Township Identifies 8 More Drinking Water Wells with 1,4- Dioxane

For years many residential wells in Scio Township have been sampled for 1,4-dioxane as a result of the large plume of groundwater contamination caused by the former Gelman Sciences facility located on Wagner Road. The Michigan Department of Great Lakes, Environment and Energy (EGLE) contracts with the Washtenaw County Health Department (WCHD) to conduct long-term monitoring of drinking water wells within 1,000 feet of the estimated plume boundary. Approximately 218 drinking water wells are sampled either twice per year, once per year, or every other year, depending on proximity to the plume and nearby detections. Historically this sampling program has had a detection limit of 1 ug/L (or parts per billion, ppb). However, beginning in June of 2022, samples have been analyzed by the EGLE lab using a detection limit of 0.50 ppb.

**Due to concerns about potential movement of the 1,4-dioxane plume to residential areas located north of M-14, Scio Township has completed three rounds of sampling that expand on the state-funded program and use Method 522, a US Environmental Protection Agency analytical method that detects 1,4-dioxane down to 0.12 ppb.**

**The first round** of sampling, conducted in July and September of 2021, identified low levels of 1,4-dioxane at one location that had previous detections under the state-funded program and at two locations that had not been previously sampled. The two new positive test results were below 1 ppb. One of these locations was a significant distance north of the estimated northern boundary of the plume as it was understood at that time.

**The second round** of sampling was conducted in November of 2021 and included 15 additional residences. This round of sampling identified four additional residences with low levels of 1,4-dioxane, all of which are located north of the estimated plume boundary. The levels of dioxane detected in the four residences ranged from 0.26 to 1.0 ppb.

**The third round** of sampling was conducted the week of May 16, 2022 and included 27 additional residences and a re-sampling of a residence from the second round. Eight additional residences were identified with low levels of 1,4-dioxane and re-sampling confirmed the presence of 1,4-dioxane in the residence from the second round. The levels of 1,4-dioxane detected in the nine residences ranged from 0.15 to 0.89 ppb. All eight residences with new detections are located north of the northernmost detection from the second round of sampling and are closer to the Huron River. **There is insufficient data at this point to determine whether there is any impact on the Huron River.** These concentrations are below the State of Michigan drinking water standard for 1,4-dioxane of 7.2 ppb. All other residences tested non-detect for 1,4-dioxane. The residents have all been informed of the sample results.

Township Supervisor Will Hathaway has worked together with Trustees Kathleen Knol and Jacqueline Courteau to push for more data on the extent of the contamination and faster progress on the Gelman cleanup. The Township plans an additional round of testing using Method 522. Wells to be sampled in this fourth round of testing will be drawn from among applications received from property owners in the target area. **Apply to have your well tested and find more information about the well testing project, including a map of the wells that have already been tested, at Sciotownship.org/Gelman.** The Township will continue to coordinate with WCHD and EGLE regarding future sampling efforts. More information regarding 1,4-dioxane and the state-funded residential sampling program can be obtained at washtenaw.org/1789/14-Dioxane.

The Gelman Site is owned by PALL Life Sciences, Inc., a wholly owned subsidiary of Danaher Corporation, and there are no active plant operations. Historically, the plant manufactured filter devices and used dioxane as a solvent. Thousands of pounds of 1,4-dioxane were discharged to soil, surface water, and groundwater through seepage lagoons, land spray irrigation, and direct discharges at the site. The 1,4-dioxane groundwater plume, which currently is about four miles long and one mile wide, has polluted local lakes, creeks, residential drinking water wells, and a City of Ann Arbor municipal water supply well.