



QUARTERLY  
UPDATE

GELMAN PLUME *and*  
1,4-Dioxane

### Settlement and EPA Update

From approximately the spring of 2017 until the fall of 2020, a proposed fourth amendment to and restatement of the Consent Judgement was under negotiation between Gelman, the Michigan Department of Environment, Great Lakes, and Energy (EGLE), the City of Ann Arbor, Washtenaw County and its Health Department, Scio Township and the Huron River Watershed Council (The Intervenor).

- On April 12, 2021, the director of EGLE sent a letter requesting that United States Environmental Protection Agency (EPA) reinstate assessment of the Gelman site for the National Priorities Listing (NPL) process. The EPA selected Weston Solutions for the NPL assessment process.
- EPA updates regarding the Gelman site can now be found on the EPA’s website at: <https://www.epa.gov/mi/gelman-sciences> and the ‘frequently asked questions’ for the Gelman site is: <https://www.epa.gov/mi/gelman-science-frequently-asked-questions-0>
- On May 3, 2021 Judge Connors held an evidentiary hearing regarding the Gelman plume cleanup. As a result of the hearing and based on the legal briefs and technical reports that the parties filed in advance of the hearing, the judge ordered Gelman to implement the requirements in the proposed fourth amended consent judgment that had been made public after the negotiations concluded in the fall of 2020 (“Response Activity Order”).
- Gelman filed a motion to partially stay the Response Activity Order pending appeal, which Judge Connors denied. Gelman then filed both a claim of appeal and an application for leave to appeal the Response Activity Order. On June 29, 2021, Court of Appeals Judge Christopher Murray dismissed the claim of appeal, deciding that the Response Activity Order does not constitute a final order and that Gelman has no direct right of appeal.
- On July 26, 2021, the Court of Appeals granted Gelman’s application for leave to appeal, meaning that the Court of Appeals is going to consider the merits of Gelman’s challenge to the Response Activity Order.
- On September 15, 2022, the Michigan Court of Appeals vacated Judge Connors’ June 1, 2021 Response Activity Order (RAO) which directed that Gelman immediately implement the proposed 4<sup>th</sup> Amended Consent Judgment and comply with the revised clean up criteria for the Gelman Sciences groundwater contamination which was reduced from 85 ppb to 7.2 ppb. This means that the 3<sup>rd</sup> Amendment to the Consent Judgment is reinstated as the document that governs how the clean-up and containment is to be conducted and could impact the prohibition zone boundaries and where groundwater is not permitted for use. Because the 3<sup>rd</sup> Amended Consent Judgment does not incorporate the reduced clean-up level for 1,4 dioxane, the State has indicated it has begun communications with Gelman Sciences to negotiate an amended consent judgment to implement the revised clean-up criteria and address other requirements in the now-vacated RAO. The City will continue to advocate for and pursue the gains that were achieved as part of the RAO and proposed 4<sup>th</sup> Amended Consent Judgment.
- In September 2022 Weston Solutions initiated sampling of wells for 1,4 dioxane as part of their NPL Assessment process.

### Sentinel Well Installation Update

**Sentinel Well Installation** - The City will be installing one nested sentinel monitoring well nest in Garden Homes Park. The drilling subcontractor bid was approved by City Council in September and the drilling is anticipated to start the first week of November.



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

# Agency Updates

## EGLE / CARD

- CARD meetings were held on September 6 and October 4, 2022. All meetings were held virtually. Additional personnel from EGLE were present for the September meeting.
- EGLE has completed their review of the monitoring well trend analysis and have indicated they will finalize their review after direction of response activities as defined by the court.
- There has been limited discussion as to what Gelman will complete now that the 4<sup>th</sup> Amended Consent Judgement was vacated, but activities include the following:
  - The eastern area GSI work plan is under review. Re-sampling of surface water in West Park and Third Sister Lake. Results are posted on [EGLE's dedicated webpage](#).
  - Gelman will be converting IW-2 to an extraction well for the Rose Area extraction well. It will be piped to the existing infrastructure and treated at the Gelman facility.
  - The National Pollutant Discharge Elimination System (NPDES) permit application was submitted to EGLE for review, however EGLE reported that Gelman is not currently pursuing the Park Lake extraction well that would discharge to First Sister Lake.
  - Two of the three onsite extraction wells were installed in the source area.
  - The trees for phytoremediation have been planted in the former pond areas on Gelman's property. Trees will be planted in the marshy area over the winter, should Gelman decide to proceed with that remediation work.
  - Work has begun in the former burn pit area on Gelman's property, where the heated soil vapor extraction system will be installed to treat the soil. Utilities were removed from the area in September.
  - Three monitoring wells have been installed near Sequoia Parkway; two Scio Township wells require access agreements in order to be installed. EGLE reported that the West Park well locations are currently on hold.
- Washtenaw County Health Department has completed over 175 residential well samples in 2022 with the most recent sampling event completed in August.
- Scio Township completed a fourth round of additional residential sampling in August. Low level detections of 1,4-dioxane were identified at concentrations ranging between 0.17 and 1.3 ppb south of the Huron River and north of M-14.
- The next scheduled meeting will be held on November 1, 2022, at 6PM via Zoom.

## MS4 PERMIT

- Concentrations of 1,4-dioxane entering the Allen Creek Drain stormwater system have significantly increased since 2017 surrounding West Park area. One location in particular has increased from 4.4 ppb in 2017 to 49 ppb in sampling completed during the fall of 2020.
- The Allen Creek Drain stormwater system is part of Washtenaw County's Municipal Separate Storm Sewer System (MS4).
- Based on the 'corrective action required' notice sent by the Washtenaw County Water Resources Commission Office (WCWRC) to Gelman for increased concentrations of 1,4-dioxane in the Allen Creek Drain stormwater system, Gelman submitted a work plan on April 15, 2021, for sampling. EGLE and WCWRC reviewed the work plan, provided feedback to Gelman and requested an updated work plan. A revised workplan has been re-submitted to EGLE for review as a Groundwater to Surface Water Interface (GSI) issue rather than an MS4 issue. EGLE staff are completing a technical review of the work plan. After the technical review is complete, EGLE will meet with Gelman to discuss the issues of the GSI and MS4 violation. A meeting was held in August and both the WCWRC and EGLE are finalizing responses based on the meeting.

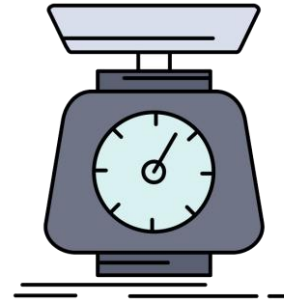
## NPDES PERMIT

- EGLE is reviewing the NPDES permit application that was submitted for Gelman's current system on April 4, 2019.
- EGLE is nearing completion of the permit review. Once the review is complete, draft comments will be provided to Gelman. After Gelman's review the proposed permit will be made available for public review and EGLE will hold a public hearing on the permit application.

## Pall Groundwater Treatment Updates

Total Volume of Groundwater Treated  
**June – August 2022**

**77,102,746 gallons**



**Mass of  
1,4 Dioxane Removed**

June: 77.00 lbs  
July: 92.61 lbs  
August: 89.37 lbs  
Total: 258.98 lbs

*The mass calculations were determined from the NPDES monthly discharge reports using the maximum daily influent concentration and maximum daily effluent concentrations.*

*The volume was calculated from the average monthly flows in the monthly discharge report.*

**Next Quarterly  
Report Due  
January 2023**

- CARD Updates
- NPDES Permitting Progress
- Settlement Updates
- EPA Updates
- MS4 Permit Updates