April 8, 2024

JOSHUA BOLDT
CITY MANAGER
CITY OF MAQUOKETA
201 EAST PLEASANT ST
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manager@maquoketaia.com

Re: Clinton Engines, Maquoketa, IA (605 East Maple St., Maquoketa, IA)
Contaminated Sites Database ID No. 162
Environmental Site Assessment and Annual Indoor Air Monitoring Report

Dear Mr. Boldt:

The Iowa Department of Natural Resources, Solid Waste and Contaminated Sites Section (DNR) received an Indoor Air Monitoring Report (Doc #41222) for the Museum Building and the Phase II Environmental Site Assessment (Doc #41221) in May 2023.

Addressing the Annual Indoor Air Monitoring Report
The report outlined four samples that were collected on April 22 and 23, 2023. Samples were collected using summa canisters placed in the basement media room, basement community room, main floor museum, and main floor office area. Samples were analyzed using EPA Method TO-15 for volatile organic compounds (VOCs). No concentrations exceeded the EPA's Regional Screening Levels (RSLs).

In past conversations, we've discussed use of a sub-slab depressurization system (SSDS) to help the museum meet their health objectives instead of continuous use of the air exchanger. This would likely put less stress on the current building systems. Usually, annual monitoring is not required if an SSDS is installed successfully (with post-installation monitoring to prove the system is meeting indoor air goals) and an EC is put in place to ensure long-term operation and maintenance of the system.

Please continue to keep the Iowa DNR updated as the process unfolds with a monthly email (due by the 15th of each month). Please remember that at a minimum, the air exchanger must be continually run and annual indoor air sampling is required until a long-term solution is found to protect those working and visiting at the museum. Additionally, signage on entrances remains a requirement. The next annual indoor air report is due June 1, 2024.

Addressing Phase II Environmental Site Assessment
The report outlined additional assessment work that was completed in order to further assess potential impact on the site and adjacent properties, fully delineate the contamination plume both vertically and horizontally, and determine potential risks to site residents and workers. Activities summarized in this report included the installation of thirteen monitoring wells in the alluvial aquifer to further delineate the vertical and horizontal extent of the contamination plume, installation of four monitoring wells in the underlying bedrock aquifer, and the collection of groundwater, soil, and soil vapor samples. All samples were analyzed for volatile organic compounds (VOCs) using EPA Methods 8260 and TO-15.

The DNR had the following comments:

1. As noted in the report, groundwater samples from wells installed in deeper portions of the alluvial aquifer as well as the upper bedrock aquifer confirm that contamination has migrated vertically and has likely migrated into the bedrock underlying the site (upgradient bedrock wells indicate no VOC contamination). Although bedrock monitoring well concentrations do not exceed Statewide Standards (SWS), DNR concurs with the consultant's recommendation to conduct additional sampling of private groundwater wells that could be contaminated presently or in the future. Private wells within 1 mile of the site should be included in future sampling events to ensure wells have not been impacted. At a minimum, annual groundwater sampling is required until site closure.
2. Groundwater contaminant detection levels are compared to non-protected groundwater source SWS. However, as noted in previous letters, a non-protected groundwater source which is affecting or likely to affect an existing drinking water well must meet standards applied to protected groundwater sources (567 IAC 137.6(3)). As private drinking water wells exist in the vicinity that have the potential to be affected by the contamination plume, all groundwater results should be compared to protected groundwater source SWS.
3. Monitoring wells installed the bedrock (MW-101, MW-102, MW-103 and MW-104) do not exceed SWS and should be plugged at this time. As noted above, private wells in the area should continue to be sampled to ensure no impacts.
4. As discussed in sections 5.5.2 and 5.5.6, various options are being considered for reuse of the site. Soil sampling targeting surficial metals/VOCs has not been conducted at the site, and based on past investigations may be present. Prior to implementing any construction activities for reuse, surface soil samples should be collected and analyzed for VOCs as well as Resource Conservation Recovery Act (RCRA) metals in order to complete a risk evaluation to site construction workers, site workers, and future users of the site. Please discuss strategies to analyze and address this potential risk with your consultant.

As noted above, annual sampling is required for both indoor air at the museum and groundwater. The indoor air issues at the museum need to be addressed with a permanent solution. Further soil assessment is required onsite to determine appropriate reuse strategies. As requested by the City of Maquoketa, DNR would like to arrange a virtual meeting to discuss the site's status in the LRP and requirements remaining to obtain an NFA. Please reach out to your consultant and attorney and email me with three dates/times during the week of **May 6, 2024** that would work for a virtual meeting to discuss the future of the site.

If you have questions or would like to discuss the project further, please contact me at 515-669-5494 or by email at shelly.nellesen@dnr.iowa.gov.

Sincerely,

Digitally signed by Shelly Nellesen
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