

BEFORE THE POLLUTION CONTROL BOARD  
OF THE STATE OF ILLINOIS

SIERRA CLUB, PRAIRIE RIVERS NETWORK, )  
and NATIONAL ASSOCIATION FOR )  
THE ADVANCEMENT OF COLORED PEOPLE, )  
 )  
Complainants, )  
 )  
v. )  
 )  
CITY WATER, LIGHT and POWER, )  
 )  
Respondent. \_\_\_\_\_)

PCB 18-11  
(Citizens Enforcement –  
Water)

NOTICE OF FILING

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

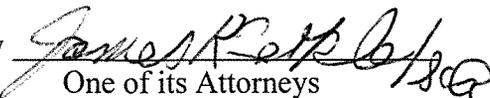
And Attached Service List

Please take notice that on January 29, 2020, I filed electronically with the Office of the Clerk of the Illinois Pollution Control Board the attached **Respondent's Motion for Partial Summary Judgment**, of the City of Springfield, Office of Public Utilities d/b/a City Water, Light and Power, a copy of which is attached and served upon you.

Respectfully submitted,

THE CITY OF SPRINGFIELD,  
a municipal corporation

Dated: January 29, 2020

By   
One of its Attorneys

James K. Zerkle  
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OF THE STATE OF ILLINOIS**

<b>SIERRA CLUB, PRAIRIE RIVERS NETWORK,</b>	)	
<b>and NATIONAL ASSOCIATION FOR</b>	)	
<b>THE ADVANCEMENT OF COLORED PEOPLE,</b>	)	
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	)	<b>PCB 18-11</b>
<b>v.</b>	)	<b>(Citizens Enforcement –</b>
	)	<b>Water)</b>
<b>CITY WATER, LIGHT and POWER,</b>	)	
	)	
<b>Respondent .</b>	)	
	)	

**RESPONDENT’S MOTION FOR PARTIAL SUMMARY JUDGMENT**

NOW COMES Respondent, the City of Springfield, Office of Public Utilities (“City”) d/b/a City Water, Light and Power (“CWLP”), by and through its counsel, and pursuant to 35 Ill. Adm. Code 101.516 and respectfully requests that the Pollution Control Board (“Board”) enter summary judgment in its favor that certain remedies sought by the Complainants in this case are beyond the jurisdiction of the Board to grant. In support of its Motion, the City states as follows:

**I. INTRODUCTION**

Through this action, the Complainants purport to dictate the means and manner through which CWLP proceeds with its stated intent to close its unlined ash ponds prior to the implementation and adoption of regulations which would govern such closure. Additionally, and more problematically, the remedy Complainants seek is for this Board to issue a mandatory injunction ordering and directing the manner and means by which such closure should occur. Such a mandatory injunction is beyond the jurisdiction of this Board.

## II. PROCEDURAL BACKGROUND

On September 27, 2017, Complainants filed a single Count Complaint with the Pollution Control Board (“Board”) alleging violations of Sections 12(a) and 12(d) the Environment Protection Act (“Act”) [415 ILCS 5/12(a) and(d)] and Sections 620.115, 620.301(a) and 620.405 of the Board’s regulations. 35 Ill. Adm. Code 620.115, 620.301(a) and 620.405. Complainants’ filed an amended Complaint on April 19, 2019 and an errata to the amended Complaint on June 24, 2019. The City’s amended Answer and Affirmative Defenses were filed on July 5, 2019. Complainants’ Reply to Respondents Affirmative Defenses to the amended complaint were filed on September 16, 2019.

The Amended Complaint in subpart C of its prayer for relief requests this Board to issue an order mandating the following:

- i. Cease and desist from causing or threatening to cause water pollution,
- ii. Modify its coal ash and coal combustion waste disposal and storage practices so as to avoid future groundwater contamination,
- iii. Remediate the contaminated groundwater so that it meets applicable Illinois Groundwater Quality Standards (GQSS); and

CWLP maintained in its Affirmative Defenses and in this Motion that the mandatory injunctive relief sought in paragraphs C.ii. and C.iii. are not within the Board’s jurisdiction to order.

In addition, in the Board’s Acceptance of the Complaint for Hearing, the Board directed that with regard to the remedy sought, any dispositive motion should consider “. . . proposing a remedy for a violation, if any (including whether to impose a civil penalty), and supporting its position with facts and arguments that address any or all of the Section 33(c) factors . . .” PCB 18-11 (December 17, 2017) Slip Op. at 9.

At the close of discovery in this matter, the Complainants own expert in this proceeding has made clear that neither he nor the Complainants are in a position to recommend any specific remedy without further fact finding:

My Report shows that the location of the unlined CWLP waste facilities on the floodplain of Sugar Creek, with waste placed below the water table, reduces the number of options that are both protective of the environment and permanent solutions. A detailed analysis of alternatives should be conducted in order to evaluate the range of options and make a final selection. The analysis of alternatives would evaluate remedial options for criteria such as: protection of human health and the environment; compliance with applicable regulations; long-term effectiveness and permanence; reduction of toxicity, mobility, and volume through treatment; short-term effectiveness; implementability; cost; and regulator and community acceptance.

Rebuttal Report of Mark A. Hutson, PG at page 11 (Exhibit A). Although the City disputes many of the conclusions of Complainants expert generally, it is clear that on the matter of remedial action, the Complainants are unable to comply with the Board's direction.

### **III. ARGUMENT**

#### **A. The Board Lacks Jurisdiction to Enter a Mandatory Injunction.**

Section 33(b) of the Act governs the contents of a Board Order in a citizens' enforcement case. That Section provides:

Such order may include a direction to cease and desist from violations of this Act. any rule or regulation adopted under this Act, any permit or term or condition of a permit, or any Board order, and/or the imposition by the Board of civil penalties in accord with Section 42 of this Act. The Board may also revoke the permit as a penalty for violation. If such order includes a reasonable delay during which to correct a violation, the Board may require the posting of sufficient performance bond or other security to assure the correction of such violation within the time prescribed.

415 ILCS 5/33(b).

While the Board may order a Respondent to cease and desist from violations of the Act, the Board authority does not extend to the imposition of the relief requested by Complainants to order modification of coal ash practice or to order a plan of remediation of contaminated

groundwater. Such injunctive relief is beyond the Board's authority under the Act. See, *Janson v. Illinois Pollution Control Bd.*, 69 Ill.App.3d 324, 328, 387 N.E.2d 404, 408 (3rd Dist., 1979) and *Clean the Uniform Company-Highland v. Aramark Uniform & Career Apparel, Inc.*, PCB 03-21, Nov. 7, 2002, slip. Op. at 1 & 3.

The process for mandatory injunctive relief under the Environmental Protection Act is limited to the process provided in Section 42(e) whereby “[t]he State's Attorney of the county in which the violation occurred, or the Attorney General, may, at the request of the Agency or on his own motion, institute a civil action for an injunction, prohibitory or mandatory, to restrain violations of this Act, any rule or regulation adopted under this Act, any permit or term or condition of a permit, or any Board order, or to require such other actions as may be necessary to address violations of this Act, any rule or regulation adopted under this Act, any permit or term or condition of a permit, or any Board order.” 415 ILCS 5/42(e).

Furthermore, the procedure to identify the permit requirements and process for closing Coal Combustion Residual ash ponds has been expressly specified in Illinois Public Act 101-171, discussed in greater detail below. Under this Act, the Illinois EPA is directed to propose the rules for CCR impoundments which the Board will then adopt after the hearing process, 415 ILCS 5/22.59(g). Thus far, the EPA has not proposed such rules. Therefore, the Board is without statutory authority to proceed with rulemaking without the advice of the EPA.

For these reasons, the Board should enter an order denying the relief sought in subparagraphs C.ii. and C.iii. of the Amended Complaint.

B. Determining the Remedial Relief Sought by Complainants is Inappropriate for this Proceeding.

1. Background of Relevant Legal Developments.

CWLP owns and operates the Dallman power generating stations pursuant to National Pollutant Discharge Elimination System (“NPDES”) permit #IL0024767 and Municipal Solid Waste Landfill permit #1995-243-LFM. In 2010 and 2012, groundwater monitoring wells beyond those installed for purposes of the landfill permit were voluntarily installed by CWLP at request of the Illinois Environmental Protection Agency (“Illinois EPA”). These wells are those identified in the Complaint as AP-1, AP-2, AP-3, AP-4, and AP-5. The complaint also identifies groundwater monitoring well AW-3 which existed prior to the installation of these five wells. Complaint at ¶ 1, 3. In the Amended Complaint, Complainants have removed reference to alleged violations at wells AP-4 and AP-5 and have conceded that these wells monitor background conditions. Complainants’ Unopposed Motion for Leave to File Amended Complaint at ¶¶4 and ¶6.

Subsequent to installation of these monitoring wells, the Illinois Environmental Protection Agency (“Agency”) submitted the proposal titled “In the Matter of Coal Combustion Waste Ash Ponds and Surface Impoundments at Power Generating Facilities: Proposed New 35 Ill. Adm. Code Part 841” regulations to the Board on October 28, 2013. See, R14-10. Both parties to this matter were participants in that proceeding until the Record closed in March of 2017. Two years later, on March 28, 2019, the Board directed the Agency to show cause as to why the docket should not be closed. The Agency and other parties requested the docket remain open through the legislative session and the docket was ultimately dismissed by the Board on September 19, 2019 as a result of the enactment of Public Act 101-171 on July 30, 2019.

Meanwhile, on the federal level, in 2015, the United States Environmental Protection Agency (“U.S. EPA”) finalized federal Coal Combustion Residual rules under Subtitle D of the Resource Conservation and Recovery Act, 42 U.S.C. § 6901, et seq. (“RCRA”), entitled “Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals From Electric Utilities,” 80 Fed. Reg. 21,302 (April 17, 2015) (the “CCR Rule”). Subtitle D of RCRA governs the disposal of solid waste presently classified as non-hazardous.

The Rule sets forth a set of comprehensive requirements in the form of nationally-applicable minimum criteria for the safe disposal of coal combustion residuals (“CCR”), a by-product of the operation of coal-fired power plants, in properly constructed and maintained landfills and impoundments. 80 Fed. Reg. at 21,302-03. These comprehensive requirements and criteria generally include: (a) location restrictions (40 C.F.R. §§ 257.60-64); (b) liner design criteria (40 C.F.R. §§ 257.70-72); (c) structural integrity requirements (40 C.F.R. §§ 257.73-74); (d) operating criteria (40 C.F.R. §§ 257.80-84); (e) groundwater monitoring and corrective action requirements; (40 C.F.R. §§ 257.90-98); (f) closure and post-closure requirements; (40 C.F.R. §§ 257.100-04); and (g) recordkeeping, notification and website posting requirements (40 C.F.R. §§ 257.105-07). Failure to comply with many of these criteria generally results in a covered facility being deemed an “open dump,” which is thereby required to upgrade or close within specified time periods. 40 C.F.R. § 257.1(a); 80 Fed. Reg. at 21,468.

In addition, on December 16, 2016, twenty months after the CCR Rule was promulgated and three years into Board proceeding on R14-10, Congress enacted the Water Infrastructure Improvements for the Nation Act (“WIIN Act”), Pub. L. No. 114-322, 130 Stat. 1628, which at section 2301 sets forth an amendment to Section 4005 of the Solid Waste Disposal Act, 42 U.S.C. § 6945.

That amendment made several fundamental changes to Subtitle D of RCRA, by: (a) instituting a program under which States could seek U.S. EPA approval of a State permitting program that would allow the State to issue individualized facility permits that would operate in lieu of the national criteria in the Rule, provided U.S. EPA determines that the State program is at least as protective as the requirements/criteria set forth in the Rule; (b) granting U.S. EPA authority to issue permits, in the absence of an approved State program, subject to receiving a specific appropriation for that purpose; and (c) granting U.S. EPA authority to institute administrative or judicial enforcement actions against facilities that are in violation of State or Federal requirements. 42 U.S.C. § 6945(d).

Prior to this amendment, Subtitle D was generally described as “self-implementing,” as EPA had no statutory authority to bring an enforcement action against a facility that was in violation of any federal criteria promulgated by U.S. EPA. 42 U.S.C. §6973; 80 Fed. Reg. at 21,309-11.

Since adoption of the WIIN Act, the federal CCR rules have been subject to a number of proposed revisions initiating from settlements of litigation over the 2015 rule, remand of provisions of the 2015 rule by the federal courts,<sup>1</sup> and other administration-initiated proposals. U.S. EPA’s Phase 1 rule was proposed in March 2018 and the Phase 1 Part 1 portion of the proposal addressing certain deadlines to cease receiving CCR was finalized on August 29, 2018. 83 Fed. Reg. 36435. U.S. EPA is also planning to finalize the Phase 1 Part 2 portion of that proposal which includes adding boron to the list of Appendix IV constituents.

In August 2019, U.S. EPA proposed a second phase of CCR amendments addressing concerns raised regarding the adequacy of the rules treatment of beneficial use of CCR material

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<sup>1</sup> See, *USWAG v. EPA*, No. 15-1219 (DC Cir. 2019) and *Waterkeeper Alliance Inc. et al. v. EPA*, No. 18-1289 (DC Cir 2019).

and accessibility of information on CCR compliance websites to the public. 84 Fed. Reg. 40353. Most recently, in December 2019, U.S. EPA published proposed amendments to Part 257 titled “A Holistic Approach to Closure Part A: Deadline to Initiate Closure.” 84 Fed. Reg. 65941 (December 2, 2019). It is also anticipated that additional rulemakings to address alternative liner demonstrations and legacy impoundments will be forthcoming.

2. Illinois Legislation.

Despite these evolving issues at the federal level, Illinois was able to enact legislative authority for regulation of CCR impoundments at the State level in the last legislative session. Public Act 101-171 (introduced as Senate Bill 9) establishes a comprehensive scheme in Board regulations for the permitting and closure of CCR surface impoundments that will be at least as stringent as, and approvable under, the federal CCR regulations. The Agency has until March 30, 2020 to file a rulemaking proposal with the Board and the Board has one year from receiving the Agency’s proposal to adopt final rules.

The Agency has summarized on its website the elements that must be included in a final CCR rule as follows: (1) 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; (2) specify the minimum contents of CCR surface impoundment construction and operating permit applications, including the closure alternatives analysis; (3) specify which types of permits include requirements for closure, post-closure, remediation and all other requirements applicable to CCR surface impoundments; (4) specify when permit applications for existing CCR surface impoundments must be submitted, taking into consideration whether the CCR surface impoundment must close under the Resource Conservation and Recovery Act (RCRA); (5)

specify standards for review and approval by the Agency of CCR surface impoundment permit applications; (6) specify meaningful public participation procedures for the issuance of CCR surface impoundment construction and operating permits, including, but not limited to, public notice of the submission of permit applications, an opportunity for the submission of public comments, an opportunity for a public hearing prior to permit issuance, and a summary and response of the comments prepared by the Agency; (7) prescribe the type and amount of the performance bonds or other securities required under subsection (f), and the conditions under which the State is entitled to collect moneys from such performance bonds or other securities; (8) specify a procedure to identify areas of environmental justice concern in relation to CCR surface impoundments; (9) specify a method to prioritize CCR surface impoundments required to close under RCRA if not otherwise specified by the United States Environmental Protection Agency, so that the CCR surface impoundments with the highest risk to public health and the environment, and areas of environmental justice concern are given first priority; (10) define when complete removal of CCR is achieved and specify the standards for responsible removal of CCR from CCR surface impoundments, including, but not limited to, dust controls and the protection of adjacent surface water and groundwater; and (11) describe the process and standards for identifying a specific alternative source of groundwater pollution when the owner or operator of the CCR surface impoundment believes that groundwater contamination on the site is not from the CCR surface impoundment.

Significantly for this proceeding, Senate Bill 9 establishes two new requirements found nowhere in prior federal or Board regulations. First, a new Section 22.59(b) of the Act provides that “No person shall: . . . (2) construct, install, modify, operate, or close any CCR surface impoundment without a permit granted by the Agency, or so as to violate any conditions

imposed by such permit, any provision of this Section or any regulations or standards adopted by the Board under this Section...” 415 ILCS 5/22.59(b)(2). For the first time, CCR surface impoundments that have been regulated under NPDES permits, have a clear legal requirement to obtain a permit from the Agency to cease operating and close the impoundment. Though examples can be found of the Agency using the prior available permitting process in closures, there was never a clear legal mandate for such prior permitting in the absence of the enforcement or groundwater management zone process.

The second new provision that is of significance to the issues in this Motion is the new provision in Section 22.59(d) that “Before commencing closure of a CCR surface impoundment, in accordance with Board rules, the owner of a CCR surface impoundment must submit to the Agency for approval a closure alternatives analysis that analyzes all closure methods being considered and that otherwise satisfies all closure requirements adopted by the Board under this Act.” 415 ILCS 5/22.59(d). Again, for the first time, owners and operators must secure formal Agency approval of their closure plans prior to selecting one and that approval must include an analysis of alternatives meeting the requirements of the statute and upcoming Board rules that the Agency must review and approve prior to granting the closure permit.

3. Closing of the Ponds Will be Governed by Regulations Not Yet Completed.

The rulemaking mandated by Public Act 101-171 will necessarily impact the manner and means by which CWLP must close its unlined ash ponds.

The Board has recognized this in similar cases and appropriately stayed proceedings pending completion of that rulemaking. On October 3, 2019, the Board granted a stay in the Adjusted Standard proceeding “*In the Matter of: Petition of Midwest Generation, LLC for an*

Adjusted Standard from 35 Ill. Adm. Code 811 and 814” (AS19-1). In that proceeding that Board stated:

[Midwest Generation]’s motion notes that Public Act 101-171 took effect on July 30, 2019. Public Act 101-171 amended existing provisions of the Environmental Protection Act and added new provisions addressing CCR surface impoundments. [Midwest Generation] requests that the Board stay this proceeding for 60 days “while it evaluates the potential impacts of Public Act 101-171.” Mot. at 1. At the end of the stay, [Midwest Generation] commits to file a status report. *Id.*, citing 35 Ill. Adm. Code 101.514. [Midwest Generation] adds that the Illinois Environmental Protection Agency (IEPA) “does not object” to the request. The Board recognizes that Public Act 101-171 significantly amended statutory requirements for the management of CCR surface impoundments. MG requests a stay of 60 days to consider the effect of Public Act 10-171, and IEPA does not oppose the request. Under these circumstances, the Board finds that a 60-day stay of this proceeding is reasonable. The Board grants MG’s motion and stays this proceeding—including the pending request for a public hearing—for 60 days to Monday, December 2, 2019.

Slip Op. at 1. The Board has recognized that, in the context of this matter, changes brought about by Public Act 101-171 may serve as a proper basis for a stay of proceedings regarding the proper handling of CCR materials before the Board.

The City has committed publicly for some time that it plans to close its unlined ash ponds and that decision is today something that is ultimately expected to be required pursuant to both federal and state rules. However, the specific actions taken to do so must be done in accordance with the applicable regulations, be they the federal regulations or state regulations. And now, for the first time, as a result of passage of Senate Bill 9, these activities must be done following proper submittals and according to permits issued by the Agency following the required public participation process. As a result of these developments, it is premature for this matter to proceed to a hearing on remedy until the City has taken the actions provided for in these programs and until the Agency has indicated through its permitting process what activities would be acceptable and protective of the environment.

Complainants cannot dispute that proceeding to dispositive motions and necessary hearings in this matter is premature based on the opinions issued by its own expert in this matter. In the final of three reports submitted in by Complainants' expert Mark A. Hutson, PG, Complainants' expert has determined that additional studies of closure methods are needed before a remedy can be selected. As Mr. Hutson himself stated:

The intention of this section of my Report is to identify potential remedial options that provide permanent solutions and minimize long-term operation and maintenance costs and the risk of catastrophic release. My Report shows that the location of the unlined CWLP waste facilities on the floodplain of Sugar Creek, with waste placed below the water table, reduces the number of options that are both protective of the environment and permanent solutions. A detailed analysis of alternatives should be conducted in order to evaluate the range of options and make a final selection. The analysis of alternatives would evaluate remedial options for criteria such as: protection of human health and the environment; compliance with applicable regulations; long-term effectiveness and permanence; reduction of toxicity, mobility, and volume through treatment; short-term effectiveness; implementability; cost; and regulator and community acceptance.

Rebuttal Report of Mark A. Hutson, PG at page 11 (Exhibit A).

Although the City disputes many of the conclusions of Complainants expert generally, this description of the process for closing or retrofitting facilities like the ones at issue in this matter leaves little room for dispute. These issues that in Mr. Hutson's opinion would need to be addressed in an alternatives analysis are remarkably similar to the issues the General Assembly has mandated the Board include in its CCR regulations and that must be included in the alternatives analysis conducted by the permittee and approved by the Agency under that program.

This analysis should not be conducted in an adversarial hearing before the Board; such proceedings are not designed to achieve an efficient, effective and implementable result. The process described by Complainants' expert and affirmed in Senate Bill 9 is not one that will be

best achieved through weighing of technical testimony to determine which expert the Board finds more credible. Rather, it should be determined through submittal of permit applications and closure plans to the Agency for approval which include the alternatives analysis mandated by Senate Bill 9. This process will not only rely on the technical expertise of the Agency but will include as a part of the decision-making the public involvement process mandated by Senate Bill 9.

Conclusion

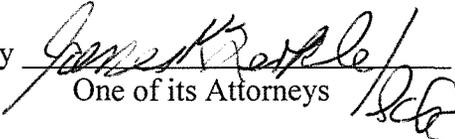
For the reasons stated herein, Respondent, City of Springfield, Office of Public Utilities d/b/a City Water, Light and Power respectfully requests that the Board grant partial summary judgment denying the relief sought in subparagraphs C.ii. and C.iii. of the Complaint.

Respectfully submitted,

THE CITY OF SPRINGFIELD,  
a municipal corporation

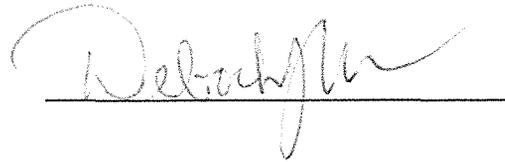
Dated: January 29, 2020

James K. Zerkle  
Corporation Counsel  
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800 East Monroe, Ste. 313  
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By  One of its Attorneys

CERTIFICATE OF E-MAIL SERVICE

The undersigned, Deborah J. Williams, an attorney, certifies that I have served by email upon the individuals named on the attached Service List a true and correct copy of the **NOTICE OF FILING** and **RESPONDENT'S MOTION FOR PARTIAL SUMMARY JUDGMENT** of the CITY OF SPRINGFIELD, OFFICE OF PUBLIC UTILITIES d/b/a CITY WATER, LIGHT AND POWER from the email address ([deborah.williams@cwlp.com](mailto:deborah.williams@cwlp.com)) of this 36 page document before 5:00 p.m. on January 29, 2020 at the address provided on the attached Service List.



A handwritten signature in cursive script, appearing to read "Deborah J. Williams", is written above a horizontal line.

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**GEO-HYDRO, INC**  
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**REBUTTAL REPORT OF  
MARK A. HUTSON, PG  
City Water, Light & Power  
Dallman Station  
Springfield, IL**

Prepared for:  
**SIERRA CLUB**  
Environmental Law Program  
2101 Webster Street  
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June 27, 2019

GEO-HYDRO, INC.

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## GEO-HYDRO, INC.

### 1. Introduction

City Water, Light & Power (CWLP) operates Dallman Station (Dallman), a coal-fired electric power plant on Lake Springfield, in Springfield, IL. Coal Combustion Waste (CCW) storage and disposal facilities, including Fly Ash Ponds and a Flue Gas Desulfurization Sludge (FGDS) Landfill, are located on CWLP property downstream of Lake Springfield and Spalding Dam (Figure 1). I have previously prepared two reports<sup>1,2</sup> describing the results of my review of available information on the environmental impacts of the Dallman Ash Pond.

Mr. Brad Hunsberger of Andrews Engineering submitted a response document<sup>3</sup> (Response) that provides his comments on my Supplemental Expert Report. This document presents my rebuttal of issues raised in Mr. Hunsberger's comments.

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<sup>1</sup> Hutson, M.A., 2018, Expert Report of Mark A. Hutson, PG, City Water, Light & Power, Dallman Station, Springfield, IL, October 15, 2018.

<sup>2</sup> Hutson, M.A., 2019, Supplemental Expert Report of Mark A. Hutson, PG, City Water, Light & Power, Dallman Station, Springfield, IL, March 26, 2018.

<sup>3</sup> Andrews Engineering, 2019, Response to: Supplemental Expert Report of Mark A. Hutson, PG (March 26, 2019), May 2019.

GEO-HYDRO, INC.

**2. Rebuttal Comments**

1. Section 2.1, First Bullet, and Section 2.7, Sixth Bullet, Third Sub-Bullet – The Response states in Section 2.1 that :

*“FEMA identifies the 100-year floodplain at the Dallman Ash Pond as elevation 454 feet above mean sea level (msl) (Report Figure 2 and Footnote #1). The berm elevation at the northwest corner of the Dallman Ash Pond (lowest point) is approximately 553 feet above msl (Aero-Metric Engineering, Inc., 1991 — See Attachment B). The perimeter berm elevations around the facilities increase to the south by approximately 10 feet to transition to the top of dam/bridge elevation. Therefore, there is no chance the structures will be inundated by floodwaters from the Sugar Creek floodplain during a 100-year storm event.”*

In Section 2.7 the Response again mistakenly indicates that:

*“As provided in Section 2.1 of this document, FEMA identifies the 100-year floodplain at the Dallman Ash Pond as elevation 454 feet above mean sea level (msl). The berm elevation at the northwest corner of the Dallman Ash Pond (lowest point) is approximately 553 feet above msl. The perimeter berm elevations around the facilities increase to the south to transition to the roadway/bridge elevation. Therefore, there is no chance the structures will be inundated by floodwaters from the Sugar Creek floodplain.”*

If you take a closer look at the FEMA map referenced and included as Figure #2 of my Report you will see that the flood elevation at the Dallman pond is actually identified as 545, not 454, feet above mean sea level. At elevation 545 feet above mean sea level the floodwater would be only eight feet below the top of the berm on the northwest corner of the Dallman Ash Pond. It must also be noted that the FEMA map indicates that the 100-year flood elevation of water in Springfield Lake would be at an approximate elevation of 561 feet above mean sea level and that water is projected to flow across Spaulding Dam and onto the Lakeside Ponds. CWLP could attempt to lower the gates to control lake level and stop water from flowing into the Lakeside impoundments. This action would however have the effect of raising the water elevation downstream of the dam and increasing the elevation and erosive power of the water impinging on the western impoundment berms. Of course, the 100-year flood is not the largest flood that will eventually impact this location. Larger events such as 150 or 200-year floods and the damage that they would do should be anticipated. To say that there is no chance of inundation by floodwaters is to deny one of the basic realities caused by locating waste disposal facilities on a floodplain.

2. Section 2.1, Second Bullet - The Response also states that:

*“The water within with surface impoundment continually keeps the subsurface stratigraphy under saturated conditions. The Report is inaccurate as it states ‘rising groundwater elevations will re-wet wastes that might not be wet under normal conditions.’”*

A careful reading of this section of my Report will show it is a general discussion of problems associated with locating the “CWLP waste facilities” on the floodplain and within the area of inundation of Sugar Creek. Under current conditions there are waste facilities that are not wet under normal conditions such as the gypsum storage area, Landfill Unit 1, and any unsaturated materials present in the Lakeside Ash Pond and Lime Softening Ponds. Future cap-in-place closure scenarios, if implemented, would increase the number of facilities, including the Dallman Ash Pond, that would not be continuously saturated. Any facilities not already fully saturated and generating leachate would be subject to stimulation of increased leachate production by rising floodwater.

3. Section 2.1, Second Bullet – This section of the Response goes on to state that:

*“Furthermore, the last sentence of the paragraph states ‘Re-wetting of disposed wastes stimulates leachate production from higher elevation wastes that might normally be located above the groundwater. The Report tries to imply that additional leachate production will occur during periods of elevated groundwater levels.’”*

My Report does not make that implication. It simply states that re-wetting of unsaturated wastes by rising floodwater will stimulate leachate production from wastes that may be unsaturated under normal conditions. The production of leachate will persist for weeks or even months after a period of elevated groundwater levels. In fact, I would not expect to detect the effect of increased leachate production in the groundwater monitoring system until well after floodwaters have receded.

4. Section 2.1, Second Bullet – The Response concludes that:

*“Based on the hydrogeologic characteristics of the impoundment area, any influence of the impoundments to the groundwater quality should be present. Solute concentrations in the groundwater are stable and consistent.”*

Review of time-versus-concentration graphs of the common ash-related contaminants included in Section 4.4 of my Report show that rather than being “stable and consistent”, the concentrations of ash-related contaminants in downgradient monitoring wells are very often above background and Illinois Groundwater Quality Standards with large spikes of high concentrations. No attempt appears to have been made by CWLP to identify either the extent of groundwater impacts or the cause of the observed spikes in contaminant concentrations.

5. Section 2.1, Third Bullet – The Response indicates takes exception to the sentence in my Report that says:

*“The second issue with the location of the waste disposal facilities adjacent to Sugar Creek is the increased danger of damage and/or catastrophic release of coal ash during flood events.”*

The Response cites a previous certification<sup>4</sup> that the units are not located in “unstable areas” as evidence that a catastrophic release could not occur. The cited regulation defines Unstable Area as:

*“[A] location that is susceptible to natural or human-induced events or forces capable of impairing the integrity, including structural components of some or all of the CCR unit that are responsible for preventing releases from such unit. Unstable areas can include poor foundation conditions, areas susceptible to mass movements, and karst terrains.”*<sup>5</sup>

The apparent lack of unstable soil or geologic conditions beneath the site does not indicate that flooding cannot cause a release from the impoundments.

The Response goes on to indicate that the Initial Hazard Potential Classification Assessment Report that was prepared by Andrews Engineering<sup>6</sup> classified the site as Low Hazard Potential CCR Surface Impoundments. This classification was made even though an inspection by a USEPA contractor conducted in 2011 recommended that a hazard classification of Significant be assigned to both the Lakeside and Dallman Impoundments. The USEPA contractor concluded that:

*“The Dallman Ash Pond is not regulated by any state agency and therefore does not currently have a designated hazard rating. The Lakeside Ash Pond is regulated by the Illinois Department of Natural Resources and is classified as a ‘Low Hazard’ potential. However, due to the potential environmental and economic impacts that a failure at either of these impoundments would present, it is recommended that a hazard classification of ‘Significant’ be assigned to both impoundments.”*<sup>7</sup>

A release of waste from the CWLP waste disposal facilities as a result of a flood event would indeed be catastrophic for the environment, and for downstream property owners and water users.

6. Section 2.1, Fourth Bullet – The Response seems to indicate that damage from flood water overtopping the monitoring wells and introducing stream water and sediment into the wells, which necessitated replacement of monitoring wells, is not actually damage to the wells. The Response states that:

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<sup>4</sup> Certification that a CCR unit is not located in an Unstable Area is required by 40 CFR 257.64.

<sup>5</sup>40 CFR 257.53

<sup>6</sup>Andrews Engineering, 2016, Initial Hazard Potential Classification Assessment Report for Coal Combustion Residuals Surface Impoundments, October 2016.

<sup>7</sup>Kleinfelder, 2011, Coal Ash Impoundment, Site Assessment Final Report, Dallman Power Station, City of Springfield, Springfield, Illinois, Section 3.8 Bates 5.12.

*“The damage referenced to the wells was simply a concern that sediment within the flood waters may have entered the well and deposited in the screen or sand pack of the well. Wells were replaced to ensure analytical data was representative of actual groundwater quality and not influenced by potential sediment that may have entered the well. There has never been any physical damage to the wells as a result of erosion or debris (limbs, branches, or similar) from flood water.”*

Even invisible subsurface damage to monitoring wells from the introduction of surface water and sediment is damage to the monitoring system. In addition to invisible damage, during my March 1, 2019 site visit I observed a damaged monitoring well (AP-3) with a bent outer casing that was awaiting replacement after a recent high water event. In my opinion, impairment of the ability of a monitoring well to be used to collect representative water quality and elevation data qualifies as damage to the monitoring system.

7. Section 2.1, Fourth and Fifth Bullets – The fourth and fifth bullets in this section make related comments that are addressed here. The fourth bullet in this section states that:

*“Additionally, there has never been any evidence of erosion of the berms adjacent to the CCR impoundments due to flood water.”*

The fifth bullet in this section indicates that:

*“If the statement in the Report was accurate, embankment erosion would be a reoccurring problem. There is no such documentation or recollection by CWLP personnel.”*

I witnessed erosion of the outside of the berm during my site visit on March 1, 2019 in one location near the northeast corner of the Dallman Impoundment despite the fact that it appeared that most berm surfaces had recently been attended to. Erosion of berm materials was also documented during the USEPA site inspection on August 13, 2010.<sup>8</sup> Whether from surface water or floodwater, the documented erosion of the outer berm shows that the berms can be eroded by flowing water. Erosion of the outer surfaces weakens the berm and provides avenues for release of ash or ash-impacted water.

8. Section 2.1, Sixth Bullet - This section of the Response questions the potential for overtopping of the Spaulding Dam indicated on the most recent FEMA Flood map that is cited in my report. The Response states:

*“The dam contains five gates that can also be lowered to further control the lake level as necessary. There is no potential for lake water to cross the dam into the lime softening ponds.”*

CWLP could certainly attempt to lower the gates to control lake level and stop water from flowing into the Lakeside impoundments. This action would however have the effect of raising the water elevation downstream of the dam and increasing the elevation and erosive

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<sup>8</sup>Kleinfelder, 2011, Coal Ash Impoundment, Site Assessment Final Report, Dallman Power Station, City of Springfield, Springfield, Illinois, Section 3.8 Bates 5.12.

power of the water impinging on the western impoundment berms. At the time of a major flooding event CWLP would be faced with two bad options: to either increase the flow of water against the western berms by lowering the dam gates, or let water flow across the dam and into the impoundments. Either of these options put the stability of the CWLP waste facilities at risk.

9. Section 2.2, First Bullet - The Response states that:

*“According to CWLP personnel on site during the visit (Eric Staley), the surface water perimeter along the west and north berms were tens of feet from the inside of the top of the berm, at a minimum, except where the ash line enters the pond.”*

The most important point in this statement is the caveat that says “except where the ash line enters the pond.” The location where I noted a clear lack of any freeboard was near the northwest corner of the Dallman Ash Pond, near where the ash line enters the pond. This condition makes overtopping of the Dallman Pond berms very likely during any significant precipitation event. The fact that the outside of the western berm showed active erosion<sup>9</sup> occurring directly across the berm from the area of no freeboard is an indication of the vulnerability of the berm to erosion by surface runoff. Erosion of the berm and release of waste would be a significant concern should the berm be overtopped.

10. Section 2.2, Second Bullet - The Response states that:

*“According to CWLP personnel on site during the visit (Eric Staley) the erosion feature was approximately 6 inches deep by 6 inches wide by approximately 30" long and was located at the edge of the haul road, within the haul road base material and not in the berm. However, the Report implies the erosion was occurring in the berm. The roads are graded such that no runoff occurs as any precipitation on the haul road will drain back to the interior ponds.”*

I am uncertain about what erosion feature Mr. Staley saw and is describing. The eroded area that I observed was located near the northwest corner of the Dallman Impoundment on the outside of the Dallman Berm. This eroded area extended down the side of the berm rather than being located on the haul road. The erosion started near the top of the berm and extended down the outer slope. Seepage of water was readily observable starting near the top of the feature. A small rotational slump was observed near the bottom of the eroded area. The erosion feature described by Mr. Staley is distinctly different than the erosion feature that I observed in the field.

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<sup>9</sup> See Rebuttal Item #7.

11. Section 2.2, Third Bullet – The Response states that:

*“According to CWLP personnel on site during the visit (Eric Staley), the slump of berm sediment was the result of vegetative maintenance on the sideslope of the berm where the bucket of a backhoe was used to remove vegetation from the surface of the berm and that the ‘slump’ was the leading edge of the limit of the reach of the backhoe. It was simply the area where vegetation was not scraped from the surface. There was no slump of berm sediment. Additionally, as stated by Mr. Staley, no seep was present in the northwest corner of the Dallman Ash Pond. Mr. Staley stated it was ponded water from recent precipitation events, which is a common occurrence as the area immediately north of the impoundment drains back towards the base of the Dallman Ash Pond.”*

It is unclear what slump of berm sediment caused by a backhoe Mr. Staley is referring to. The small rotational slump that I observed was at the bottom end of an eroded area downslope from the top of the Dallman Ash Pond berm. The erosion and seepage that I observed was in no way ponded water from recent precipitation events that was draining toward the ash pond.

12. Section 2.3 First Bullet – This Bullet indicates that:

*“The vertical berms tied into the existing berm system but largely overlie existing ash as the offset was to the interior of the pond. Use of FGD sludge aided in structural stability of the berm and presents no potential for groundwater contaminants outside the pond's clay lining as any vertical migration of solutes would be to the underlying ash deposits within the original Lakeside Ash Pond perimeter.”*

The explanation proffered above would work if contaminated water flowed only vertically. However, contaminated water flows horizontally through weak points in the berms as well as vertically into underlying materials. If water only flowed vertically there would not be the documented history of seepage problems along the sides of the impoundments and there would not be a need for the ditch along the northeast side of the Lakeside Ash Pond to collect seepage.

13. Section 2.3, Second Bullet, and Section 2.7, Sixth Bullet, First Sub-Bullet – These bullets indicate that:

*“Ms. Corcoran stated in her deposition (page 36) that the toe drain was redone the summer of 2018 and there is no leakage now, that that's been corrected.”, and “Ms. Corcoran stated in her deposition (page 36) that maintenance was conducted on the toe drain during the summer of 2018 and there is no leakage now. She also stated the Illinois EPA inspected the facility as part of the facility NPDES permit and had no comments with respect to the impoundment berm system.”*

At the time of my site visit there was no visible leakage from the area of the re-constructed toe drains on the west side of the Lakeside Ash Pond. Since this was a recently completed fix it remains to be seen whether leakage from this location will eventually return. However, leakage through the berms of the Lakeside Ash Pond has been and continues to be a problem. A ditch has been constructed at the toe of the slope on the north side of the Lakeside Ash Pond that collects leakage from the impoundment and directs the collected leachate across the surface to discharge into the Clarification Pond. Collection of leachate that migrates through the berms, either in subsurface pipes (toe drains) or in a surface ditch does not mean that the berms do not leak. It simply means that the leakage is being collected at those locations.

14. Section 2.6, First Bullet – This section of the Response states that:

*“Section 4.3.2 of the Report states ‘Six years after the initiation of groundwater sampling CWLP has established proposed background water quality values.’ This statement implies no background concentrations were established for six years after implementation of the groundwater monitoring program.”*

This comment was actually intended to highlight how long it has been since CWLP became aware of coal ash related groundwater contamination with no effective actions taken to correct this condition. If I rewrote that sentence, I might note that despite establishing proposed background water quality values, CWLP has taken no effective steps to stop the release of contaminants.

15. Section 2.6, Second Bullet – This section of the Response indicates that:

*“As stated in the last sentence of the above excerpt, TDS appears to be associated with the sulfate concentration. Even though TDS is a separate parameter, it does not represent an additional solute present in the groundwater.”*

My Report correctly discusses TDS as a monitoring parameter included in the CWLP monitoring program that has its own background concentration and Class 1 Groundwater Quality Standard. It clearly describes TDS as being similar to sulfate concentrations. My Report does not describe TDS as an additional solute.

16. Section 2.6, Third Bullet – This section of the Response indicates that:

*“The first sentence of the second paragraph in Section 4.4.5 states ‘In summary, each of the downgradient wells is impacted with ash contaminants.’ The groundwater monitoring wells have been sampled and evaluated pursuant to 40 CFR Sections 257.93 through 257.95. Only arsenic in well RW-3 was determined to be a statistically significant increase exceeding the background concentration requiring further evaluation pursuant to 40 CFR Section 257.95(g).”*

The Response attempts to focus only on arsenic since that parameter is the only one currently showing a statistically significant exceedance of background values when tested using procedures required by federal regulations. Section 4.4 of my report summarizes monitoring data showing elevated concentrations of Boron, Sulfate, Manganese, Arsenic and TDS in water from downgradient monitoring wells, including concentrations above Illinois Class 1 Groundwater Quality Standards. The Groundwater Quality Standards<sup>10</sup> provide numeric standards that are not to be exceeded<sup>11</sup>. Groundwater from downgradient monitoring wells at the Dallman Ash Pond clearly violates Illinois Groundwater Quality Standards.

17. Section 2.6, Fourth Bullet – This section of the Response states that:

*“There are no references cited for the 2012 and 2013 IEPA indications of violations. A search found no Illinois documents or references to ‘violations’ in 2012 and 2013.”*

The third paragraph of a letter<sup>12</sup> dated May 12, 2014 from the City of Springfield, Office of Public Utilities, to the Illinois Environmental Protection Agency concerning exceedances of Groundwater Quality Standards in monitoring results from 2012 and 2013 reads as follows:

*“The VN alleges that operations at CWLP's ash impoundments have resulted in exceedances of Groundwater Quality Standards in four (4) groundwater monitoring wells; more particularly that the Groundwater Quality Standard for boron has been exceeded in four (4) of these wells, and that one (1) well (AP-1 R) also has exceeded the Groundwater Quality Standards for Sulfate and for TDS for sampling conducted by CWLP in 2012 and 2013. Boron is alleged to have exceeded the standard of 2.0 mg/L in well AP-2 with a sample value of 2.63 mg/L once (1x) in 2010. Well AP-2R is alleged to have eight (8) exceedances for boron in 2012 and 2013, with well AP-3 alleged to have eight (8) exceedances for boron in 2012 and 2013, and one in 2010.”*

The Illinois Environmental Protection Agency subsequently declined to enter into a Compliance Commitment Agreement with Springfield writing<sup>13</sup> on May 29, 2014 that:

*“Due to the nature and seriousness of the violations and the extended time requested to achieve compliance, the Illinois EPA has determined that these violations may not be able to be resolved without the involvement of the Office of the Attorney General or the State's Attorney.”*

There remains no indication that actions have been taken to remedy these violations of Illinois Groundwater Quality Standards.

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<sup>10</sup> Title 35, Chapter I, Part 620, Section 620.410(a)

<sup>11</sup> The only exceptions to this prohibition are where groundwater naturally exceeds the standards or where an alternative source is identified, neither of which apply at the CWLP impoundments.

<sup>12</sup> Bates 04.10 and Exhibit A

<sup>13</sup> Bates 04.11 and Exhibit A

18. Section 2.7, First Bullet – This section of the Response indicates that:

*“It is premature to assess, select and design corrective measures until information is obtained and evaluated from the investigation characterizing of the nature and extent of the arsenic exceedance.”*

It is not premature to discuss possible remedies considering that CWLP has done nothing to address impacts to groundwater impacts in the 9 years since the first samples showing high concentrations of ash-related constituents were analyzed. This is especially true here: because the CWLP waste facilities are located immediately adjacent to and within the 100-year floodplain of Sugar Creek, and the waste has been placed below the water table, the range of effective remedies is severely limited.

19. Section 2.7, Second and Fifth Bullets – The second bullet of this Response seems to argue that the potential for a catastrophic release is improbable, even under flood conditions. The rationale for this statement appears to be that:

*“Section 257.102(k) [Criteria for conducting the closure or retrofit of CCR units] states any retrofitted units must comply with the requirements of Section 257.72 (Liner design for new CCR surface impoundments and any lateral expansion of a CCR surface impoundment). This includes the structural integrity criteria for new CCR surface impoundments pursuant to Section 257.74.”*

The fifth bullet of this Response says:

*“As stated previously, pursuant to 40 CFR Part 257, a retrofitted unit must comply with all requirements of a new CCR impoundment, including structural integrity.”*

Considering that the CWLP waste facilities are located immediately adjacent to and within the 100-year floodplain of Sugar Creek, and that it appears that 100-year or greater storm events will send water over the Spaulding Dam and onto the waste units, retrofitting the waste units so that they are not potentially susceptible to a catastrophic release would seem unrealistic. A structurally sound impoundment design does not necessarily mean that it is capable of withstanding a 100-year flood. CWLP could attempt to lower the dam gates during a flood event to control lake level and stop water from flowing into the Lakeside impoundments. This action would however have the effect of raising the water elevation downstream of the dam and increasing the elevation and erosive power of the water impinging on the western impoundment berms. It is also true that the 100-year flood is not the largest flood that will occasionally occur. Locating waste disposal facilities on a floodplain and immediately adjacent to a stream exposes the facility to the high groundwater elevations, and inundation and erosion by floodwaters.

20. Section 2.7, Third Bullet – The Response indicates that:

*“The Report does not provide a reference for the ‘additional costs’ as no comparison was provided for excavation and disposal costs as recommended in Section 5.2.10. A cost analyses is an integral part of the decision process for remedial design and closure goals.”*

The intention of this section of my Report is to identify potential remedial options that provide permanent solutions and minimize long-term operation and maintenance costs and the risk of catastrophic release. My Report shows that the location of the unlined CWLP waste facilities on the floodplain of Sugar Creek, with waste placed below the water table, reduces the number of options that are both protective of the environment and permanent solutions. A detailed analysis of alternatives should be conducted in order to evaluate the range of options and make a final selection. The analysis of alternatives would evaluate remedial options for criteria such as: protection of human health and the environment; compliance with applicable regulations; long-term effectiveness and permanence; reduction of toxicity, mobility, and volume through treatment; short-term effectiveness; implementability; cost; and regulator and community acceptance.

21. Section 2.7, Fourth Bullet – The Response states that:

*“The provisions of the Illinois Environmental Protection Act do not require that CCR be placed in sited facilities, nor do the regulations provided in 40 CFR Part 257.”*

The word “sited” in my Report was not a reference to a regulatory requirement. It could be readily re-worded as, “Waste removed from the current leaking impoundments should be removed to a properly located and constructed disposal facility.” A properly located facility does not place waste with a floodplain and adjacent to a stream, with waste located below the water table.

22. Section 2.7, Sixth Bullet, Second Sub-Bullet – The Response states that:

*“The Report utilizes the most stringent groundwater quality standards, yet does not discuss or acknowledge subsequent sections of the regulations which allows for the establishment of a groundwater management zone (GMZ) as listed in Section 620.250.”*

My Report does not discuss establishment of a GMZ for the Dallman Ash Pond because one has never been proposed or established.

23. Section 2.8, First Bullet – The Response says:

*“Pursuant to 40 CFR 257.90 through 257.95, only arsenic at well RW-3 exceeded a groundwater protection standard requiring additional activities.”*

This response again attempts to focus only on arsenic since that parameter is the only one currently showing a statistically significant exceedance of background values when tested using procedures required by federal regulations. Section 4.4 of my report summarizes monitoring data showing elevated concentrations of Boron, Sulfate, Manganese, Arsenic and TDS in water from downgradient monitoring wells, including concentrations above Illinois

Class 1 Groundwater Quality Standards. The Groundwater Quality Standards<sup>14</sup> provide numeric standards that are not to be exceeded<sup>15</sup>. Groundwater in the downgradient monitoring wells at the Dallman Ash Pond clearly violates Illinois Groundwater Quality Standards.

24. Section 2.8, Second Bullet – The Response says:

*“The Illinois EPA strategy is to obtain US EPA approval pursuant to the Water Infrastructure Improvements for the Nation Act (WIIN) such that the State program would be legally binding. This would allow the resolution of State regulations that conflict with current 40 CFR Part 257 regulations. It is typical and expected that the proposed Part 841 regulations will be generally similar to the existing Federal regulations.”*

Although IEPA at one time intended to enforce compliance with groundwater quality standards, no such enforcement has occurred and groundwater contamination downgradient of the Dallman Ash Pond continues unabated as of this date. My report does not address the rationale for IEPA’s aborted enforcement of Illinois Groundwater Quality Standards.

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<sup>14</sup> Title 35, Chapter I, Part 620, Section 620.410(a)

<sup>15</sup> The only exceptions to this prohibition are where groundwater naturally exceeds the standards or where an alternative source is identified, neither of which apply at the CWLP impoundments.

GEO-HYDRO, INC.

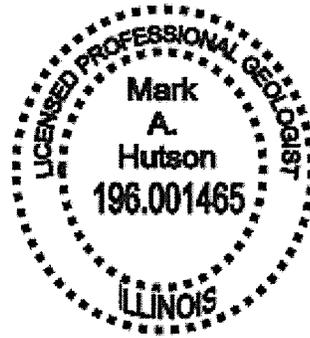
### 3. Concluding Remarks

This report sets forth my rebuttal of comments on my Supplemental Expert Report submitted by Mr. Brad Hunsberger, LPG on behalf of City Water, Light and Power. I reserve the right to supplement this report and/or my opinions as new or additional information is brought to light in the future.



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Mark A. Hutson, P.G.  
Illinois Licensed Professional Geologist No. 196.001465



Electronic Filing: Received, Clerk's Office 01/29/2020  
GEO-HYDRO, INC.

**EXHIBIT A**

**Enforcement Letters from  
Illinois Environmental Protection Agency**



OFFICE OF PUBLIC UTILITIES  
CITY OF SPRINGFIELD, ILLINOIS

J. MICHAEL HOUSTON, MAYOR

VIA CERTIFIED MAIL

May 12, 2014

Ms. Andrea Rhodes  
Mr. Michael Crumly  
Illinois Environmental Protection Agency  
Division of Public Water Supplies, CAS #19  
P.O. Box 19276  
Springfield, IL 62794-9276

Re: Violation Notice No.: W-2014-00002  
Facility No.: IL 1671200  
(Springfield—City Water, Light & Power)

Dear Ms. Rhodes and Mr. Crumly,

This is written on behalf of the City of Springfield, Office of Public Utilities, City Water, Light & Power (CWLP) regarding the above-referenced Violation Notice (VN) received by Mayor Houston on February 25, 2014.

CWLP submitted a response to the VN on April 2, 2014 that included a proposed Compliance Commitment Agreement (CAA) and requested a meeting with the Agency to discuss. As you know, the meeting with the Agency was held on April 22, 2014 and CWLP received additional correspondence on the VN on April 23, 2014. This letter is the proposed terms for the CCA and meeting response as requested by the Agency per the April 23, 2014 letter.

The VN alleges that operations at CWLP's ash impoundments have resulted in exceedances of Groundwater Quality Standards in four (4) groundwater monitoring wells; more particularly that the Groundwater Quality Standard for boron has been exceeded in four (4) of these wells, and that one (1) well (AP-1R) also has exceeded the Groundwater Quality Standards for Sulfate and for TDS for sampling conducted by CWLP in 2012 and 2013. Boron is alleged to have exceeded the standard of 2.0 mg/L in well AP-2 with a sample value of 2.63 mg/L once (1x) in 2010. Well AP-2R is alleged to have eight (8) exceedances for boron in 2012 and 2013, with well AP-3 alleged to have eight (8) exceedances for boron in 2012 and 2013, and one in 2010.

As you know, these monitoring wells were voluntarily installed and sampled, and the results submitted to the Agency by CWLP pursuant to a groundwater monitoring plan voluntarily filed with the IEPA for approval (and approved) pursuant to the Agency's request to CWLP as part of its Ash Impoundment Strategy. CWLP engaged Stabilize, Inc., which designed a plan to characterize the local hydrogeologic conditions specific to the impoundments, evaluate the potential for migration from the impoundments and identify potable water supply wells with

2,500 feet of the impoundments. Results were submitted to the Agency in August 2010 (with no potable water supply wells found within 2,500 feet). Subsequently, the Illinois EPA required the submittal of a Groundwater Monitoring Program, which included the proposed locations for the installation of an additional background well and replacement of two downgradient wells. The subject Groundwater Monitoring Program was designed by Andrews Engineering, Inc. and submitted to the Illinois EPA on November 18, 2011. The Groundwater Monitoring Program was approved December 29, 2011.

CWLP appreciates the Agency's efforts both before the VN and in the future to work with CWLP toward an acceptable and as cost-effective solution as possible to the issue of groundwater exceedences. The solution will be consistent with the steps of a scientific process to ensure that the groundwater and hydrogeologic conditions are properly investigated and assessed, and to determine appropriate mitigation activities. As explained above, CWLP had been voluntarily engaged with the Agency in that process when the VN was issued.

Toward that end and consistent with Section 31(a)(2) of the Environmental Protection Act (Act), CWLP proposed to enter into a Compliance Commitment Agreement (CCA) with the Agency (as suggested in more detail below) and requested a meeting with the Agency to discuss the VN and CWLP's CCA proposal. As you know, CWLP has been participating in the rulemaking proceeding underway before the Illinois Pollution Control Board (IPCB) that would formalize a process for ash impoundment assessments for the protection of groundwater. CWLP's CCA proposal takes into consideration our Groundwater Monitoring Program already approved by the Agency and the steps that have been underway, proposing additional investigation in a manner that would not require CWLP to engage in unnecessary costly duplicative consulting services once the regulations in R14-10 become final. CWLP notes that the VN did not set forth suggested mitigation activities or a suggested timeline toward compliance, and therefore suggests the next steps as follows:

**Proposed CCA:** Complete additional activities to investigate and assess the extent of concentrations exceeding the applicable standards and/or the background concentrations to the groundwater, based on available and ongoing groundwater monitoring results, potentially addressing the conditions in 35 Ill. Adm. Code 620.250. Within 45 days of the Agency's acceptance of CWLP's CCA, CWLP will submit an approvable assessment monitoring plan to the Agency for review which defines the subject activities. It is assumed the Illinois EPA will provide a response to the assessment plan within 30 days.

#### **Phase 1**

- The approvable assessment monitoring plan will identify what parameters must be tested, by identifying the constituents of concern (COC);
- CWLP expects that the assessment monitoring plan would require approximately 8-10 Geoprobe borings located along the periphery of the specific affected monitoring wells, which may include areas across the creek (north and/or west);
- Discreet groundwater samples will be collected and analyzed from each borehole for each COC;
- One-inch piezometers may also be placed in borings where such data are deemed necessary or relevant for possible subsequent work;
- If the extent of concentrations exceeding the applicable limits is not defined during the first phase of drilling, additional phases shall be conducted until the extent is defined;

- CWLP will provide a written report to the Bureau of Water detailing the results of the assessment activities.

## Phase 2

- Subsequent to identifying the extent of COC exceedences attributable to the impoundment(s), a Groundwater Management Zone (GMZ) shall be established within one (1) year of the Agency's acceptance of CWLP's CCA.
- As part of the establishment of the GMZ, potential corrective actions will be evaluated for implementation to control and/or mitigate the COC exceedences. Potential compliance options that may be considered after the extent of elevated concentrations has been determined are set forth below. The timetable for the potential compliance options listed below is difficult to set forth at this time; however, CWLP has estimated the time needed to perform each activity upon initiating.
  - Establishing a CWLP site-specific rule or an adjusted standard (Illinois Pollution Control Board) for alternative groundwater standards for COC(s) (timetable – one (1) year from initiating). An adjusted standard pursuant to 415 ILCS 5/28.1 may not require corrective action, dependent upon the content of the Adjusted Standard Petition;
  - Groundwater extraction and discharge via outfall 004 and/or to the Springfield Metro Sanitary District (timetable – two (2) years from initiating);
  - Installing a dry fly-ash handling system on Dallman Unit 33 (timetable – four (4) years from initiating);
  - Dredge portion of the Dallman ash impoundment and retrofit with compliant liner. Close and cap unused portion of Dallman ash impoundment (timetable – six (6) years from initiating).

Pursuant to statements by Illinois EPA personnel during the April 22, 2014 meeting, Phase I activities as originally proposed (and re-proposed here) are acceptable toward the CCA, but required follow-up activities to address the exceedences. At that meeting Illinois EPA personnel also stated that active remediation (pump and treat or the installation of a barrier wall) will not be required unless elevated concentrations are migrating off site or impacting a water supply. Neither appears to be occurring at the subject facility. The Phase 1 assessment monitoring will provide additional data on these issues.

CWLP will assess the effectiveness of the above referenced potential corrective actions for the ability of the action to improve the groundwater quality with respect to the identified COCs. CWLP shall provide the Bureau of Water written notification of the selected corrective action with accompanying justification for such selection. The Bureau of Water will provide approval of the selection prior to corrective action implementation by CWLP. A construction report shall be submitted upon completion of the corrective action.

## Summary

Following is a summary of the anticipated tasks and related timelines leading up to implementation of corrective action. Dates that are dependent upon fieldwork may vary.

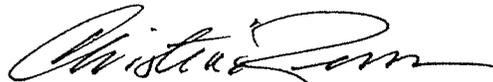
1. May 13, 2014 – submittal of the CCA to the Illinois EPA.
2. June 12, 2014 – Illinois EPA approval of the CCA.
3. July 27, 2014 or 45 days from Illinois EPA approval of CCA – CWLP submits the assessment plan to the Illinois EPA for approval.

4. August 26, 2014 – Illinois EPA approves the assessment plan.
5. November 15, 2014 or 80 days from Illinois EPA approval of the assessment plan – CWLP provides results of the assessment to the Illinois EPA.
6. April 15, 2015 or 150 days from the above referenced task – CWLP provides notification of selection of corrective action and accompanying information to the Illinois EPA.
7. Timetable for implementation and completion of corrective action dependent upon the results of the foregoing assessment monitoring and other activities.

CWLP may request meetings with the Bureau of Water during the process to discuss preliminary findings and possible conclusions. CWLP believes that it has provided an aggressive timetable here for addressing the groundwater exceedances discovered through its voluntary participation in the Illinois EPA's Ash Impoundment Strategy. As explained at the meeting, CWLP is disappointed and believes it unrealistic and outside the terms and intent of Section 31 of the Act to require corrective action for groundwater exceedances to be complete within one (1) year, in order to avoid referral to the Attorney General, as the Illinois EPA appeared to say is the only timetable in which a CCA will be accepted. CWLP respectfully requests reconsideration of such limitation.

CWLP reserves its right under Section 31 to amend or add to this response. Please contact me if you have any questions or need additional information. I can be reached at: (217)789-2116 (ext. 2628) or at: [Christine.zeman@cwlp.com](mailto:Christine.zeman@cwlp.com). Thank you.

Sincerely,



Christine Zeman  
Regulatory Affairs Director

Cy: PJ Becker  
Sue Corcoran



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 • (217) 782-2829

PAT QUINN, GOVERNOR

LISA BONNETT, DIRECTOR

217-785-0561

May 29, 2014

CERTIFIED MAIL # 7011 1150 0001 0859 2144  
RETURN RECEIPT REQUESTED

J. Michael Houston  
800 East Monroe Street  
Municipal Center West  
Springfield, IL 62701

Re: Notice of Non-Issuance of Compliance Commitment Agreement  
Violation Notice: W-2014-00002  
SPRINGFIELD, IL1671200

Dear Mr. Houston:

The Illinois Environmental Protection Agency ("Illinois EPA") has reviewed the proposed Compliance Commitment Agreement ("CCA") terms submitted by Springfield in a letter dated April 2, 2014 and a meeting response dated May 12, 2014, in response to the Violation Notice dated February 20, 2014, and has decided not to issue a proposed CCA for these violations. Due to the nature and seriousness of the violations and the extended time requested to achieve compliance, the Illinois EPA has determined that these violations may not be able to be resolved without the involvement of the Office of the Attorney General or the State's Attorney.

Because the violations remain the subject of disagreement between the Illinois EPA and Springfield, this matter will be considered for referral to the above-referenced prosecutorial authorities for formal enforcement action and the imposition of penalties.

Questions regarding this matter should be directed to Andrea Rhodes at 217/785-0561. Written communications should be directed to Illinois EPA, Attn. Andrea Rhodes, MC#19, 1021 North Grand Ave East, Springfield, IL 62702.

Sincerely,

W. David McMillan  
Manager, Division of Public Water Supplies  
Bureau of Water

cc: Sue Corcoran

