed to dewater. Later, Ponds B, C and the Bottom Ash Pond were also removed from service and closed by removal of all CCR, which included dewatering and removal of the liner systems. The closures of the ash ponds at Hutsonville occurred pursuant to the authority and approval of the IEPA.

VI. DESCRIPTION OF THE IMPACT OF PETITIONER'S ACTIVITIES ON THE ENVIRONMENT (35 ILL. ADMIN. CODE 104.406(G))

The following discussion summarizes relevant technical details concerning site geology and groundwater quality and the environmental impacts of Hutsonville D. More comprehensive descriptions of geology and groundwater conditions are provided in the Hydrogeologic Site Investigation Report submitted to the IEPA as part of the Hutsonville D Closure Plan, approved by the IEPA on April 18, 2012. This Report is included as part of **Exhibit 1**.

A. Site Geology

Site geology consists of four hydrostratigraphic units: (1) unlithified sand overlying lithified Pennsylvanian-age sandstone, present in upland areas, with a combined thickness that is typically between 15 and 35 feet; (2) unlithified fine-grained alluvial sediments within the Wabash River bedrock valley that are approximately 20 feet thick; (3) coarse-grained alluvial sediments within the Wabash River bedrock valley that are as much as 70 or more feet thick; and (4) Pennsylvanian-age shale that underlies the sandstone in the upland areas and the coarse-grained alluvium in the bedrock valley. The western portion of Hutsonville D overlies the upland sand. The eastern portion of Hutsonville D overlies the fine-grained alluvium in the Wabash River Valley. The upland sand and underlying sandstone beneath the western portion of Hutsonville D and thin sand lenses within the fine-grained alluvium that lies under the eastern portion of Hutsonville D are collectively referred to as the "upper migration zone."

The coarse-grained alluvial deposits at depth in the Wabash River bedrock valley are referred to as the "deep alluvial aquifer."

The fine-grained alluvial deposits overlying the deep alluvial aquifer occur over an elevation range that overlaps the upland shale, combining to form a confining layer that restricts vertical migration of groundwater between the upper migration zone and deep alluvial aquifer. As a result, the uppermost aquifer at the Site is the upper migration zone. The efficacy of the confining layer is supported by the concentration data because, as explained below, the only ash leachate impacts observed in the deep alluvial aquifer are highly localized, and at concentrations lower than Class I standards and much lower than in the upper migration zone, despite the fact that Hutsonville D was first placed in service more than 50 years ago. Groundwater flow direction in both the upper migration zone and the deep alluvial aquifer is eastward, toward the Wabash River.

The upper migration zone is not used for water supply at or downgradient of the Site, because this zone is not sufficient for power plant operational uses, agricultural irrigation purposes or domestic uses. Only the deep alluvial aquifer at depth in the Wabash River bedrock valley has sufficient thickness and hydraulic conductivity to yield adequate groundwater supplies for power plant and agricultural irrigation purposes.

B. Groundwater Quality

1. Groundwater Monitoring Network

Ameren has monitored groundwater quality at the Site, via a monitoring well network, since 1984 to define groundwater flow direction, monitor groundwater quality, and to characterize hydrogeologic conditions.

The groundwater monitoring program design basis included the geology and hydrogeology information presented in the Hydrogeologic Site Investigation. This Monitoring Plan outlined

groundwater monitoring and sampling procedures; the parameters to be evaluated and analytical methods; and assessment of groundwater quality data. The monitoring program now follows 35 Ill. Admin. Code § 840.112 by satisfying the following standards for the monitoring system:

- The monitoring wells are sufficiently located to represent the quality of groundwater at the compliance point(s).
- The monitoring wells are located within the stratigraphic unit(s) that may serve as potential contaminant migration pathways.
- The groundwater monitoring wells are secure.
 - The monitoring wells are installed to evaluate on-site and off-site groundwater quality.

Figure 1-2 of Exhibit 4 depicts the locations of the current monitoring wells at the Site. Table 1 lists the monitoring wells, identification numbers, and locations of the wells associated with Hutsonville D.

The groundwater monitoring system for Hutsonville D, as defined by the IEPA approved Groundwater Monitoring Plan, originally consisted of two background monitoring wells, MW-10 and MW 10D, and nine downgradient compliance monitoring wells MW-6, MW-7, MW-7D, MW-8, MW-11R, MW-14, MW-115S, MW-115D, and MW-121 (**Exhibit 4, Figure 1-2**). Background wells MW-10 and MW-10D were destroyed due to construction unrelated to Ameren operations after the first quarter, 2016 monitoring period. No trace of the former background wells was found using a metal detector, probes, or digging. As a result, these wells were replaced with new background monitoring wells, MW-23S and MW-23D, in November 2017. In addition, several other monitoring wells and piezometers located at Hutsonville are measured for groundwater level so that groundwater elevation contour maps can be created for the entire site.

The IEPA approved Groundwater Monitoring Plan, in accordance with 35 Ill. Admin. Code

§ 840.114 and 35 Ill. Admin. Code § 840.116, outlines groundwater monitoring and sampling procedures, establishes the parameters and methods to be used for analyzing the groundwater samples, and describes evaluation methods to assess post-closure groundwater quality and trends to demonstrate compliance with the applicable groundwater standards. The Groundwater Monitoring Program Schedule is provided in **Exhibit 4, Table 1-1**.

Monitoring well locations, installation dates, construction information, and the groundwater zone they monitor are provided in **Exhibit 4, Table 1-2**. Field and laboratory parameters for evaluating groundwater quality are shown in **Exhibit 4, Table 1-3**.

Post-closure groundwater monitoring and annual reporting according to the IEPA approved Groundwater Monitoring Plan and the IEPA approved Post-Closure Care Plan began in 2013. The eighth annual report submitted in January 2021, included as **Exhibit 4**, includes the following elements:

- A summary of groundwater monitoring data collected in 2019 and 2020. Data tables are included in Appendix A.
- Quarterly Site Inspection Forms, including observations and descriptions of any maintenance activities performed on the pond cap, embankment, and groundwater collection trench and discharge system (Appendix B).
- Annual trend and statistical analysis results per Section 5.2 of the Groundwater Monitoring Plan, including an assessment of any statistically significant increasing trends (Appendix C).

2. Groundwater Quality Overview – 2013 to 2020

a. Summary of Cover System Maintenance

Inspections of the cover system are performed on a quarterly schedule. Routine maintenance activities are performed at Hutsonville D as needed and as soon as practicable after

issues are identified, and include recontouring the ground surface, repairing drainage channels, repairing and replacing lining material, revegetating areas, and removing woody vegetation. Maintenance activities can be found in more detail in the Post-Closure Plan.

b. On-Site Groundwater Compliance

As described in 35 Ill. Admin. Code § 840.118(a)(1) and Section 5.2.1 of the IEPA approved Groundwater Monitoring Plan:

- Compliance with on-site groundwater quality standards will be achieved when no statistically significant increasing trend that can be attributed to Hutsonville D is detected in the concentrations of all constituents monitored at the compliance (down-gradient) boundary of the site for four consecutive years after changing to an annual monitoring frequency.

c. Off-Site Groundwater Compliance

As described in 35 Ill. Admin. Code § 840.118(a)(2) and Section 5.2.1 of the Groundwater Monitoring Plan for off-site groundwater, the following compliance criteria must be met:

- Statistically significant decreasing trends in concentration for all constituents monitored in accordance with 35 Ill. Admin. Code § 840.114 in the upper zone of the aquifer at the compliance boundary are detected for a period of four consecutive years after changing to annual monitoring.
- No statistically significant increasing trend that can be attributed to Hutsonville D is detected in the concentrations of all constituents monitored in accordance with 35 Ill. Admin. Code § 840.114 in the lower zone of the aquifer at the compliance boundary for a period of four consecutive years after changing to an annual monitoring frequency.

- All concentrations of constituents monitored in accordance with 35 Ill. Admin. Code § 840.114 are at or below the applicable groundwater quality standard as provided in 35 IAC 840.116(b) at the down-gradient boundaries of Hutsonville D.

d. Compliance Determination

As described in 35 Ill. Admin. Code § 840.118(b) and (c) and Section 5.2.3 of the Groundwater Monitoring Plan:

- Compliance is demonstrated by performing an annual trend analysis for each monitoring well located at the down-gradient boundaries of Hutsonville D for all constituents monitored in accordance with 35 Ill. Admin. Code § 840.114. The analysis shall use Sen's Estimate of Slope and be performed on a minimum of four consecutive samples.
- If a GMZ is established for off-site groundwater in the future, the demonstration of compliance will be set forth in the GMZ approved by the closure or post-closure care plan.
- If the results of sampling and analysis show a positive slope at any compliance monitoring well located at the downgradient boundaries of Hutsonville D, a Mann-Kendall test will be performed at 95 percent confidence to determine whether or not the increasing slope represents a statistically significant increasing trend. Ameren will investigate the cause of a statistically significant increasing trend as described below. If the statistically significant increasing trend occurs during post-closure care, the investigation will include more frequent inspection of the surface of the cover system and evaluation of background concentrations.
- If the investigation attributes a statistically significant increasing trend to a

superseding cause, Ameren will notify IEPA in writing, stating the cause of the increasing trend and providing the rationale used in such a determination.

- If there is no superseding cause for the statistically significant increasing trend and sampling frequency has been reduced pursuant to semi-annual or annual sampling, a quarterly sampling schedule will be reestablished. After four consecutive quarterly samples show no statistically significant increasing trend, the frequency of groundwater monitoring will return to either semi-annual or annual, whichever frequency was utilized prior to the return to quarterly sampling.
- Notifications concerning statistically significant increasing trends and revisions of the sampling frequency will be reported to IEPA in writing within 30 days after making the determinations.
- If a statistically significant increasing trend is observed to continue over a period of two or more consecutive years and there are no superseding causes for the trend, then Ameren will perform the following:
 - A hydrogeologic investigation
 - Additional site investigation, if necessary

During the most recent eight monitoring events (2019-2020), none of the parameters showed increasing short-term trends along with concentrations above the Class I Groundwater standard; as such, no further action is required at this time under 35 Ill. Admin. Code § 840.118.

3. Groundwater Flow

Groundwater flow for 2020 is represented using groundwater elevation contour maps for each quarterly sampling event (Exhibit 4, Figures 3-1 through 3-4). Groundwater in the upper (shallow) zone generally flowed from west to east and northeast towards the Wabash River during

2020, which is consistent with past evaluations. The Groundwater Collection Trench began operation in April 2015, and following startup, groundwater elevations have exhibited localized flow toward the trench with groundwater elevations generally lower near the trench (Table 1-2 and Figure 3-5).

4. Groundwater Compliance Summary

Cover system construction and maintenance, as well as stable or decreasing boron and sulfate concentrations in the majority of Hutsonville D compliance monitoring wells, are strong indications that the cover system is functioning to improve overall groundwater quality beneath the pond.

Statistical analyses of analytical results for the most recent eight rounds of groundwater samples collected for 2019 to 2020 at the Hutsonville D did not show both increasing short-term trend and concentrations above the Class I Groundwater Standard for any parameters; as such, no further action is required at this time under Section 840.118.

VII. DESCRIPTION OF EFFORTS TO COMPLY (35 ILL. ADMIN. CODE 104.406(E))

Ameren intends to comply with new regulations in Part 845 that were not within the Board's authority to establish in Part 840, such as financial assurance. However, Ameren cannot feasibly comply with two separate sets of substantive technical regulations as to Hutsonville D for multiple reasons. First, the regulations conflict in certain key aspects related to closure care and post-closure care. Second, compliance with two separate sets of regulations as to Hutsonville D subjects Ameren to duplicative and/or disparate enforcement for alleged violations of one regulation or another. Third, as a regulated entity, Ameren must have certainty regarding what regulations apply—indeed, such certainty ought to be the hallmark of any regulatory program established by the state or federal government. Ameren

expended \$5.3 million to close Hutsonville D in accordance with Part 840. Meeting Part 845 would require Ameren to duplicate efforts that have already been accomplished under the Part 840 closure, and are being accomplished under the Part 840 post-closure requirements.

**VIII. NARRATIVE DESCRIPTION OF PROPOSED ADJUSTED STANDARD
(35 ILL. ADMIN. CODE 104.406(F))**

Petitioner requests that the Board grant the following relief:

Pursuant to Section 28.1 of the Environmental Protection Act (Act) (415 ILCS 5/28.1), the Board grants Ameren Energy Medina Valley Cogen, LLC (Ameren) an adjusted standard as follows:

- (1) Ameren shall continue to comply with the provisions of the Board's Site-Specific regulation, as promulgated by the Board in 35 Ill. Admin. Code Part 840.
- (2) Unless otherwise provided below, the provisions set forth in the Board's new Part 845, 35 Ill. Admin. Code Part 845, shall not be applicable to Hutsonville D.
 - (i) Ameren shall post all record keeping documents required pursuant to 35 Ill. Admin. Code 840.116 on an Internet Website maintained in accordance with 35 Ill. Admin. Code 845.810.
 - (ii) Ameren shall maintain financial assurance for Hutsonville D, as required under 35 Ill. Admin. Code 845, Subpart I.

IX. STATEMENT OF JUSTIFICATION (35 ILL. ADMIN. CODE 104.406(H))

Consistent with Section 28.1(c) of the Act, Petitioner has demonstrated that it is entitled to adjusted standards from the Board's landfill regulations. 415 ILCS 5/28.1(c).

A. Factors relating to Petitioner are substantially different from factors relied upon by the Board in Part 845, thus justifying an adjusted standard.

Hutsonville D is uniquely situated in terms of the applicable regulatory structure. Ameren closed Hutsonville D in accordance with Part 840 and performs post-closure at Hutsonville D in

accordance with Part 840. *See* 35 Ill. Admin. Code §§ 840.100 et seq. At Page 15 in its First Notice Opinion and Order (October 7, 2010) the Board noted that Ameren, before initiating the Part 840 site-specific rulemaking, had spent ten years trying to define the appropriate regulatory requirements for closure of Hutsonville D. *See* Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill. Admin. Code 840.101 through 840.152, R09-21, slip op. at 70 (Oct. 7, 2010). Part 840 was the culmination of that effort.

Part 840 only applies to Hutsonville D. No other CCRSI can use Part 840 in lieu of Part 845. The factors related to Hutsonville D are substantially different in that Part 840 was adopted to establish a methodology to manage closure and post-closure at single CCRSI, whereas Part 845 was designed as a rule of general applicability – designed to generally address Illinois CCRSIs. During the Part 845 proceedings, Ameren requested that Part 845 address site specific situations, including Hutsonville D. Ameren Questions to The Illinois Environmental Protection Agency, R2020-019, at pg. 5-7. Both the Board and the IEPA stated that it was inappropriate to address site specific matters in Part 845. Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New 35 Ill. Admin. Code 845, R20-19, pg. 5 (Feb. 4, 2021). As a result, Ameren can only avoid duplicative regulatory systems relative to Hutsonville D by having the Board approve this Petition for Adjusted Standards.

The IEPA and the Board have recognized that factors relating to Hutsonville D closure are substantially and significantly different from the factors relied on by the Board in adopting the generally applicable Part 845, as evidenced by the prior promulgation of Part 840, and that those factors warrant an adjusted standard.

B. The requested standard will not result in substantially and significantly more adverse environmental or health effects.

Attached to this Petition are the Board's First Notice Opinion and Order (October 7, 2010)

in R09-21 (**Exhibit 5**) and the Board's Second Notice Opinion and Order (January 2011) (**Exhibit 6**).

In its Opinions and Orders the Board carefully, and at length, reviewed the potential for adverse environmental or health effects in the context of the technical feasibility and economic reasonableness of the Board rule. At pages 5-6 of the Second Notice Opinion the Board stated:

As noted in the Board's first-notice opinion and order, Ameren evaluated several alternatives to meet the closure objectives of preventing off-site migration of contaminated groundwater, minimizing infiltration of precipitation through the ash pond, and protecting human health and the environment. See Ameren Ash Pond Closure Rules (Hutsonville Power Station) Proposed 35 Ill. Admin. Code 840.101 through 840.152, R09-21, slip op. at 16-33 (Oct. 7, 2010). These alternatives addressed the management of impacted groundwater, ash removal and on- or off-site treatment and disposal, and placement of final cover. Regarding groundwater management, Ameren evaluated "no action" with groundwater monitoring, placement of a low permeability vertical barrier, and a groundwater collection trench. *Id.* at 17-22; *see* TSD at 22, 73. Ameren found the installation of groundwater trench to be technically feasible and economically reasonable to address the impacted groundwater. The other alternatives were found to be technically infeasible for achieving the closure objectives. In its first-notice opinion and order, the Board agreed with Ameren's conclusions, as "no action" and a vertical barrier may not prevent the off-site migration of contaminated groundwater. Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill. Admin. Code 840.101 through 840.152, R09-21, slip op. at 69 (Oct. 7, 2010).

With regard to ash removal and disposal, Ameren asserted that removing the entire volume of waste and disposing of the ash off-site or in a newly constructed on-site landfill are not feasible options because of the exorbitant costs associated with those options. Ameren estimated the excavation and off-site disposal cost to be approximately \$34 million. TSD at 73. For on-site disposal, in addition to waste excavation cost, Ameren noted that there would be a very high capital cost of reconstructing the landfill. Ameren contended that the ash removal options are economically unreasonable. *Id.* Also, Ameren stated that the ash removal options also pose technical concerns regarding dewatering and storage of the waste. The Agency also expressed concerns regarding the implications of excavating ash in a steady state condition in terms of geochemistry and equilibrium with the site hydrogeologic conditions. *Tr.* at 66-76. In light of the issues highlighted by Ameren and the Agency, the Board agreed that excavation and disposal of ash from Ash Pond D, whether on-site or off-site, is not a

viable option. Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill. Admin. Code 840.101 through 840.152, R09-21, slip op. at 69 (Oct. 7, 2010).

Finally, with regard to the final cover alternatives, the Board found that the proposed final cover consisting of a geomembrane with a 3-foot-thick protective soil layer to be technically feasible and economically reasonable. Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill. Admin. Code 840.101 through 840.152, R09-21, slip op. at 69 (Oct. 7, 2010). The Board noted that the proposed final cover is similar to those required for landfills under the Board's landfill regulations at 35 Ill. Admin. Code 811.314. *Id.* As noted by Ameren, the effectiveness of the geomembrane to minimize infiltration and leachate generation is comparable to the other options considered by Ameren, including compacted clay and pozzolonic fly ash. Regarding the cost of the proposed closure alternative, Ameren expected that "capital costs associated with the selected closure scenario could range from \$3 to \$4 million dollars, excluding engineering design." SR at 21, citing TSD at 73-74; *see* TSD at 27, Bollinger Test. at 15. Ameren has also estimated that its "[a]nnual operating and maintenance costs associated with the trench and final cover system are expected to be around \$50,000." SR at 21, citing TSD at 73-74; *see* TSD at 27, Bollinger Test. at 15. In its analysis of economic and budgetary effects submitted with its original proposal, Ameren indicated that its costs as owner of the Station were "undetermined," but it projected capital and operating costs consistent with these figures.

Regarding PRN's position that treatment of contaminated groundwater collected from the groundwater trench should be considered in this rulemaking, the Board noted the proposed rules require Ameren to discharge groundwater collected in the groundwater trench in accordance with its NPDES permit or an option approved by the Agency. Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill. Admin. Code 840.101 through 840.152, R09-21, slip op. at 70 (Oct. 7, 2010); see Joint Prop. at 17 (proposed Section 840.122). The Board expected any treatment issues concerning groundwater from the collection trench to be fully addressed during the Agency's permitting process. *Id.*

In adopting its first-notice opinion and order, the Board concluded on the basis of the record before it that Ameren has undertaken an appropriate review of closure alternatives. Ameren Ash Pond Closure Rules (Hutsonville Power Station): Proposed 35 Ill. Admin. Code 840.101 through 840.152, R09-21, slip op. at 70 (Oct. 7, 2010). The Board also concluded that the record supported the conclusion that the joint proposal is economically reasonable and technically feasible. *Id.* Accordingly, the Board proceeded to adopt the joint proposal without significant substantive amendment for first-notice publication in the *Illinois Register*. *Id.*

Since adoption of the first-notice opinion and order, the record in this proceeding has grown only to the extent of two first-notice comments. Both comments support the Board's action in proceeding to first notice and request that the Board proceed to Second Notice with its proposal as expeditiously as possible. PC 8 at 5, PC 9 at 5. Neither comment cast doubt on the Board's findings and conclusions regarding the technical feasibility or economic reasonableness of the first-notice proposal, and the Board proceeded to second notice without significantly amending it. In the absence of any contrary arguments, the Board concludes that its adopted regulations are technically feasible and economically reasonable and below directs the Clerk to file them with the Secretary of State for publication in the *Illinois Register*.

The Board has previously found that a site-specific rule, in the form of Part 840, will not result in substantially and significantly more adverse environmental or health effects. For the same reasons as previously reviewed by the Board, an adjusted standard in the form of Part 840 is appropriate in this matter. Further, Ameren notified the IEPA on January 30, 2013, that closure had been completed in accordance with Part 840. Ever since, Ameren has been monitoring and maintaining Hutsonville D in accordance with the post-closure plan mandated by the Board in its rulemaking. During this post-closure period there have been no substantial or significantly more adverse environmental or health effects related to Hutsonville D.

X. CONSISTENCY WITH FEDERAL LAW (35 ILL. ADMIN. CODE 104.406(I))

Ameren's proposed standards are consistent with federal law. The standards which Ameren seeks to adjust do not implicate federal or federally delegated regulatory programs as applied to the Site. Ameren, the IEPA and the Board all recognized the potential for the adoption of federal regulations that could impact Part 840. As a result, 35 Ill. Admin. Code § 840.152 was included:

Section 840.152 Resource Conservation and Recovery Act

Nothing in this Subpart shall be construed to be less stringent than or inconsistent with the provisions of the federal Resource Conservation and Recovery Act of 1976 (P.L. 94-580), as amended, or regulations adopted under that Act. To the extent that any rules

adopted in this Subpart are less stringent than or inconsistent with any portion of RCRA applicable to the closure of Ash Pond D, RCRA will prevail.

Section 840.152 recognizes that USEPA may at some point adopt rules that are applicable to legacy sites at inactive facilities such as Pond D. At this time, USEPA has not done so in a manner that implicates any CCRSI that closed pursuant to state authority at a time when federal authority did not apply. When USEPA promulgated 40 CFR 257 effective October 19, 2015, that rule did not include requirements for legacy ponds at inactive facilities. While that point was remanded to the USEPA for consideration of coverage of legacy ponds at inactive facilities, USEPA is currently evaluating potential regulatory requirements but has indicated that promulgation of those rules could be years away. *See Advanced Notice of Proposed Rulemaking for Disposal of Coal Combustion Residuals from Electric Utilities; Legacy CCR Surface Impoundments*, United States Environmental Protection Agency (last updated Mar. 3, 2021) (<https://www.epa.gov/coalash/advanced-notice-proposed-rulemaking-disposal-coal-combustion-residuals-electric-utilities>). Moreover, to Ameren's knowledge, USEPA has never indicated that it will (or can) fail to honor responsible closures that occurred pursuant to state authority during this period of uncertain federal regulatory coverage.

XI. WAIVER OF RIGHT TO A HEARING (35 ILL. ADMIN. CODE 104.406(J))

Ameren recognizes the public interest relevant in this proceeding and does not intend to waive its right to hearing, but will further and fully develop the facts contained in this Petition at hearing, in part through the testimony of expert witnesses, who will be timely named, and testimony presented, as the Board or its hearing officer prescribes.

XII. DOCUMENTS RELIED UPON (35 ILL. ADMIN. CODE 104.406(K))

Ameren has either provided web addresses for or attached as exhibits relevant portions

of the sources relied upon in this petition. Additionally, Ameren has requested that the entire record in R09-21 (the Board's regulatory proceeding that led to Part 840) be incorporated into the record of this proceeding, given the unique regulatory development history at play here.

XIII. CONCLUSION

WHEREFORE, for all the foregoing reasons Ameren Energy Medina Valley Cogen, LLC respectfully requests that its Petition for adjusted standards be granted and the Board provide Ameren the relief requested herein.

Dated: May 11, 2021

Respectfully submitted,
Ameren Energy Medina Valley Cogen, LLC,
Petitioner.

By: /s/ CLAIRE A. MANNING
One of Its Attorneys

BROWN, HAY & STEPHENS, LLP

Claire A. Manning, #3124724
Anthony D. Schuering, #6333319
Garrett L. Kinkelaar, # 6334441
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
cmanning@bhslaw.com
aschuering@bhslaw.com
gkinkelaar@bhslaw.com

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
PETITION OF AMEREN ENERGY MEDINA) AS 21-_____
VALLEY COGEN, LLC (HUTSONVILLE D)) (Adjusted Standard - Land)
FOR ADJUSTED STANDARDS)
FROM 35 ILL. ADM. CODE PART 845)

NOTICE OF FILING

To: Don Brown, Clerk
Pollution Control Board
100 West Randolph St.
Suite 11-500
Chicago, Illinois 60601

Christine Zeivel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19267
Springfield, IL 62795-9276

Please take notice that on May 11, 2021, the Petitioner filed electronically with the Office of the Clerk of the Illinois Pollution Control Board, the attached Entry of Appearance with the Illinois Pollution Control Board in the above captioned proceedings, copies of which are hereby served upon you.

Dated: May 11, 2021

Respectfully submitted,
Ameren Energy Medina Valley Cogen, LLC,
Petitioner.

By: /s/ CLAIRE A. MANNING

BROWN, HAY & STEPHENS, LLP
Claire A. Manning, #3124724
Anthony D. Schuering, #6333319
Garrett L. Kinkelaar, # 6334441
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
cmanning@bhslaw.com
aschuering@bhslaw.com
gkinkelaar@bhslaw.com

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
PETITION OF AMEREN ENERGY MEDINA) AS 21-_____
VALLEY COGEN, LLC (HUTSONVILLE D)) (Adjusted Standard - Land)
FOR ADJUSTED STANDARDS)
FROM 35 ILL. ADM. CODE PART 845)

APPEARANCE

NOW COMES, CLAIRE A. MANNING, ANTHONY D. SCHUERING, and GARRETT L. KINKELAAR, of BROWN, HAY & STEPHENS, LLP and hereby enter there appearance as attorneys for the Petitioner, AMEREN ENERGY MEDINA VALLEY COGEN, LLC, in the above-captioned matter.

Dated: May 11, 2021

Respectfully submitted,
Ameren Energy Medina Valley Cogen, LLC,
Petitioner.

By: /s/ Claire A. Manning
BROWN, HAY & STEPHENS, LLP
Claire A. Manning
Registration No. 3124724
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
cmanning@bhslaw.com

By: /s/ Anthony D. Schuering
BROWN, HAY & STEPHENS, LLP
Anthony D. Schuering
Registration No. 6333319
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
aschuering@bhslaw.com

By: /s/ Garrett L. Kinkelaar
BROWN, HAY & STEPHENS, LLP
Garrett L. Kinkelaar
Registration No. 6334441
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
gkinkelaar@bhslaw.com

CERTIFICATE OF SERVICE

Please take notice that on May 11, 2021, the Petitioner filed electronically with the Office of the Clerk of the Illinois Pollution Control Board, the foregoing Notice of Filing and Entry of Appearance, copies of which are hereby served upon the following:

Don Brown, Clerk
Pollution Control Board
100 West Randolph St.
Suite 11-500
Chicago, Illinois 60601

Christine Zeivel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19267
Springfield, IL 62795-9276

/s/ CLAIRE A. MANNING

BROWN, HAY & STEPHENS, LLP

Claire A. Manning
Registration No. 3124724
205 S. Fifth Street, Suite 1000
P.O. Box 2459
Springfield, IL 62705-2459
(217) 544-8491
cmanning@bhslaw.com