To: Sharon Township Mineral Licensing Board From: Sharon Preservation Society Date: December 20, 2021 RE: Aggregate Industries application to expand mining on F-52

COMMENTS RELATED TO SURFACE AND GROUNDWATER CONCERNS - MLB MTG 20-DEC-2021

I am concerned about a number of issues related to the expansion of the mining activity on M-52. This letter focuses on concerns with the impact on wetlands and groundwater.

The applicant states, "Aggregate Industries proposes to obtain an Inland Lakes and Stream permit/s from EGLE pursuant to the creation of the two permanent ponds on site. This will be done once the hydrogeological analysis... has been completed."

We ask the that no license be granted until EGLE issues permits (Part 301 and 303) as we won't know until then if EGLE will raise concerns during the permitting process.

The applicant further states, "Neither the emergent wetland located at the northeast corner of the west parcel, nor the forested/shrub wetland located at the northeast corner of the east parcel will be impacted as part of the proposed operation."

We would like to see the data to support the claim there is no impact to wetlands or ponds in the area.

For instance, does the applicant describe how much ground water it will withdraw for its operations, or might lose to evaporation and during the processing aggregate? As we understand it, even closed-loop systems, like the one proposed here, take up groundwater, which can drain nearby ponds and wetlands. Groundwater general flows towards surface water bodies that have been created. This can adversely impact nearby wetlands.

As an example, here are two photos of a pond in Kent County that was once 20' deep and is now nearly completely drained. (If you look closely, you can see a person standing in the midst of the pond.) The pond was drained within two months of an aggregate mine expansion next to this property. The geologist consulted by the property owner believes the drainage was caused by an inadequate understanding of the subsurface geology.

Regarding monitoring wells: the applicant proposes four. We believe the final number and location of monitoring wells should be re-assessed after the proposed wells are installed AND the hydrogeological study is complete. We'd also like to ensure the soil borings for the wells extend to about five feet below the maximum depth proposed for the mining activity. These will need to be screened appropriately to understand the hydrogeology of all aquifers penetrated during mining.

We want the applicant and township to re-assess the final number and location of monitoring wells after the proposed wells are installed AND the hydrogeological study is complete.

The applicant states its fuel storage tanks are not big enough to warrant registration with appropriate state agencies. However, above ground fuel leaks are a potential cause of groundwater contamination.

We would like to have assurance that fuel will not be allowed to contaminate groundwater.

Finally, I am very concerned with potential impacts on residential drinking wells. We understand that disruption of the aquifer layers can impact quality and water pressure of drinking wells, and that contaminated water may be returned to the aquifer at warmer temperatures.

We propose the applicant provide baseline testing of water quality and pressure for all residential wells within a 2000' radius of the pits.

Photos of a pond in Kent County that was once 20' deep and is now nearly completely drained. (If you look closely, you can see a person standing in the midst of the pond.) The pond was drained within two months of an aggregate mine expansion next to this property and is believed to be the result of inadequate understanding of the subsurface geology.



