



27777 FRANKLIN ROAD, SUITE 2500 • SOUTHFIELD, MICHIGAN 48034-8214
PHONE 248.351.3000 • FAX 248.351.3082
www.jaffelaw.com

Arthur H. Siegal
asiegal@jaffelaw.com
248.727.1452

January 11, 2022

Board of Directors
c/o Mr. Larry L. Kieft
Grand Haven Board of Light and Power
1700 Eaton Drive
Grand Haven, MI 49417

Re: Grand Haven Board of Power and Light/JB Sims site/Review and Strategies

Dear Mr. Kieft:

This letter is sent to you to summarize recent developments regarding the JB Sims Site. This letter is not a formal opinion of counsel, but the issues summarized address the possibility of potential litigation and liability and, as such, a briefing of the Board on the facts and law is advisable.

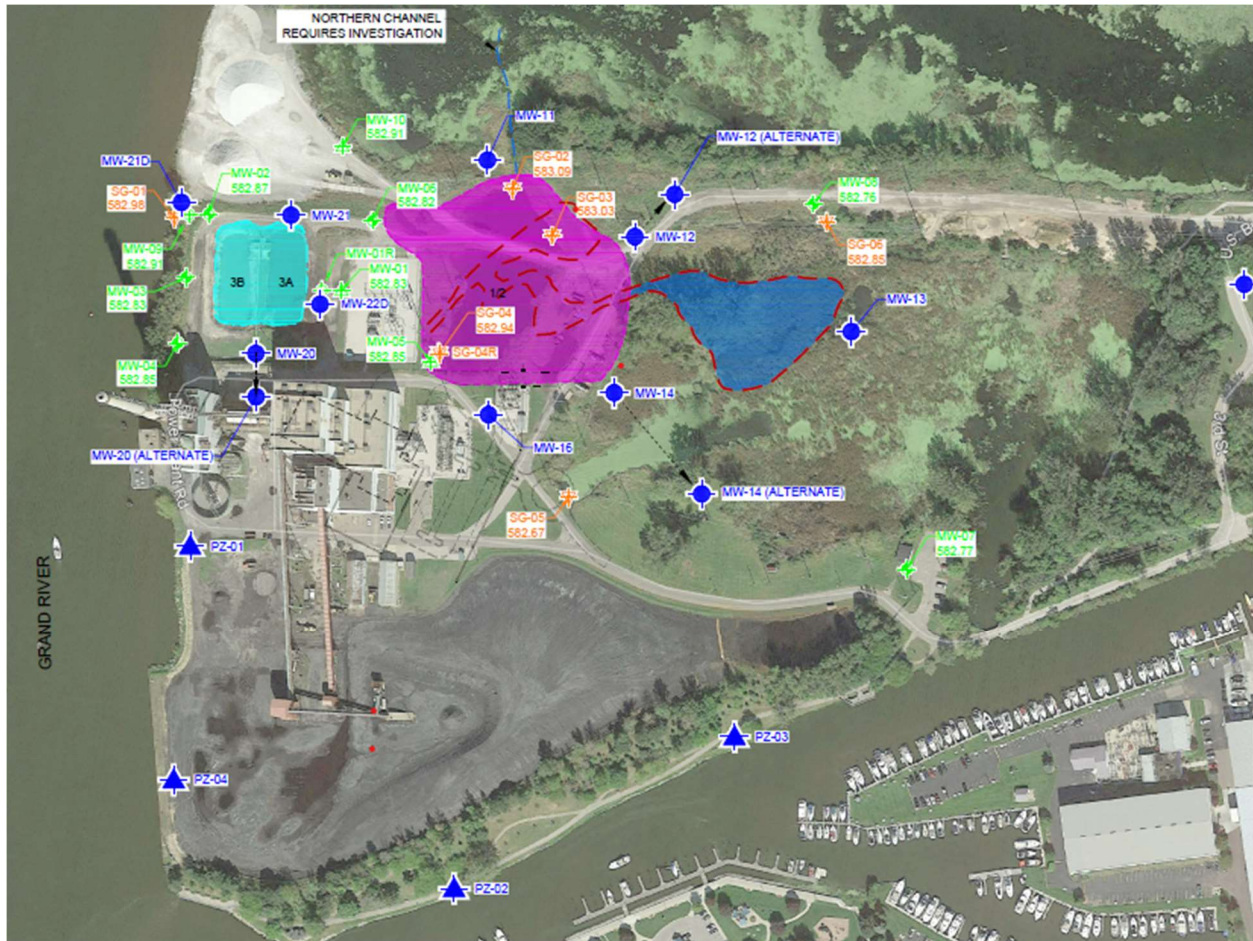
This follows up on and may repeat (for the benefit of new members of the GHBLP Board and the City Council) some information previously provided. There are three different acknowledged coal ash impoundments at the Sims Site: (a) Impoundment 3A; (b) Impoundment 3B; (c) Impoundment 1/2 (the "Impoundments"). These are not the only issue at the site. A map is provided on the next page.

Portions of the Sims Site are known to have been filled with ash. Also, historical photographs and reports (as well as subsurface excavations) document that the Sims Site was used for waste disposal by the City before ash from the power plant was generated or disposed at the Sims Site. Further, other portions of Harbor Island were reportedly: (1) constructed with waste materials, (2) filled with dredgings from the Grand River (including the area now used for soccer fields); and (3) had been used as petroleum tank farm. We continue to research those past uses.

A. Introduction

There are two sets of regulatory regimes that govern the management of coal ash impoundments – State regulation found at Part 115 of the Michigan Natural Resources and Environmental Protection Act ("NREPA"), MCL 324.11501 *et seq.* (2018 PA 640) and Federal regulation found at 40 CFR Part 257. These regulatory regimes are relatively new, with some of the requirements of the two regimes largely complimentary and parallel, but there are differences

between the two and, at the moment, the State of Michigan has not received approval from EPA to implement its legislation in place of the federal rule. Therefore, both regimes govern this situation.



The EPA rule is self-implementing and, therefore, EPA does not have the level of involvement that the Michigan Department of Environment, Great Lakes and Energy (EGLE) has in this process. BLP staff spent the better part of 2020 bringing EPA up to speed on the site and working to determine a delineation that would satisfy the federal agency in accordance with EPA's rules rather than just trying to comply with EGLE's somewhat different rules. It should be noted that neither EGLE nor EPA is charged to focus on cost-effectiveness and both agencies read the statutes and rules without focusing on outcome, underlying rationales or cost.

It is important to understand that the BLP's charge to Golder and this law firm were to help the BLP and the City minimize risk either already in existence or that might be created by acting without adequate information. The BLP also directed that the goal should be to comply with the law and regulations in a cost-effective fashion to protect the ratepayers and taxpayers of the community from expenditures that would not result in health or environmental protection.

The BLP has been working with EGLE over the last two plus years to bring the Impoundments into compliance with the law and to an environmentally safe and compliant closure. Unfortunately, circumstances and EGLE's initial task-by-task approach made this more complicated and time-consuming than anyone had hoped.

Also, EGLE staff have made it clear that they will not prescribe actions that will satisfy it, but rather, will ask the BLP and its experts to submit data and make proposals which may or may not be approved. This is typical of how EGLE functions with private parties but is not the most efficient manner of bringing matters to completion. The goal has never been to “fight” with EGLE but, rather, to work with EGLE to achieve a cost-effective, environmentally protective resolution.

B. Impoundments 3A and B

Impoundments 3A and 3B were constructed above grade in the early 1980s. BLP emptied and cleaned these Impoundments of their contents and a report certifying closure was submitted to EGLE on December 11, 2020. Closure certification of the 3A and 3B Impoundments by December 28, 2020 was required by the law. *See, e.g., MCL 324.11502.*¹ In December, the BLP submitted to EGLE a report documenting the removal of coal ash. The BLP also submitted to EGLE on December 28, 2020, a report of Alternative Source Demonstration (ASD) providing supporting evidence that the Unit 3 impoundments’ clay liner had not leaked and was not a source of groundwater contamination detected nearby due to: (1) the closure work; (2) geochemical fingerprinting of site groundwater, porewater from Unit 3, background groundwater and Grand River samples; and (3) statistical trend analysis of the groundwater samples showing stable groundwater quality over time which would not happen if the Unit 3 impoundments (which were active until closure in August 2020) were leaking. In short, the ASD concluded that the Unit 3 impoundments were not the source of the groundwater contamination detected. As discussed below, EGLE disagrees.

In response to the closure certification, EGLE sent the BLP a letter on January 21, 2021, taking the position that BLP had not achieved an acceptable closure of the Unit 3 Impoundments. EGLE also responded to the Alternative Source Demonstration in a letter dated January 28, 2021. EGLE did not approve the ASD, taking a number of positions including asking that the BLP demonstrate irrefutably the source of the groundwater contamination at the site.

This led to a dialogue between EGLE and the BLP which took the better part of 2021 and included substantial work, based on multiple lines of evidence, to satisfy EGLE that the ash had been removed from the Unit 3 Impoundments. The lines of evidence included final elevations of the excavation, colorimetric testing, microscopic analysis, analytical test results of 22 parameters of concern, and comparison with the original source clay located at the Bass River Recreational Area. EGLE has not approved the BLP’s conclusion that the ash has been acceptably removed because four coal ash contaminants were detected in the remaining clay in excess of EGLE standards. As a result, it is the opinion of the BLP staff, Golder and this law firm that if the issue of the removal of ash from the clay cannot be resolved successfully, that does not bode well for achieving agreement on closure as to the remainder of the Sims Site, which is substantially more complex.

Among other things (some of which are discussed below), the BLP in 2021:

- Sought out, gathered and analyzed data from the clay that was the source of the 1980’s construction the Unit 3 Impoundments and engaged in a dialogue with EGLE regarding evaluating the clay left after the Impoundments were emptied.
- Worked through various EGLE divisions that had different interpretations of the appropriate background data to be used in comparison to site data, State background data, and original source data.

¹ Under EPA’s rules, both the Unit 3 and Unit 1/2 Impoundments are to achieve closure by October, 2023.

- Went through a lengthy dialogue with EGLE and EPA resulting in the installation of a broader set of groundwater monitoring piezometers aimed at expanding the groundwater monitoring program at the site to satisfy both EGLE and EPA requirements.

The 3A/3B Impoundments remain empty and in December, 2021, EGLE explicitly took the position that iron, selenium, lithium, and arsenic detected in the remaining clay require either: (a) the removal and disposal of the clay; or (b) closure in place of the remaining clay by treating it as a landfill. It should be noted that the lithium concentrations of the clay remaining at 3A/3B Impoundments were lower than the lithium concentrations identified by the State of Michigan in its guidance document and the levels the BLP identified at the Bass River Recreational Area (which was the source of the clay in the Impoundments). EGLE has informed BLP that data cannot be used. Additionally, of the 20 locations tested only two spots had arsenic levels that were 0.1 part per million (ppm) above the State limits.

As EGLE will not accept the clay that remains as acceptably clean, that leaves two options as EGLE noted – removal of the clay and off-site disposal or closure in place.

1. **Removal**

If removal of the clay is selected, the BLP would have to stage and time the removal and some sort of replacement to avoid exacerbation of the ash and waste beneath the former Unit 3A/3B Impoundments, otherwise there could be an improper discharge to the Grand River as well as, fines and penalties and possibly remedial expenses. The removal, disposal and replacement of the clay (not the underlying materials) was estimated to be approximately \$750,000.² Because contaminants would be exposed, to avoid liability for exacerbation due to the exposure, that clay would need to be replaced. This approach is very expensive, and adds virtually no incremental benefit while diverting resources from the Sims Site's other, more pressing, environmental issues that pose a more significant risk. Additionally, as outlined in EGLE's December 9, 2021 letter, EGLE will not approve the Unit 3A/3B Impoundment closure until the groundwater (which EGLE assumed was contaminated by releases from these lined Impoundments) are below State groundwater protection standards. Since EGLE has not yet concurred that groundwater contamination (below the clay) is from the unlined impoundments, approval of closure by removal is unlikely to be achieved. The recent discovery of PFAS and non-CCR contamination under this clay, leave unclear whether EGLE will change its view of the previously submitted Alternate Source Demonstration.

2. **Closure in Place**

The rules regarding closure in place are not entirely clear in this scenario but it appears that the BLP would be obligated to take the following actions:

- (a) Eliminate free liquids by removing liquids from the Unit 3A/3B Impoundments.
- (b) Stabilize the remaining materials (the clay in this case) so that it will be sufficient to support final cover.
- (c) Cover the surface impoundment with a final cover that complies with R 299.4304 (2 feet of compacted soil + a 6 inch erosion layer that will support plant growth).

² This did not take recent cost increases into account nor did it take the cost of managing PFAS in the groundwater at the site into account – which will drive up closure costs significantly.

- (d) Groundwater monitoring and post-closure maintenance in accordance with rules applicable to type III landfills.

MAC R. 299.4309(7). These last two requirements are significant. Under Michigan's rules, the closed area must be regularly inspected and groundwater must be monitored for 30 years. MAC R. 299.4319. Further, under Michigan law, EGLE may assert that the BLP must establish and maintain a perpetual care fund for that 30 year period. If this applies to the 3A/3B Impoundment, the amount is calculated based on the quantity of waste up to a maximum of \$1,253,000 (which is annually adjusted for inflation). Given that the wastes have been removed from these two former impoundments and EGLE is focused on the detections of chemicals in the parts per million, it is not clear what the perpetual care fund amount would be. There is a process where the BLP and City may be able to rely on their creditworthiness to support 95% of perpetual care fund requirement.

Further, EGLE has previously asserted that, to close an impoundment after December, 2020 (even one that is empty and ceased accepting wastes before December of 2020), an operating license is required and, potentially, financial assurance of \$20,000/acre must be provided to assure maintenance for that 30 year period. Golder believed that enough evidence was provided by the deadline date to confirm that closure had been achieved. EGLE disagreed as noted above. BLP asked EGLE, in early spring 2021, if it should submit an application for an operating license based on EGLE disagreement on closure. EGLE replied in an email on March 19, 2021, that it was drafting an administrative consent order and "at this time applying for an operating license is not recommended as it would complicate the resolution process."

Finally, at EGLE's request, BLP committed to remove ash residuals that rest outside some of the berms and on some of the roadways outside the 3A and 3B Impoundments.³ This will be followed by some of the same confirmation techniques (likely colorimetric and microscopic confirmation) that were used with the interior of the Impoundments. Golder has estimated this cost to be on the order of \$120,000. Given EGLE's previous challenges to the BLP's multiple lines of evidence regarding the interior of the 3A and 3B Impoundments, there is a risk that EGLE will not accept such confirmatory work and a more cost-effective solution may exist under an expanded closure-in-place option.

C. Impoundment 1/2

This situation is more complex as this area was not designed, engineered, or constructed but rather was historic filling of a low area in the island with ash. The first issue to be resolved was the "footprint" of the impoundment in question - which, unlike the 3A/3B Impoundments, was less clear. The BLP could not plan for an area that was ill-defined and so a consensus was sought with both State and Federal regulatory agencies.

On November 24, 2020, EPA presented a diagram that they considered as properly delineating this impoundment. This diagram did not match the guidance that EGLE gave to Golder in October 2019 to satisfy EGLE's rules. On January 14, 2021, EPA and EGLE confirmed during a conference call that they jointly agreed on the Impoundment's footprint as shown above – including only the blue and maroon areas. As noted above, the areas outside the 3A/3B and Unit 1/2 Impoundments, are not deemed impoundments subject to closure but may have historically received

³ We understand that there are sites in Michigan being permitted to leave ash in place outside the perimeter of removed impoundments if it was placed as historic fill.

ash (and waste) as beneficial fill which is to be addressed under Part 201 of the Michigan Environmental Code. The BLP agreed with this expanded definition of the Unit 1/2 Impoundment.

EGLE has taken the position that this Impoundment is regulated under Part 115 (although no operating license is required) and is subject to the Part 115 closure requirements for Type III landfills discussed above. That is open to debate. There is little doubt that EPA does have regulatory authority here under its language which differs from Michigan's law.

As noted above, the feasibility and cost of closure options for the Unit 1/2 Impoundment was evaluated last year. The discovery of PFAS compounds throughout the Site (as discussed below), apparently related to past non-ash waste disposal at the Site, has complicated and delayed the next steps in this process. PFAS, along with a few other compounds detected raise significant impediments relating to future development at the Sims Site and perhaps larger areas of the Island.

1. EGLE's position

EGLE has taken the position that this Impoundment is regulated under Part 115 and is subject to the closure requirements in Part 115 for Type III landfills. EGLE correctly states that coal ash is a low-hazard industrial waste, MCL §324.11504(10)(a), and, from that, argues that the Impoundment 1/2 is an industrial waste surface impoundment subject to the closure requirements for Type III landfills pursuant to M.A.C. R 299.4309. MCL §324.11502(17) defines a "coal ash impoundment" as:

*“a natural topographic depression, man-made excavation, or diked area that is not a landfill and that is designed to hold **and, after October 14, 2015, accepted** an accumulation of coal ash and liquids or other materials approved by the department for treatment, storage, or disposal and did not receive department approval of its closure. **A coal ash impoundment in existence before October 14, 2015 that receives waste after [December 28, 2018], and that does not have a permit pursuant to part 31, is considered an open dump** beginning [December 28, 2020] unless the owner or operator has completed closure of the coal ash impoundment under section 11519b or obtained an operating license for the coal ash impoundment.”*

(Emphasis added).

Because it did not accept coal ash after October 14, 2015, this Impoundment is not a “coal ash impoundment” and therefore, cannot be a “low-hazard potential coal ash impoundment” because to be a low-hazard coal ash impoundment, it must first be a coal ash impoundment. The Unit 1/2 Impoundment would not be deemed an open dump; EGLE is not alleging a violation of the law and is not demanding licensure.

EGLE's position regarding the Unit 1/2 Impoundment appears to hinge on Rule 309. That Rule provides rules for the design, permitting, construction, operation and closure of “a surface impoundment that receives low-hazard industrial sludges” and predates the coal ash sections of Part 115. At most, the Unit 1/2 Impoundment is subject to only subparagraphs 1 and 7 if closed with waste in place:

“(1) The requirements of this rule apply to a surface impoundment which receives low-hazard industrial waste sludges or slurries that contain free liquids and which is

an impoundment where solid waste will remain after closure. ... An industrial waste surface impoundment that is closed as a landfill shall be in compliance with all parts of these rules designated as applying to type III landfills....

(7) At closure, the owner or operator of a surface impoundment that is closed as a landfill shall do all of the following unless the director determines that such actions are not necessary:

- (a) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues.
- (b) Stabilize remaining wastes to a bearing capacity that is sufficient to support final cover.
- (c) Cover the surface impoundment with a final cover that [complies] with ... R 299.4304.
- (d) Conduct groundwater monitoring and postclosure maintenance in accordance with rules applicable to type III landfills.”

BLP has engaged Golder to evaluate different approaches to achieve compliance with this rule regarding the Unit 1/2 Impoundment. Golder is considering, among other things, the possibility of a closure in place that would likely include some combination of the following:

- (a) Solidifying in place materials.
- (b) Stabilizing the in place materials to support a cover.
- (c) Covering the in place materials with a substrate layer and an erosion control layer.
- (d) Conducting groundwater monitoring and ongoing cover maintenance.

Golder previously provided the BLP information regarding the rough order of magnitude of the costs to either remove or cap the Unit 1/2 Impoundment (\$7 - \$9 Million – that does not include long-term monitoring, maintenance, or responding to monitoring results and it was estimated *before* the PFAS compounds were discovered on site - that will cause an exponential cost increase in managing waters removed at the site and likely other tasks relating to protection of the Grand River). As the plans become clearer, so will the cost estimates.

The PFAS issue recently discovered through the BLP’s efforts and on BLP’s initiative (discussed below) complicates these matters as dewatering and water management is a component of any closure approach. Also, there will be challenges, delays and expenses arising out of the need to assess, permit and mitigate wetlands which have developed on the site as well as floodplain permitting and permitting for management of water at the site.

2. EPA’s Position

EPA has not yet taken a specific stance on this Impoundment – other than their view that it is subject to regulation and its delineation. 40 CFR 257.102. 40 CFR 257.102(b)(ii), (c), confirm that one option is removal of the coal ash from the Unit and then confirmed decontamination of the Unit and any releases from the Unit. 40 CFR 257.102(d) confirms that as part of closure when leaving ash in place, one must control, minimize or eliminate to the maximum extent feasible the release of leachate into the ground or surface waters as well as removing liquid wastes or solidifying the remaining wastes and then capping them with a cap meeting certain design specifications. Discussions with EPA need to be held to see what level of dewatering it will accept.

Either of those paths are problematic. There are safety concerns as the materials in the area are saturated and likely somewhat unstable. Further, if removal is conducted it must be confirmed through sampling and, as noted above, if the “footprint” of the Impoundment was removed, the surrounding materials are ash and likely non-BLP wastes – meaning that confirmatory sampling will be viewed as **not** confirming the complete removal. This is a challenge. There is also a possibility that the bottom of the Impoundment has become a largely stable matrix, holding itself in place. Because virtually all of the Sims Site was once river, there is an exceptionally robust water table. If this “matrix” is disturbed, it could become unstable, risking a release of contaminants into the Grand River upstream from the City’s drinking water intake. This concern has been raised with EGLE and EPA and EGLE had indicated through comments made to the Grand Haven Tribune printed on February 19, that it is not convinced of this risk. https://www.grandhaventribune.com/news/local/disconnect-on-harbor-island/article_347327e8-8c44-50b1-b15c-bc0662abbbad.html As discussed below, based on the discovery of PFAS in the groundwater at the Sims Site, that conclusion may be changing.

D. Groundwater

As noted above, under both the federal and State rules and laws, groundwater monitoring of coal ash impoundments is required both during and after closure. In this case, the BLP’s monitoring program has already detected certain elevated levels of coal ash constituents in the groundwater. If these detections are deemed to be from the regulated impoundments, then, under Michigan law, the BLP would transition to assessment monitoring and preparation of a response action plan in accordance with the Part 115 rules.

Following the 2021 agreement on the “footprint” of the Unit 1/2 Impoundment, in April 2021, Golder and BLP proposed an expansion to the monitoring well network program that would satisfy both EGLE and EPA simultaneously. Given the record high water levels experienced on the site in 2020, neither EGLE nor EPA could approve the plan and suggested instead that a flow study be conducted based on these changed conditions. Based on this direction, Golder and BLP proposed a piezometer installation plan on April 23, 2021. This plan was revised based on comments received by the regulatory agencies, submitted, and ultimately approved on June 22, 2021.

The BLP installed and is assessing piezometers and expects to convert those to (and possibly adding) permanent groundwater monitoring wells to further monitor the regulated Impoundments. This was delayed somewhat by the need for a wetland permit due to wetlands that have developed around and over portions of the Unit 1/2 Impoundment. The BLP intends to propose a revised groundwater monitoring program to EGLE in the Spring of 2022, following EGLE review and approval of the piezometer study results.

As noted above, this issue is complicated because the area under and around the Impoundments is a field of ash and non-BLP waste. EGLE staff previously took the position that they will not approve the BLP’s Unit 3 ASD because it does not contain irrefutable proof that the Impoundments did not leak to the groundwater. Our firm believes that EGLE is applying too stringent a standard of proof (beyond a reasonable doubt) and should, instead, apply a clear and convincing standard.

Given EGLE’s intransigence on the Unit 3 ASD and closure documentation, it appears that, after updating its groundwater monitoring program, the BLP will be developing a response action

plan pursuant to MCL 324.11519b(4). That would include a plan to identify sources of contamination and interim response activities to control those sources of contamination. MAC R. 299.4442. This would be followed by a corrective action plan to assess the effectiveness of potential corrective measures including protection of human health and the environment, achieving groundwater protection standards, and preventing future releases. MAC R. 299.4443-4445. On May 4, 2021, the BLP submitted to EGLE a summary of the monitoring history and assessment of the progress of the assessment of corrective measures (including much of what's described in this letter) and indicating that additional time was needed to complete the BLP's assessment. As part of its June 4, 2021, reply, EGLE stated that "The proposed Administrative Consent Order that EGLE is drafting will include as part of its compliance program deadlines for submittals required to bring Impoundment 3A/3B into compliance with Part 115 ... including a deadline for the submittal of the Assessment of Corrective Measures." To date, EGLE has not provided that draft Consent Order.

EGLE has indicated that if wastes are left in place, use restrictions are a certainty – the scope of those restrictions beyond a ban on using groundwater would be open to discussion but may include prohibiting residential use. Removal will be exceptionally expensive as it would include the excavation, transit and disposal of the ash and wastes, as well as treatment, management and disposal of water encountered during removal. Also, given the PFAS detections discussed below, such removal may be effectively impossible as most disposal sites may reject the removed materials as unacceptable.

E. Recent analytical testing – PFAS

As part of BLP's efforts to assess the various options for closure of the Unit 1/2 Impoundment and for additional work at the Unit 3 Impoundments, the BLP directed its expert, Golder, to conduct a broader evaluation of groundwater on the Site beginning this past summer. Previously, BLP's evaluation of the Site groundwater focused on coal ash constituents as required by the federal law and State rules. BLP, on its own initiative, had Golder take the added measure of assessing surrounding waters in the Summer of 2020 which was not required by federal law or State rules. In 2021, BLP, again, on its own initiative, had the existing wells on the Sims Site tested for contamination relating to the former City dump. The testing for non-CCR constituents was conducted because all of the BLP's closure options for Unit 1/2 Impoundment (and possibly the Unit 3 Impoundments) will require dewatering of contaminated groundwater – which may be significant - and discharging it following treatment. The BLP cannot develop detailed closure engineering plans and cost estimates without understanding what groundwater treatment would entail and could not legally discharge groundwater into the Grand River or the local wastewater treatment plant without first understanding the make-up of that water.

Although neither EPA nor EGLE asked for this sampling, the BLP chose to do this sampling out of a concern for protection the surrounding waters and downstream drinking water intakes. Prior to testing for non-ash contamination, BLP and Golder presented their concerns publicly during a community event on February 9, 2021. I provided more detail to both the Directors of the BLP and the City Council during our first Joint Work Session on March 22, 2021, regarding environmental matters at the former Sims Site at Harbor Island. Both governing bodies agreed that this additional testing was advisable before further actions were taken. Based on the data, discussed below, EGLE was also appreciative of this analysis.

The data showed levels of ammonia and total inorganic nitrogen elevated above Michigan drinking water and surface water protection criteria in a number of wells and these compounds are not consistent with coal combustion and so, appear to be originating from other wastes which were dumped at the Site. Additionally, cyanide was reported above EGLE's Groundwater Surface Water Interface (GSI) criterion.

More significantly, levels of PFAS compounds were detected and then confirmed through later sampling. Most of the existing wells had a detection of either PFOA or PFOS or both in excess of Michigan's recently adopted cleanup standards. The highest detection of both compounds is at the northeast end of the Sims Site, apparently upgradient of the impoundments. This indicates that PFAS detection is not related to the ash and more likely relates to materials historically disposed of by others at the Sims Site or from elsewhere. PFAS compounds typically relate to industrial processes, and relate to certain fire-fighting foams and chemicals used to make Teflon and water and stain resistant clothing, carpeting and furniture coverings. PFAS compounds are not related to the combustion of coal.

Data provided by the Northwest Ottawa Water Treatment Plant, indicates that no PFAS compounds have been detected in excess of these stringent standards since 2018. 2019 EGLE data for the Grand River confirms this. EGLE conducted a community briefing on the PFAS issue at the end of July and the BLP continued to gather data on PFAS and other non-coal ash compounds

EGLE has taken the position that mixing zones (a concept the BLP had been exploring with EGLE relating to other constituents in groundwater) are not available for PFAS compounds. The State previously authorized a mixing zone relating to the venting of contaminated groundwater from the former Shell Oil Distribution Parcel A to the South Channel of the Grand River directly east of the Sims Site. While mixing zones may be permitted for many chemicals, Mich. Admin. Code R. 323.1082 does presume that mixing zones are not available for new discharges of bioaccumulative chemicals of concern (BCCs) and even existing discharges are not to receive mixing zones except in limited circumstances, which need further exploration.

The cost to manage the PFAS compounds is expected to be significant – possibly doubling the cost of water management, if not more.

EGLE has not confirmed this, but we believe that the PFAS issues should be addressed under Part 201 of the Michigan Environmental Code. Part 201 does not prohibit the use of the surface of the property for any type of development purposes, but any such work would need to exercise due care to ensure that conditions are not exacerbated and that public health is protected. Building over those areas, if done properly, may encapsulate those areas akin to the clay of the Unit 3 Impoundments. If the source of the PFAS is from outside the Sims Site or is not related to the BLP's operations, then there is a solid argument that the BLP is not obligated to remediate those compounds but is obligated to exercise due care. MCL 324.20126(4)(b).

F. Holistic Approach

As noted in previous correspondence and in prior discussions, EGLE has been content to approach the Sims Site and Harbor Island in a piecemeal fashion. EGLE has repeatedly suggested that a Consent Order is being drafted. This is something that the BLP welcomes as it can lead to a negotiated pathway to completion for the entire Sims Site or the larger Harbor Island. Thus far, no Consent Order draft has been provided. However, the issues posed by the Impoundments and the

surrounding area are virtually the same and engage and expose both the City and the BLP to expense and liability.

Portions of the Sims Site were used for waste disposal by the City before ash was placed and it is still not fully known what sorts of contamination and/or wastes might have been disposed or the depths or horizontal locations of such waste. It appears that there are wastes beyond the Sims Site on the remainder of Harbor Island. It is unlikely that EGLE would pursue the BLP with respect to non-BLP wastes outside the Sims Site, although they may pursue the City as well as the generators of that waste, if any can be identified. MCL §324.20101 *et seq.* (“Part 201”), 42 USC 9601 *et seq.* (“CERCLA”). The historic ash and any wastes outside the Impoundments should not be regulated by Part 115 or the federal rule but would be governed by State cleanup and water discharge laws and rules.

EGLE staff previously commented that once the Part 115 issues are resolved, the City and BLP may pursue a Part 201 process with respect to what remains. The State cleanup law (Part 201) provides far greater flexibility than EGLE appears ready to offer under Part 115. For that reason alone, it is worth pursuing a Part 201 closure of the entire Sims Site in conjunction with a Part 115 closure of the regulated Impoundments.

It appears that almost any removal of ash will encounter non-BLP wastes which have to be assessed and managed. Given EGLE’s approach to the impacted groundwater, as noted above, it seems that the State may be driving the BLP and the City toward either a complete removal or a complete encapsulation. BLP has been urging a holistic strategy that would approach the Sims Site as a complete encapsulation and try to minimize the amount of excavation and disposal and to focus the State on protecting the Grand River rather than trying to excavate the entire Sims Site.

This holistic approach would most likely include: (1) a cover meeting the Rule 309 cover requirements being evaluated for Unit 1/2 and Unit 3 Impoundments; (2) a type of barrier surrounding part (or much of) the Sims Site, while leaving most of the wastes in place; (3) solidifying the Unit 1/2 (and possibly other) wastes in place; (4) capping the remains of the Unit 3 Impoundment; (5) a groundwater management program; (6) some sort of restrictive covenant and (7) perpetual monitoring to ensure the impacts to the River are minimal, with certain “hotspot” responses when impacts are detected.

BLP’s sampling along the edge of the Grand River thus far indicates that the BLP ash at the Sims Site is not significantly impacting the River. However, PFAs detections at the River’s edge have been less satisfactory. While the coal ash compound levels favored the pursuit of a mixing zone, the availability of a mixing zone when dealing with bioaccumulative compounds, such as PFAS compounds, is far narrower and, thus far, unheard of for PFAS compounds. MAC R. 323.1082.

G. Other outstanding issues

Beginning in the Spring of 2021, a dialogue began with EGLE regarding the former coal pile at the southwest end of the Sims Site. This was where the BLP stockpiled coal prior to its use in the power plant. EGLE has taken the position that this area is subject to regulation under Part 115 because they view what is left there as waste vs a useful product. EGLE requested a Closure Plan although it is not clear that the storage area is regulated under Part 115. On May 19, 2021, the BLP submitted a plan for work in this area which would involve removing coal residuals and conducting post removal verification. A dialogue ensued which resulted in EGLE approving the former Coal

Yard Cleanup Plan on July 9, 2021. The BLP began implementing the plan and determined that management of water ponded on the east end of the coal yard was complicated by the discovery of PFAS. The BLP is working through a water management plan with Golder for proper treatment and handling of this water. In the meantime, the BLP improved the on-site berms to manage the on-site collected water in the short term. The plan is that the materials will be fully removed and disposed of during 2022.

This summer and fall, dialogue with EGLE turned to an area that had discharges of water in the distant past from the Unit 1/2 Impoundment. EGLE asked for a plan to investigate the extent of ash that may have come to rest in a historical outlet channel outside the agreed-upon footprint of the Impoundment. The BLP prepared a work plan which was approved by EGLE on October 9, 2021. Because the area for the work contains wetlands, the BLP submitted a permit application to conduct the investigation work in the wetlands December 9, 2021 and will begin the investigatory work as soon as the permit is issued and conditions permit.

Conclusions

The BLP has been consistently working with EGLE to achieve site closure that is protective of the environment but that provides good stewardship of the both ratepayers' and taxpayers' funds. Further, the BLP has minimized risks and mitigated potential liability on the part of the City and the BLP by taking a cautious iterative approach rather than simply jumping in and conducting a full blown removal without a full understanding of the issues involved.

Originally, the BLP thought it best and achievable to remove both the 3A and 3B Impoundments and the Unit 1/2 Impoundment. The process of removal with the 3A and 3B Impoundments has been more complex than was anticipated and it appears that, despite pursuing a technical dialogue with EGLE, the BLP has exhausted the removal process and, as a result, in-place closure is a more likely process. EGLE staff were advocating for more of a task-by-task approach and it appeared that EGLE wanted the Impoundments removed. Work with BLP led to the concern that removal of the Unit 1/2 Impoundment could cause a significant release of contamination to the Grand River. EGLE did not originally share this concern and was not focused on the holistic approach advocated by the BLP. Because the BLP determined that groundwater at the site was impacted by PFAS compounds, during the Michigan PFAS Response Team (MPART) public community meeting on July 28, 2021, EGLE staff stated that they believe that a holistic approach should be taken regarding the Sims Site. EGLE staff also indicated a heightened concern regarding potential impacts at the site counseling greater caution.

In short, while the path has not been as much of a straight line to closure as anyone would have preferred, significant progress has been made with EGLE (e.g., coal yard closure plan, northern channel investigation plan, groundwater flow investigation plan, Impoundment delineation) and on-site work already conducted relating to the Unit 3A/3B Impoundments.

This site is extremely complex given: (a) its location within the Grand River, (b) that much of the Island was man made, (c) the past uses involving operation of a coal fired power plant, and (d) prior to that the operation of the former City Dump in which materials were placed in a comingled manner and cannot be separated. Additionally, and most importantly, this process has proceeded cautiously with the priority always being the protection of the surrounding waters and potential impacts of the downstream drinking water system from impacts of proposed actions regarding clean up activities.

We look forward to answering your questions.

Sincerely,

Jaffe, Raitt, Heuer & Weiss
Professional Corporation

Arthur Siegal

Arthur H. Siegal

AHS

Cc: Mr. David Walters
Mr. Erik Booth