

January 28, 2019

Mr. Doug Lance, Supervisor  
Ms. Janice Kitley, Clerk  
Waterloo Township  
9773 Mt. Hope Road  
Munith, MI 49259

RE: **Aggregate Industries Gravel Pit  
2018 Fourth Quarter Groundwater Monitoring Report**

Dear Doug and Jan:

Aggregate Industries has submitted the 2018 fourth quarter groundwater monitoring report for the Chelsea plant. The applicant submitted the following documents, all of which were dated January 4<sup>th</sup>, 2019:

- Table 1 – Groundwater and Surface Water Elevation Data (PDF Format)
- Monitoring Well and Surface Water Hydrograph (PDF Format)
- Surface Water (Clear Lake) Hydrograph (PDF Format)

To remain compliant with the special land use permit requirements, the applicant must submit a groundwater monitoring report on a quarterly basis. Attached to this letter is the fourth quarter ground water monitoring report for the fourth quarter of 2018. The ground water monitoring report did not show alarming levels. The recorded ground water levels are characteristic of the area and are not considered to be unusual. Given the data that was presented in the ground water monitoring report, no adjustments to the Aggregate Industry operation will be necessary.

The 30-day period of December 2018 appears to be continuing the trend of steadily rising water level elevations for Freshwater Lake, Pond Lily Lake and Clear Lake. These lakes all have much different characteristics, but it is expected that they see similar changes from month to month. It is important to note that these lakes cannot be compared to one another or the surrounding lakes due to the vastly different characteristics. Clear Lake has a rather large watershed that serves as a buffer to the overall hydrology of the lake while Pond Lily Lake has a rather small watershed and is completely isolated. Fresh Water Lake continues to be expanded by the applicant per the annual permitted plan.

After careful review of the 2018 Fourth Quarter Water Level report we conclude that the applicant continues to be compliant with requirements outlined in the Township special land use permit. As such, it is recommended that the Township takes no action in altering permitting and mining activities at this time based on the submitted report.

Please feel free to contact us with questions or concerns regarding this recommendation or the groundwater monitoring report. As a friendly reminder, it is recommended that this groundwater monitoring report gets posted on the Township's website for Township residents and the Clear Lake Homeowner's Association to reference.

Sincerely,



Bruce Pindzia, P.E.



Shawn Bates, E.I.T

Attachments

cc: *(via email)*

Robert Hayes, Aggregate Industries  
Ethan Belden, Aggregate Industries  
Brian Gasiorowski, Aggregate Industries  
Todd Yetzke, Aggregate Industries  
Wally Alexander, Clear Lake Homeowner's Association