

February 10, 2026

Ms. Faith Bugel  
Attorney  
1004 Mohawk Rd.  
Wilmette, IL 60091

Subject: Comments on September 2025 Updated Closure Plan  
City, Water, Light and Power (CWLP) Coal Combustion Residual Impoundments  
Springfield, IL

### **Introduction**

I have reviewed a series of updated documents, including significant revisions to the Closure Plan that were prepared in September 2025. The purpose of this review was to identify changes and possible deficiencies in CWLPs current plan for closure of the Lakeside and Dallman Coal Ash Impoundments. Documents reviewed included:

- Hanson (2025a), Dallman and Lakeside Ash Ponds, Assessment of Corrective Measures, dated September 23, 2025.
- Hanson (2025b), Dallman and Lakeside Ash Ponds, Interim Measures Report, dated September 23, 2025.
- Hanson (2025c), Dallman and Lakeside Ash Ponds, Closure Plan, dated September 23, 2025.
- Andrews Engineering (2025a), CCR Surface Impoundments – Nature and Extent Report, dated September 22, 2025.
- Andrews Engineering (2025b), CCR Surface Impoundments and FGDS Unit 2 Landfill, Flow Path Report, dated September 22, 2025.

Closure of the impoundments by simply capping them in place, which was the previous plan, would fail to meet the performance standard because waste located at or below the potentiometric surface would have continued to be in regular contact with groundwater. Infiltration of groundwater through the waste would have enabled the release of soluble contaminants. I also noted that the units were constructed on the Sugar Creek floodplain and potentially subject to damage during future flood events. This concern was most pronounced for the Lakeside Impoundment.

# GEO-HYDRO, INC

My review of the September 2025 updates showed that the proposal for closure of the Lakeside and Dallman Impoundments has been improved, albeit with several deficiencies that still need to be addressed.

## **Removal of Waste from the Lakeside Impoundment**

Waste would be excavated from the Lakeside Impoundment and placed over the existing waste in the Dallman Impoundment. A wetland with a drainage channel to deliver water to Sugar Creek would be established on the footprint of the previous Lakeside Impoundment.

Benefits of the proposed relocation of wastes from the Lakeside Impoundment include:

- Removing Lakeside ash reduces the volume of waste in contact with groundwater and removes the source of contaminants detected in wells downgradient of the pond, including “upgradient well” AP-4.
- Lakeside Impoundment was, in my opinion, the area of highest concern for flood damage. Removal of CCR from the Lakeside ash impoundment significantly reduces the possibility of damage and potential releases during a major flood event.
- Removal of the Lakeside Impoundment and creation of a wetland on that property is likely to reduce hydraulic head beneath the entire property by creating a groundwater discharge area near the southeast corner of the property where high head groundwater enters the site. Discharge of groundwater into the newly established wetland may reduce the groundwater head further downgradient, including below Dallman, although no modeling has been reported that might estimate the actual impact of this action on groundwater heads beneath the remaining units.

Identified deficiencies of the revised plans relative to closure of the Lakeside Impoundment include:

- Liquids produced from dewatering Lakeside and Dallman ash will be discharged through the settling pond system. An NPDES modification for dewatering discharges is supposedly being reviewed, but no details were found in the reviewed documents. Lack of information about the NPDES modification is a deficiency of the reviewed documentation. The details of the frequency of sampling, the parameters to be analyzed, and concentration limits associated with discharging contaminated porewater to Sugar Creek are needed. Without this information, we cannot evaluate the potential for impacts to water quality in Sugar Creek.
- There is no indication in the revised documents about how groundwater monitoring program around the Lakeside and Dallman Impoundments would be altered. A new background data set may be required in order to recalculate values that represent background without the influence of leakage from the Lakeside Ash Pond. Lack of

# GEO-HYDRO, INC

information about a revised groundwater monitoring program following closure of the Lakeside and Dallman Impoundments is a deficiency of the available information.

## **Consolidating and Covering Wastes at the Dallman Impoundment**

In 2020 testimony to the Illinois Pollution Control Board I warned that addition of CCR during closure of unlined impoundments in contact with groundwater is simply adding contaminant mass to the source of groundwater contamination.<sup>1</sup> Previous comments on CWLP closure plans have pointed out<sup>2</sup> that capping ash impoundments in place with waste left in contact with groundwater would not meet the performance standard for CCR closures<sup>3</sup> which requires the facility to take measures, such as engineering controls that will control, minimize, or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste as well as post-closure releases to groundwater from the sides and bottom of the unit. Any engineering controls or systems utilized to meet the performance standard must be permanent rather than temporary fixes designed to get the site through the required 30-year post closure care period.

The United States Environmental Protection Agency (USEPA) has clearly indicated that adding CCR to unlined impoundments that are required to close by the federal CCR rule is not permitted.<sup>4</sup> The revised closure documents do not identify why adding Lakeside waste to the Dallman Impoundment should be considered permissible.

Andrews Engineering has indicated that the bottom of Dallman Impoundment is at an elevation of approximately 530 feet and estimated the post-closure groundwater elevation beneath the closed Dallman Impoundment to be approximately 528 feet.<sup>5</sup> Four borings subsequently advanced through the Dallman Impoundment showed the pond bottom at elevations of 526.0, 523.0, 526.2, and 529.5 feet.<sup>6</sup> The bottom of the Dallman Impoundment was found to be up to 7 feet lower than the elevation than had been previously reported. Comparison of the pond bottom elevations to Andrews' estimated post-closure groundwater elevation showed that waste would be 2 to 5 feet below the estimated post-closure groundwater elevations in three of the four boring

---

<sup>1</sup>Geo-Hydro, Inc, (2020), Pre-Filed Testimony of Mark Hutson, Illinois Pollution Control Board, Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments: Proposed New Ill. Adm. Code 845, R 20-19, August 27, 2020, p. 21

<sup>2</sup>Geo-Hydro, Inc. (2025), Reply to Hunsberger Rebuttal Report Comments and Deposition Statements, August 1, 2025

<sup>3</sup> 35 Ill. Admin. Code Section 845.750(a)(1)

<sup>4</sup>USEPA, Proposed Decision: Proposed Denial of Alternative Closure Deadline for Ottumwa Generating Station at 35-36 (Jan. 25, 2022) (attached as Ex. B to Environmental Groups' Comments on Environmental Groups' Proposed Rules, R2020-19(A) (June 3, 2022)); USEPA, Letter on Duke Energy Gallagher at 3-4 (Jan 11, 2022) (attached as Ex. F to Environmental Groups' Comments on Environmental Groups' Proposed Rules, R2020-19(A) (June 3, 2022))

<sup>5</sup> Andrews Engineering (2021), Closure Alternatives Assessment – Contaminant Transport Model, Figure 4, October 2021

<sup>6</sup> City Water, Light, and Power, 2024, Coal Combustion Residuals Surface Impoundment Operating and Construction Permit Application Review Letter, Response to Item 1.7.15, September 9, 2024

# GEO-HYDRO, INC

locations. Since only four borings were advanced through the Dallman waste it is very possible that waste placed further into groundwater is present at other locations.

The updated closure documents now indicate that Lakeside ash will be excavated and consolidated on the Dallman Impoundment. A system of dewatering wells that would be used to initially dewater the entire waste column would then remain in place to be used in the event that water is found to be in contact with the waste in the future. A geotextile final cover system is proposed rather than a natural clay or composite final cover system. Water collected during both waste dewatering and subsequent to cap installation would be discharged through the settling pond system.

The potential benefits and identified deficiencies of the revised closure plan must be carefully documented and evaluated. Potential benefits of the revised plan for closing the Dallman Impoundment include:

- The groundwater head beneath Dallman will likely be somewhat lower if high head groundwater entering the site from the southeast discharges to the new wetland. However, the post-closure changes to groundwater head beneath the Dallman Impoundment remain undetermined.
- Installation and operation of a system of dewatering wells is proposed to fully dewater the CCR contained in the Dallman Impoundment.
- The dewatering wells are to remain in place after closure to be used as needed to keep the ash column unsaturated.
- The proposed geosynthetic cap will likely be effective for a period of several decades following completion of the post closure monitoring period.

Currently identified deficiencies of the proposed closure plan for closing the Dallman Impoundment include:

- A detailed discussion of how the proposed closure plan would permanently meet the performance standard for CCR closures that is contained in Illinois CCR rules<sup>7</sup> must be provided.
- The proposal to add Lakeside CCR to the Dallman Impoundment runs afoul of USEPA's position that the practice of placing CCR in unlined impoundments that are required to close by the federal CCR rule is not permitted.
- All four of the borings advanced through the Dallman Impoundment showed that the bottom of the impoundment was actually lower than the previously reported 530 feet. Three of four borings showed the bottom of impoundment is located below the projected post-closure groundwater elevation of 528 feet. Four boring are inadequate to

---

<sup>7</sup> 35 Ill. Admin. Code Section 845.750(a)(1)

## GEO-HYDRO, INC

characterize the depth of waste beneath the Dallman Impoundment. A systematic boring program is needed to determine the actual elevation of the impoundment bottom.

- The proposed geotextile cover system has a design half life of 100+ years. Constructing the cap from geosynthetic materials with a design life of 100+ years is essentially putting a temporary fix over a permanent problem. At some point in the future, likely well after the required 30 years of post-closure monitoring has lapsed, the effectiveness of the cap system will decline. Regular monitoring of water elevation within and below the Dallman Impoundment is necessary for as long as the waste remains in place if future failure of the cap system is to be detected. Water elevation data is needed in order to determine if/when the ash is in contact with groundwater, either from upward flow from below or because the geosynthetic cap is deteriorating and losing effectiveness.
- The updated Closure Plan indicates that the dewatering wells will remain in place for potential use in removing water from the base of the impoundment. The proposed Closure Plan lacks specificity about how the proposed dewatering well system will be controlled and monitored. Regular monitoring of groundwater/leachate elevation within and beneath the Dallman Impoundment is needed to document that the waste at the bottom of the impoundment remains dry under both high and low water conditions. There is no indication that porewater elevations in the waste will be monitored, no description of the porewater/groundwater elevation that would trigger pumping from the wells, and no description of whether the pumps will be manually controlled or will be automatically activated.
- The lack of an identified plan and commitment to operate the dewatering system past the required 30-years of care is another deficiency of the proposed closure plan. The dewatering wells are an integral component of the closure system now being proposed. A commitment to permanently maintain and operate the dewatering wells is needed if the proposed closure is to be anything more than a temporary fix to a permanent problem.
- Maintaining the dewatering well system in operating condition is likely to require a system of regular testing and maintenance due to the harsh chemical conditions in CCR porewater. The closure plan should identify how and when the wells will be tested and how pumps will be maintained. Constructing a pumping system is the first step, but identification of details about how the system will be maintained and operated is needed.
- Porewater collected in the dewatering wells is to be discharged to Sugar Creek under a revision to the site NPDES permit. The details of the frequency of sampling, the parameters to be analyzed, and concentration limits associated with discharging contaminated porewater to Sugar Creek are nowhere identified.

# GEO-HYDRO, INC

## Concluding Remarks

The September 2025 revisions to the proposed Closure Plans for the Lakeside and Dallman Ash Impoundments show areas of improvement over CWLP's previous Closure Plans. Information and commitments that fill the deficiencies identified above are needed in order to evaluate the protectiveness of these plans.

Please let me know if you have questions or comments.



### **Mark A. Hutson, P.G.**

Geo-Hydro, Inc.

720-320-2060

[mhutson.ghi@gmail.com](mailto:mhutson.ghi@gmail.com)

Illinois Licensed Professional Geologist No. 196.001465

