September 14, 2020

Dan Hamel, RRD Project Manager Michigan Department of Environment, Great Lakes, and Energy Jackson District Office, 301 East Louis Glick Highway, Jackson, Michigan, 49201-1556

Dear Dan,

I wanted to submit my comments for the written record in the event I am unable to "attend" meeting this evening.

In 2016, I was serving as Vice-Chair of the Sierra Club Huron Valley Group. In November of that year, the Sierra Club, along with Ann Arbor Township and Scio Township petitioned the USEPA to begin a preliminary investigation to declare the Gelman Plume a Superfund site. I currently serve as a voting member of CARD.

I have had a chance to review some of the details regarding the proposed consent judgment and while I believe there are some good qualities as a result of subsequent negotiations over the past four years, I do not feel this consent judgment is sufficient and there are some worrisome process issues that warrant further review here.

1). This consent judgment does not ensure BMP's with respect to treatment of dioxane at the Gelman site. A less effective treatment, and a process determined by Danahar, the responsible party with the ability to pay for a clean-up, is demanded instead of EGLE dictating these practices.

2). This is a still a dilution and dispersion strategy, and not a clean-up strategy when an alternative exists. This is still threatening Ann Arbor's drinking water.

3). The alternative is asking the Governor to petition the USEPA to declare the Gelman Plume a Superfund site. This alternative would bring this process under USEPA oversight, with mandates for best management practices for cleanup (UV treatment of dioxane to non-detect levels), and having a responsible party with the ability to pay to clean up the site. The proposed consent judgement PROHIBITS the City, County, and the Townships from petitioning the federal government for further action. This takes away our communities rights, and particular, our rights to clean water.

4). These negotiations with tremendous implications to the community were opaque and policymakers were unable to attend or observe negotiations. This is inappropriate in our society.

5). As I understand a dumping of 1.4 dioxane water contaminated is being permitted into First Sister Lake, a site which has a large wetland with benefits to the community.

As a policymaker, I would find all of these unacceptable.

Four years after the Sierra Club and local governments petitioned the USEPA, with the only thing to show for these efforts is hundreds of thousands of dollars spent for attorneys fees and new wells being contaminated, and further questions on what is happening in the exclusion zone.

Therefore, I ask that all policymakers and responsible actors copied here ask Circuit Court Judge Timothy Connors to REJECT the proposed consent judgment.

Thank you for considering my remarks.

-James



September 20, 2020

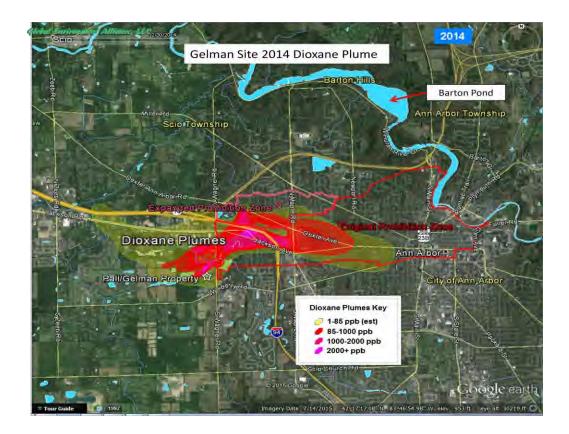
RE: Comments to the Proposed Fourth Amended Consent Judgment on the Gelman Sciences, Inc. Site, Scio Township, Michigan

Department of Environment, Great Lakes & Energy:

The Department of Environment, Great Lakes and Energy (EGLE) is requesting public comments on the Proposed Fourth Amended Consent Judgment (4th Amended CJ) for the Gelman Sciences, Inc. Michigan Contaminated Site located in Scio Township, Michigan. The 4th Amended CJ was provided to the public for comment on August 31, 2020. This document is submitted as comments to the proposed 4th Amended CJ.

The proposed 4th Amended CJ should not be accepted by EGLE.

Overall, the proposed 4th Amended CJ is not protective of public health and the environment and should not be entered into by the State of Michigan. The 4th Amended CJ does not protect the citizens affected by the release and threatened release of the carcinogenic chemical 1,4dioxane (dioxane), from the Gelman Site. The 4th Amended CJ does not protect against: public potable water supply contamination; private potable water well contamination; building vapor intrusion; damage and degradation of natural resources as a result of the contamination; and risk of additional human cancers through various routes of exposure to the contamination. The current Gelman Site dioxane groundwater plume is over four miles long and one mile wide in a densely populated area, see below figure. Under the 4th Amended CJ, the dioxane plume is allowed to expand with no effective off-site hydraulic control, thereby, contaminating a currently pristine groundwater resource, drinking water supplies and buildings. Currently and in the past, public and private drinking water supplies have been contaminated with dioxane from the Gelman Site.

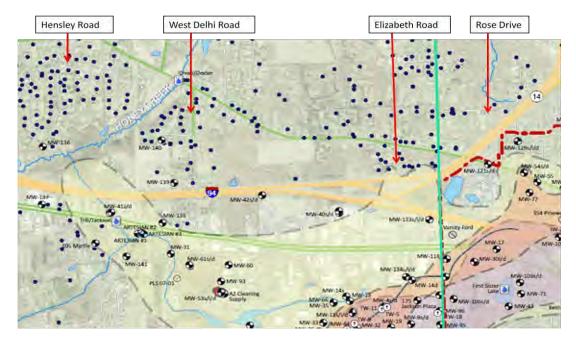


The 4th Amended CJ allows the dioxane groundwater plume to migrate unabated under vast numbers of residential and commercial properties inside and outside of the City of Ann Arbor and degrade the natural resources, including the local pristine aquifer, lakes, creeks, and other waters of the state. In part, this is based upon incomplete technical information provided to the Court in the past. One objective of the 4th Amended CJ should be to halt the dioxane plume migration and remediate the adversely impacted areas, which it does not.

Today, many residential and commercial properties in and down-gradient of the dioxane plume use groundwater wells as a potable water supply. The main City of Ann Arbor drinking water intake is at Barton Pond on the Huron River, which is in the path of the dioxane plume. The City of Ann Arbor supplies drinking water to approximately 120,000 people. One of the City water supply wells has been closed due to dioxane contamination.

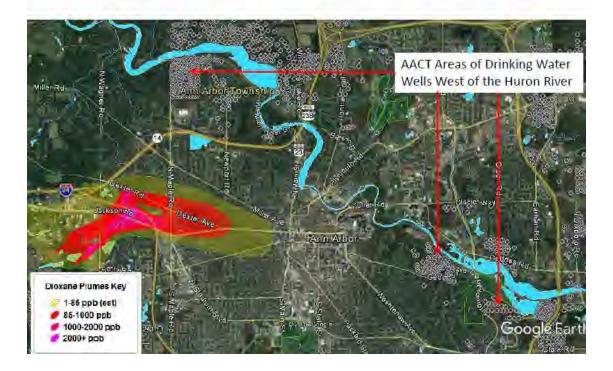
Scio Township residents now have dioxane contaminated drinking water wells and the dioxane groundwater plume is moving towards many more Scio Township residential wells with no available alternant drinking water supply, see below figure. Approximately four homes in Scio Township have dioxane ranging from 1 ug/L to 4 ug/L in their drinking water wells. The updated EGLE drinking water criterion for dioxane is 7.2 ug/L. Ann Arbor Charter Township

residential drinking water wells are directly down-gradient of the dioxane plume as it moves towards and possibly beyond the Huron River, see below figure.



Gelman Site Dioxane Plume Migration to Scio Township Residential Wells

Gelman Site Dioxane Plume & Ann Arbor Charter Township Residential Wells

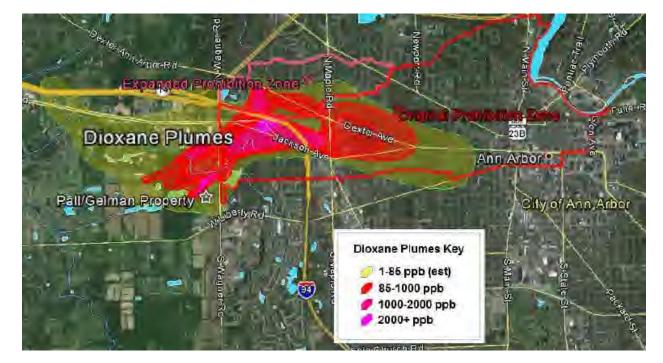


The Old West Side and West Park areas of the City have the shallow dioxane contaminated groundwater near the surface, thereby, potentially adversely impacting building residents and utility workers in the area.

At this time, the extent and fate of the dioxane groundwater contamination are not known. The potential routes of exposure to the public have not been investigated or characterized properly.

The Gelman Site has been designated a Michigan Contaminated Site since 1988. It is estimated that 800,000 pounds of dioxane was used between 1966 and 1986 with most being disposed of to the site soil, surface water, and groundwater through seepage lagoons, land spray irrigation, and direct discharges.

The Gelman Site is located on a topographical high. The groundwater contaminant flow is going in all directions, see below map. A large portion of the off-site plume dioxane concentration is very high (e.g., greater than 1,000 ug/L) with the EGLE drinking water criterion of 7.2 ug/L.



Major 4th Amended CJ Deficiencies

<u>Gelman & EGLE Allowed to Unilaterally Expand the Prohibition Zone</u> The 4th Amended CJ has Eastern Area Objectives which Gelman must attain under Sections V.A.1.a. and b. To attain these Objectives installation of extraction wells to halt the dioxane plume migration is not expressly required of Gelman; only dioxane mass reduction. One of the two Eastern Area Objectives is the Prohibition Zone Containment Objective (V.A.1.a.), which requires Gelman to prevent the Groundwater Contamination (7.2 ug/L dioxane) from migrating beyond the Prohibition Zone (PZ) Boundary, see below Objective.

 bg.
 Prohibition Zone Containment Objective. Defendant shall prevent

 Groundwater Containination, regardless of the aquifer designation or the depth of the

 groundwater or Groundwater Contamination, from migrating beyond the boundaries of the

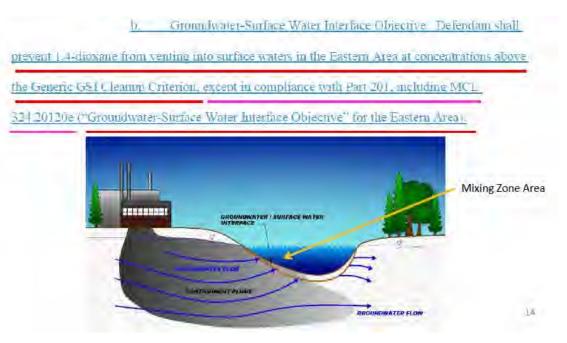
 Prohibition Zone as may be amended pursuant to Section V.A.2.f. Compliance with the

However, the PZ Objectives reference Section V.A.2.f. which allows Gelman or EGLE to expand the PZ Boundary, see below Section V.A.2.f. language. So either Gelman or EGLE can simply expand the PZ to attain the PZ Containment Objective.

<u>i</u> The Prohibition Zone Institutional Control shall remain in effect in this form until such time as it is modified through amendment of this Consent Judgment, with a <u>uninimum of 30 days' prior notice to all Parties. The Defendant or EGLE many move to amend</u> <u>this Consent Judgment to modify the boundaries of the Prohibition Zone to reflect material</u> <u>changes in the boundaries of fate and transport of the Croundwater Contamination as determined</u> <u>try fitture hydrogeological investigations or EGLE-approved monitoring of the fate and transport</u> <u>of the Groundwater Contamination</u>. The dispute resolution procedures of Section XVI shall not apply to such motion. Rather, the Prohibition Zone boundary may not be expanded indexs the moving Party demonstrates by clear and convincing evidence that there are compelling reasons that the proposed expansion is needed to preven, an unacceptable risk to lumini health. The

The 4th Amended CJ should not allow Gelman or EGLE to expand the PZ Boundary to attain compliance with the PZ Containment Objective. The 4th Amended CJ should require that Gelman halt the dioxane plume migration above the Groundwater Contamination beyond the PZ Boundary to achieve compliance.

<u>Gelman Allowed to Apply a Mixing Zone-Based Groundwater-Surface Water Interface Criterion</u> The 4th Amended CJ has Eastern Area Objectives which Gelman must attain under Sections V.A.1.a. and b. The second Eastern Area Objective is the under Section V.A.1.b. This is the same Objective in the Western Area. The Groundwater-Surface Water Interface (GSI) Objective is stated as to prevent the dioxane plume from venting into a surface water above the Generic GSI of 280 ug/L that is protective of non-drinking water use, see below extraction.



However, the GSI specifically calls out the exception of using MCL 324.20120e to comply with Part 201 and the GSI Objective, see the below extract.

NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION ACT (EXCERPT) ACT 451 of 1994

324.20120e Response activity providing for venting groundwater; definitions.

Sec. 20120e,

(1) Subject to other requirements of this section, a person may demonstrate compliance with requirements under this part for a response activity providing for venting groundwater by meeting any of the following, singly or in combination:

(c) <u>Mixing zone-based GSI criteria established under this part</u>, which are consistent with part 31. The use of mixing zone-based GSI criteria shall be allowable in any of the categories provided for in section 20120a(1) and (2) and shall be allowable for criteria based on chronic-based or acute-based surface water quality criteria.

This exception allows Gelman to apply a mixing zone dilution to the Generic GSI value to comply with the CJ requirements and the GSI Objective. A Mixing Zone is the area where groundwater enters through the ground into the surface water, see above figure. The polluter is allowed to consider the "mixing" of the amount of contaminated groundwater venting/entering into the creek or river with the amount of water in the creek or river to yield a Mixing Zone-Based GSI.

The resulting Mixing Zone-Based GSI will be much greater than the Generic GSI of 280 ug/L dioxane and will likely not require Gelman to take any actions to meet this GSI Objective requirement.

The 4th Amended CJ should not allow Gelman to apply a Mixing Zone-Based GSI to attain compliance with the GSI Objective.

Definition of Groundwater-Surface Water Interface Does Not Consider Drinking Water Supply The 4th Amended CJ define GSI as the Generic GSI of 280 ug/L dioxane which is protective of non-drinking water use. This value assumes that the venting does not enter upstream of a public water supply, which is not the case for the dioxane plume. A portion of the dioxane plume is moving northward towards Barton Pond, a City of Ann Arbor water supply. Per EGLE requirements, to protect a drinking water supply the Generic GSI should 3.5 ug/L dioxane.

The 4th Amended CJ should apply the Generic GSI of 3.5 ug/L dioxane to the portion of the dioxane plume moving towards Barton Pond.

<u>Remedial Contingency Plan with PZ Boundary Expansion Option</u> The 4th Amended CJ Eastern Area Section V.A.5.a.ii.B. requires a Remedial Contingency Plan to address a Verified Sentinel Well Exceedance trigger, see below extract. On the face of it, the Remedial Contingency Plan must identify active response actions to prevent the Groundwater Contamination from migrating beyond the PZ Boundary. However, as highlighted below, the Remedial Contingency Plan may include expansion of the PZ Boundary to attain compliance, which would allow the plume to move outward, including towards Ann Arbor Charter Township residential wells.

5	Eastern Area Response Activities. Defendant shall take the following
Response Activities	L
	(B) If the Ventied Seminel Well Exceedance occurs in a
Sentinel Well to be u	istuffed near the porthern boundary of the Probibition Zone, Defendant shill
develop a "Remedia)	Contingency Plan" that identifies the Response Activities that could be
implemented to prev-	ent Gronodwarer Contamination from inigniting bevond the Prohibition.
Zone Boundary. The	Remedial Contingency Plan may identify espansion of the Prohibition.
Zone as an option, su	bject to Section V.A.2.f. Defendant shall submit the Remedial Contingency
Plan to EGLE within	15 days after the filensed hydrogeological assessment is completed.

The 4th Amended CJ should not allow the Remedial Contingency Plan the option of expanding the PZ Boundary.

<u>Definition of Remedial Action</u> The 4th Amended CJ uses the term "Remedial Action". However, the CJ definition of "Remedial Action" is not consistent with Part 201. The CJ has added to the definition of Remedial Action "land use or resource restrictions and institutional controls", see below extract.

L_S____"Remedial Action" or "Remediation" shall mean removal, treatment, and proper disposal of <u>eG</u>roundwater and <u>Soil_contaminantsContamination</u>, land use or resource, restrictions, and institutional controls, pursuant to the terms and conditions of this Consent Judgment and work plans approved by EGLE under this Consent Judgment.

The actual Part 201 definition does not include the land use or resource restrictions or institutional controls. The definition under Part 201, MCL 324.2010 (qq) reads - "Remedial action" includes, but is not limited to, cleanup, removal, containment, isolation, destruction, or treatment of a hazardous substance released or threatened to be released into the environment, monitoring, maintenance, or the taking of other actions that may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or welfare, or to the environment.

When it suits Gelman and EGLE to use Part 201 definitions in the 4th Amended CJ, they do so, but when the Part 201 definitions do not support their intended actions, they change the Part 201 definitions to fit their purposes. The definition change is about allowing Gelman to apply Institutional Controls and Land Use Restrictions to take away individual property owner rights to use their wells for drinking water and other purposes.

The 4th Amended CJ should not allow taking of private property owner rights to use their wells as a safe potable water supply. The 4th Amended CJ should be modified to focus on stopping the plume from migrating towards private wells.

<u>Elimination of the Maple Road Containment Objective</u> The 4th Amended CJ has omitted the Maple Road Containment Objective which required Gelman to prevent dioxane great than the old GSI of 2,800 ug/L from migrating east of Maple Road, see below extract. The 4th Amended CJ allows for the new Generic GSI of 280 ug/L to be modified using a mixing zone dilution, thereby, yielding a Mixing Zone-Based GSI much greater than 280 ug/L dioxane. This Mixing Zone-Based GSI will likely not require Gelman to prevent any of the dioxane plume from migrating east of Maple Road.

A. Eastern Area

Objectives. The remedial objectives of the Eastern Area Section ("Eastern
Area Objectives") shall be- the following:

Annue Read Communest Objective. The samen that E-objective optification the Cart E-Order of preventing containment concentrations above the gammatwater authors water interace criterion of 2.800 u.s.f. subject to approval by the Court of file application of 4 new cater of Sour augming caused & Japla Read the Ellappdyne the Ensem free System, regardles - of the aquifer designation, or depth-of geometwater or groundwater containmation:

If the 4th Amended CJ had simply replaced the old GSI of 2,800 ug/L with the updated GSI of 280 ug/L, Gelman would have to remediate a large area of the dioxane plume now east of Maple Road, see the red shaded area above 280 ug/L within the blue box.



The 4th Amended CJ should not omit the Maple Road Containment Objective but simply change the definition of GSI to the new 280 ug/L dioxane from the old 2,800 ug/L dioxane.

<u>Elimination of the Little Lake Area System Non-Expansion Objective</u> The 4th Amended CJ eliminates the Little Lake Area System Objective to prevent the expansion of the dioxane plume

in this area, including a batch purging of the Ann Arbor Cleaning Supply Well. The Ann Arbor Cleaning Supply Well has been extracting dioxane contaminated groundwater many years to halt the spread of dioxane greater than 85 ug/L. The elimination of this active extraction well with no other such extraction well in the Little Lake Area System is unwarranted and not protective of the aquifer.

The 4th Amended CJ should not omit the Little Lake Area System Non-Expansion Objective or the requirement for Gelman to operate the Ann Arbor Cleaning Supply Well.

<u>No Control of Dioxane Plume Migration to the East, West or North</u> The 4th Amended CJ establishes the location and pumping rates for off-site groundwater extraction wells: Evergreen Wells; Maple Road Wells and Park Lake Well. Collectively, the Evergreen Wells and Maple Road Wells must collect 200 gallons per minute of groundwater or the maximum capacity of the existing Gelman deep transmission pipe line whichever is less, see below figure with the 4th Amended CJ extraction well locations and the dioxane plume. These Evergreen Wells and the Maple Road Wells are only required to "reduce the mass" of dioxane; not to attain a specific performance standard, such as a specific dioxane ug/L value or halt the plume migration.

Areas of High **Dioxane** Plume Concentration Beyond the Extraction Wells with Free Movement to the North, West & East Evergreen Wells: LB-4; Rose Well & IW-2 Maple Road Wells: 11 TW-19 & TW-23 Park Lake Well **On-site Extraction** Wells - Phase | & II Dioxane Plumes Key - 1-86 ppb (est) # 85-1000 ppb / 1000-2000 ppb 14 2000+ ppb

4^{III} Amended Consent Judgment Extraction Wells & Plume Beyond Wells Influence

Under the 4th Amended CJ, the Park Lake Well is not required unless Gelman receives a NPDES permit for its discharge into First Sister Lake that is no more restrictive than the 2014 NPDES permit for the Gelman Central Treatment Plant into Honey Creek. The Park Lake Well must operate at 200 gallons per minute, if it is installed by Gelman. Obtaining the requested NPDES permit demanded in the 4th Amended CJ is very dubious.

The existing groundwater extraction wells off of the Gelman Property for many years have been operating at approximately the same extraction rate required in the 4th Amended CJ for the Evergreen Wells and Maple Road Wells and this current pumping has not stopped the dioxane groundwater migration in the past and will not in the future. In the above figure the blue arrows point to the dioxane high concentration areas which are beyond the extraction wells capture zones and moving freely in eastern, western and northern directions.

There are not enough groundwater extraction wells and they are not pumping groundwater at a level to make any material difference in the plume concentration or direction of flow.

For the 4th Amended CJ, they based the number of extraction wells and rates upon how much groundwater the existing Gelman 200 gallon per minute transmission line can carry to the Gelman Central Treatment Plant.

The 4th Amended CJ should require that Gelman install the Park Lake Well, have a specific performance standard for the extraction wells, and perform a proper Remedial Design Investigation to determine how many extraction wells are required and at what pumping rate to control and capture the dioxane groundwater plume.

No Remedial Design Investigation for a Proper Groundwater Extraction & Treatment System The 4th Amended CJ requirements were not based upon sound technical work. Gelman and EGLE have never done a Remedial Design Investigation (RDI) for the groundwater extraction system. A RDI is required by all properly managed contaminated sites, whether they are State or Federal sites. A RDI is fundamental for: 1) determining the number, placement, and extraction rates of groundwater extraction wells to contain and withdraw the dioxane plume where necessary; and 2) determining the most cost-effective treatment technology to reduce the captured dioxane plume to the applicable criteria. There has never been a proper engineering study to determine where groundwater extraction wells should be placed nor the volume of groundwater to be collected from the extraction wells to control the dioxane plume. Currently, the dioxane plume is migrating past the few extraction wells with no material impact on the passing dioxane groundwater contamination movement. A Remedial Design Investigation is required at all USEPA Superfund Sites with a significant groundwater clean-up action. It is impossible to correctly install and operate a groundwater extraction and treatment system to meet CJ objectives without proper remedial design specifications. The 4th Amended CJ should require a RDI to determine how many extraction wells are required and at what pumping rate to control and capture the dioxane groundwater plume.

Park Lake Well Impacts on First Sister Lake & Wetland Nature Preserve The 4th Amended CJ has groundwater extraction at the Park Lake Well discharge after on-site treatment at 200 gallons per minute to the small First Sister Lake. This has been equated to a 100 year flood event entering the lake each day. First Sister Lake is encompassed by a wetland and is in a City Nature Preserve, see below figure. The Gelman Central Treatment Plant which can receive the Park Lake Well treated groundwater is within 2,600 feet of First Sister Lake. The cost to install a 200 gallons per minute transmission line from the Park Lake Well pump station to the Central Treatment Plant lagoon is approximately \$350,000. The 4th Amended CJ is sacrificing an established City Nature Preserve to save Gelman what should be considered a reasonable remedial cost.



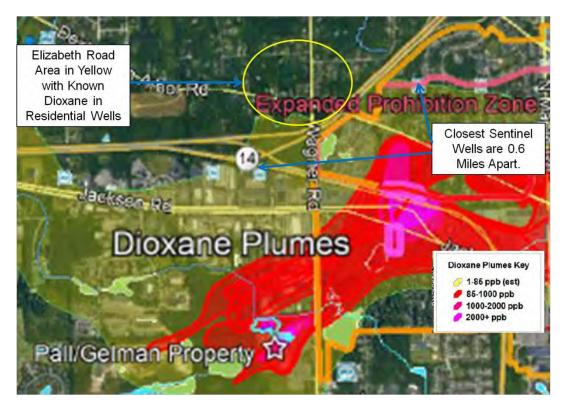
The 4th Amended CJ should require that the Park Lake Well be installed and the treated groundwater be sent to the Gelman Central Treatment Plant for discharge under a NPDES permit.

<u>No Proper Monitoring Wells Protective of Ann Arbor Charter Township or Scio Township</u> <u>Residential Wells</u> The 4th Amended CJ does not place Sentinel Wells which are necessary to protect Ann Arbor Charter Township or Scio Township residential wells. These residential wells are down-gradient of the dioxane plume. The 4th Amended CJ says that it will install "Sentinel Wells" along the northern PZ to "... ensure that any potential migration of Groundwater Contamination outside of the Prohibition Zone is detected before such migration occurs...verify the Groundwater Surface Water Interface Objective is satisfied ...track the migration of the Groundwater Contamination...". However, the location and number of the new Sentinel Wells does not allow for the proper detection of the dioxane plume moving towards Ann Arbor Charter Township private drinking water wells. There are no Sentinel Wells east of Maple Road, yet the dioxane plume is moving east of Maple Road towards the Ann Arbor Charter Township potable water wells, see below figure.



For Scio Township, there is already established dioxane groundwater contamination beyond the proposed Sentinel Wells in the northwest dioxane plume across M-14 in the Elizabeth Road area. Dioxane ranges from 1 ug/L to 4 ug/L in residential wells located in this area. The proposed Sentinel Wells are not beyond M-14 in this sensitive northwestern area. This does not allow for the proper delineation of the dioxane plume moving towards the most high risk Scio Township private drinking water wells nor provide an early warning on where the dioxane plume may migrate.

The two closest Sentinel Wells are more than 3,200 feet or 0.6 miles apart. The dioxane plume can easily pass between them undetected, see below figure.



The 4th Amended CJ needs to include Sentinel Wells east of Maple Road and across M-14 in the northwestern area to understand the groundwater migration and dioxane concentrations in these residential area.

<u>Western Area Objectives Allow Expansion</u> The 4th Amended CJ contains Western Area Objectives. One of the Objectives is the Western Area Non-Expansion Cleanup Objective, see below extract. This Objective expressly allows the continued migration of Groundwater Contamination into the Prohibition Zone. Such an allowance is contradictory to the objective of "non-expansion" and allows for the continued dioxane groundwater contamination towards sensitive receptors.

1. Western Area System Non-Expansion Cleanup Objective. The Defendant shall prevent the horizontal extent of the Groundwater Contamination in the Western Area-toexpanding. The the contained extent of the the meanmum horizontal coefficient of groundwater contamination, regardless of the depth of the coundwater contamination (as established under Section V.B.23.h and coefficient Contained International Compliance with Inobjective shall be determined as set forth in Section V.B.4, below. Continued migration of enroundwater eContamination into the Prohibition Zone - Expanded Prohibition Zone, as may be modified, shall not be considered expansion and is allowed. A change in the horizontal extent The 4th Amended CJ needs to exclude migration from the Western Area to the Eastern Area Prohibition Zone.

<u>Simple Termination Criteria for Eastern Area Objectives & Extraction Wells</u> The 4th Amended CJ has termination criterion which must be met for Gelman to satisfy CJ Objectives and complete the CJ obligations. Below are Eastern Area Objectives requirements under V.A.1.a. and b.

• Prohibition Zone Containment Objective -

 Image: Prohibition Zone Containment Objective. Debudant shall prevent

 Groundwater Containmention, reconfiless of the source destancion or the depth of the annexity of containment on the depth of the Debudates of the Debudation Zone as may or summided pursuant to Section V.A.2.2. Compliance with the

· Groundwater Surface Water Interface Objective -

ii Guundwarer-Surface Water Interface Objective Delendant dudt

prevent 1.4-diatane from venting into surface waters in the Eastern Area at concentrations above

the Generic G81 Cleannp Criterion, esteps in compliance with Part 201, malouting MCL

304.20120e ("Groundwater-Surmee Water Interface Objective for the Eastern Area)

The 4th Amended CJ also contains groundwater extraction termination criteria for the Eastern Area extraction wells: Evergreen Wells, Maple Road Wells, Wagner Road Wells & Park Lake Well under Section V.C.1.a. and b.

The Evergreen and Maple Road extraction wells must operate until the Eastern Area Objectives can be met at a reduced extraction rate or without the need to operate the wells.

The Wagner Road extraction wells must operate until the Eastern Area Objectives will be met with a lower combined extraction rate or without the need to operate the wells.

The Park Lake extraction well must have the concentration of dioxane extracted is below 500 ug/L, if it is installed by Gelman.

The Prohibition Zone Containment Objective, however, can be met by Gelman or EGLE expanding the PZ Boundaries and the GSI Objective can be met by applying a Mixing Zone-Based GSI. This will allow Gelman to terminate its Eastern Area Objectives and the extraction wells in the Eastern Area, except the Park Lake Well which may never be required to be installed by Gelman.

The 4th Amended CJ needs to be modified to ensure that the public health and the environment are fully protected in this CJ. It was never the expectation of the public that EGLE would allow

such a simple, unrestrictive, and unprotective option for Gelman to terminate its obligations to deal with the dioxane groundwater contamination adversely impacting the community.

<u>Gelman Strategy of Utilizing the 4th Amended CJ Eastern Area Provisions in Concert to Not Take</u> <u>Actions Protective of Public Health and the Environment</u> The Eastern Area 4th Amended CJ Prohibition Zone expansion provision, the implementation of Institutional Control and Land Use Restriction provision and the Municipal Water Connection Contingency Plan provision all work together to allow Gelman and EGLE to: 1) expand the Prohibition Zone Boundary; 2) place institutional controls on a private land owner whose drinking water well becomes contaminated above the dioxane drinking water criterion; and 3) provide the homeowner with a municipal potable water supply.

These provisions do not require performing active clean-up of the groundwater pollution, so that a property owner can safely drinking water from their well or ensure that the shallow dioxane plume does not adversely impact City of Ann Arbor homes or workers.

Overall, this 4th Amended CJ follows the Gelman and EGLE strategy to allow further expansion of the dioxane plume with the addition of Institutional Control and Land Use Restriction; rather than the halting of and cleaning-up of the dioxane plume migration.

The 4th Amended CJ needs to be modified to ensure that further migration of the dioxane plume above the drinking water criterion does not occur anywhere in both the Eastern and Western Areas and that the loss of private drinking water supply does not occur in the future.

<u>No Attainment of Most Interveners Objectives</u> When the City of Ann Arbor, Washtenaw County, and Huron River Watershed Council requested intervention in the Court Judgment, they made a number of statements to the Court including that the Consent Judgment remedy presents an imminent and substantial endangerment to public health and the environment. The 4th Amended CJ still presents such endangerment. Additionally, the 4th Amended CJ does not address most of the objections expressed to the Court. For example:

- City of Ann Arbor:
 - "Consent Judgment fails to cleanup or contain plume"
 - "Despite its promises and the mandates of the consent judgment, as amended, Defendant did not stop the spread of the 1,4, dioxane plumes...Defendant has not complied with mandates in the consent judgments requiring it to stop the migration of the toxic plumes outside of the prohibition zones. By any account, its cleanup must be deemed an abject failure."
 - "The consent judgment, as currently amended, has not sufficiently protected the public or the City. Contamination has been allowed to spread for decades and, despite numerous judgments and promises from Gelman, has not even been controlled, contained, or delineated, let alone cleaned up."

- "Unfortunately, to date, MDEQ has allowed 1,4 dioxane plumes to continue to spread through Ann Arbor...and has allowed the Defendant to first breach its promise to fully cleanup the pollution, and later to contain it."
- The DEQ, Gelman, and Court Judgment are required to comply with the Michigan environmental statutory mandates, however, "statutory mandates have not been met".
- "Defendant has failed and refused to undertake the Response Activities required under [state statute] MCL 324.20114. Defendant has further failed to comply with the terms of the consent judgments, and has failed to contain the 1,4 dioxane plumes."
- "Defendant has failed to satisfy its affirmative obligations to clean up the Hazardous Substances contamination it has caused, including but not limited to those required under [Michigan] Part 201 of NREPA."
- "On October 27, 2016, the MDEQ declared the Defendant's releases...to constitute an emergency threatening the public health, safety and welfare of local citizens and the environment."
- Washtenaw County:
 - "Over the years, as series of amended Consent Judgments were negotiated and executed. To date, there is not effective "cleanup" of the 1,4 dioxane contamination. The cleanup efforts have failed."
 - "The current Consent Judgment process does not include a viable "cleanup" strategy that addresses the public health concerns of Washtenaw County."
 - 'It is factually clear that there is a "public health" threat."
 - Despite the Consent Judgment, '<u>No cleanup is effectuated to date</u>."
 - "The MDEQ revised the Consent Judgment and permitted less stringent requirements. This violates the law at MCL 324.20118 and its regulations."
 - The amended Consent Judgment allows for a "...containment strategy. This violates the law and applicable regulations."
 - "Defendant has failed and refused to undertake the Response Activities required by MCL 324.20114. Defendant has further failed to comply with the terms of the Consent Judgments, and has failed to contain the 1,4 dioxane plumes."
 - "The revised strategy of ignoring the remediation and removal of the 1,4 dioxane is contrary to State law and its applicable regulations."
 - "The Defendant actions have significantly interfered with the people of Washtenaw's public health, safety, peace, and comfort."
- Huron Valley Watershed Council:
 - "DEQ has been attempting to enforce the cleanup laws,...they have not been sufficient."
 - "The State and Defendant have proved that they cannot alone adequately protect the surface water interest."
 - "Defendant has failed to comply with applicable laws and is in violation of the MEPA"

In the 4th Amended CJ, EGLE should incorporate changes which attain the Interveners above stated objectives.

The 4th Amended CJ is not Consistent with State of Michigan Laws & Regulations According to EGLE, the current CJ and 4th Amended CJ remedy is a "dispersion/dilution" remedy, however, a dilution/dispersion remedy for the Gelman site violates Michigan law and regulations, see enclosed Great Lakes Environmental Law Center – August 2016 Memorandum. The current State law requires in the Natural Resources & Environmental Protection Act 451 – Subsection 324.20118 (4) states, in part, that "Notwithstanding any other provision on this subsection, the department shall not approve of a remedial action that does not attain a degree of control or cleanup of hazardous substances that complies with R 299.3 (5) or R 299.3 (6) of the Michigan administrative code if the remedial action is being implemented by a person who is liable under section 20126 and the release was grossly negligent or intentional, unless attaining that degree of control is technically infeasible or the adverse environmental impact of implementing a remedial action to satisfy the rule would exceed the environmental benefit of that remedial action". Gelman is liable under section 20126. The Gelman dioxane releases were intentional from 1966 to 1986. The Gelman 2004 Feasibility Study indicates that the groundwater extraction and treatment alternative is not technically infeasible. The benefits of a proper Gelman clean-up would exceed any adverse environmental impacts.

Michigan Part 201 Rule 299.3 paragraphs (5) and (6) say that the plume shall not increase after initiation of the clean-up and remedial action shall be either through active remediation or naturally occurring biological or chemical process. Below are R 299.3 (5) and R299.3 (6).

(5) The horizontal and vertical extent of hazardous substance concentrations in an aquifer above the higher of either the concentration allowed by section 20120a(1)(a) or (10) of the act, as applicable, shall not increase after the initiation of remedial actions to address an aquifer, except as approved by the director as provided in section 20118(5) and (6) of the act.

(6) All remedial actions that address the remediation of an aquifer shall provide for removal of the hazardous substance or substances from the aquifer, either through active remediation or as a result of naturally occurring biological or chemical processes which can be documented to occur at the facility, except as provided in section 20118(5) and (6) of the act.

EGLE maintains that the current Gelman Site clean-up option is a "dilution/dispersion" remedy. Under this dilution remedy, generally, EGLE is allowing Gelman to let the dioxane plume migrate under the City of Ann Arbor and Ann Arbor Charter Township until it reaches the Huron River. This dilution remedy potentially contaminates buildings, private drinking water wells and the City of Ann Arbor municipal water supply. EGLE is not following the requirements of R299.3 (5) by allowing the Gelman plume to increase in size above drinking water criterion after the initiation of the remedial action. Dioxane in groundwater does not degrade through a biological or chemical process. Under the Rule, natural occurring processes do not include "dilution/dispersion". EGLE is violating the requirements of R299.3 (6) by allowing Gelman to not remove the dioxane from the aquifer.

Therefore, per the current Michigan Act and Rules, EGLE should require that Gelman halt the spread of the dioxane plume and conduct active remediation to a drinking water criterion.

In the 4th Amended CJ, EGLE should require Gelman to comply with Michigan Act and Rules, by having Gelman halt the spread of the dioxane plume and conduct active remediation to a drinking water criterion.

<u>No Residential Drinking Water Well Program</u> The 4th Amended CJ does not include a Residential Drinking Water Well Program, which would test individual residential drinking water wells about the dioxane contaminant plume. Currently, EGLE out of the State budget performs monthly sampling of local residential wells about the Gelman dioxane plume.

The 4th Amended CJ should require that Gelman reimburse EGLE for the EGLE residential drinking water wells sampling program.

<u>No Exposure Assessment</u> The 4th Amended CJ should include an Exposure Assessment. At this time, Gelman is not addressing major routes of potential exposure to the population. The 4th Amended CJ does not recognize the potential impact to Ann Arbor Charter Township drinking water wells. The 4th Amended CJ does not protect residential and commercial areas from shallow dioxane contaminated groundwater routes of exposure including: groundwater intrusion into basements; volatilization of dioxane contaminated groundwater; use of shallow wells for vegetable gardens; and dermal exposure to swimming in local lakes and creeks and recreational pools filled with dioxane contaminated groundwater.

The 4th Amended CJ should require that Gelman perform an Exposure Assessment to identify all potential receptors and routes of exposure. This a basic task in any contaminated site remediation process.

<u>Use of Outdated Dioxane Analytical Method</u> – The 4th Amended CJ continues to allow an outdated dioxane analytical method for drinking water samples. The preferred USEPA dioxane analytical method for drinking water is Method 522, solid phase extraction, which is capable of detecting dioxane at 0.2 ug/L.

The 4th Amended CJ should require that Gelman perform Method 522 on all drinking water well samples and Sentinel Well samples, thereby, ensuring the Sentinel Wells meet the objectives to

"... ensure that any potential migration of Groundwater Contamination outside of the Prohibition Zone is detected before such migration occurs...verify the Groundwater Surface Water Interface Objective is satisfied ...track the migration of the Groundwater Contamination..."

Deficient Quarterly Progress Reports The 4th Amended CJ does not require that Gelman provide a better quality Quarterly Report than now submitted under the 3rd Amended CJ. Currently, the Gelman Quarterly Reports do not include the presentation and discussion of basic facts related to: site monitoring; site investigation; remediation; and compliance with CJ objectives. There is no discussion of groundwater contamination trends (e.g., dioxane plume migration patterns) or a summary table with quarterly results for each monitoring well over the years. There is no review of compliance with CJ Objectives & Criteria, such as discussion of objectives for the: Eastern Area; Western Area; Little Lake System; Honey Creek; Third Sister Lake; or Marshy Area. There is no review of compliance with CJ Verification Plans, Monitoring Plan & Down-gradient Investigations nor discussion on further investigations required or modification to current sampling plans. There is no review of compliance with the required groundwater extraction. There is no discussion of: plume expansion; migration towards PZ & EPZ boundaries; nor consistency between groundwater model projections and groundwater data.

The 4th Amended CJ should require that Gelman provide meaningful Quarterly Reports including: analytical trends; compliance with CJ objectives and criteria; compliance with Verification Plans, Monitoring Plans, and Down-gradient Investigations; discussion of quarterly analytical results and protocols; extraction system requirement compliance; plume migration compliance; and recommendations for follow-up actions. All of these items are normal in a contaminated site status report.

If you have any technical or regulatory questions, please contact Mr. Daniel J. Bicknell with Global Environment Alliance, LLC at 248-720-9432.

Very Truly Yours,

alail Moran

Michael Moran Ann Arbor Charter Township Trustee

Enclosure

Great Lakes Environmental Law Center – August 2016 Memorandum – "Gelman Sciences, Inc – Remedy Violation"

The Great Lakes Environmental Law Center

Protecting the world's greatest neshwater resource and the communities that depend upon it

> 4444 Second Ave. Detroit, Michigan 48201 www.gielc.org

Re: Gelman Sciences Inc - Remedy Violation

Question Presented:

Whether the Michigan Department of Environmental Quality (DEQ) dilution/dispersion remedy for the Gelman Sciences Inc. (Gelman) – Michigan Part 201 Contaminated Site groundwater 1,4-dioxane (dioxane) plume complies with Natural Resources and Environmental Protection Act (NREPA) Subsection 20116 (4) and Michigan Administrative Code R 299.3(5) or R 299.3 (6)?

Brief Answer:

No. If the criteria under NREPA 20118 (4) are met, the liable party must comply with R 299.3 (5) or R 299.3(6). The DEQ dilution/dispersion remedy allows the groundwater dioxane plume to increase in horizontal and vertical extent after Gelman initiated remedial action, in direct violation of R 299.3 (5) and the DEQ dilution/dispersion remedy is neither active remediation nor naturally occurring biological or chemical degradation, in direct violation of R 299.3 (6).

Background:

The Gelman Sciences Inc. site is located in Washtenaw County, MI and has been a Michigan Contaminated Site since 1988. The site is currently owned by Pall Life Sciences, Inc. but there are no active plant operations. Historically, their facility manufactured filter devices and used dioxane as an industrial solvent. Between 1966 and 1986, Gelman disposed of dioxane into the site soil, surface water, and groundwater through seepage lagoons, land spray irrigation, and direct discharges. Dioxane is now found widely in the groundwater aquifer and its physical properties allow it to spread rapidly in groundwater.

The current groundwater dioxane plume is approximately 4 miles long and 1 mile wide and has contaminated local lakes, creeks, residential drinking water wells, and a City of Ann Arbor municipal well. The plume is spreading approximately one foot per day in all directions

Per the 1992 Consent Judgment between DEQ and Gelman, DEQ oversees response actions required of Gelman. In the February 2016 Washtenaw County Board of Commissioners and City of Ann Arbor City Council Special Working Sessions, Mr. Robert Wagner, Chief of the DEQ Remediation and Redevelopment Division, specifically stated that the Gelman Site remedial action was now a "dilution/dispersion" remedy.

Under NREPA, if the DEQ determines that there may be an imminent and substantial endangerment to the public health, safety, welfare, or the environment because of a release or threatened release, they may require persons who are liable under the provisions related to environmental remediation to take necessary action to abate the danger or threat.¹

Legal Analysis:

In order for the NREPA 20118(4)² to apply, the person must be liable under Section 20126 and the person that released a hazardous substance must have acted grossly negligent or intentionally. Gelman is liable as an intentional polluter under Section 20126(b)⁴ because they owned and operated the facility during the time that dioxane was disposed of by various intentional means. These intentional means include disposing of dioxane into the site soil, surface water, and groundwater through seepage lagoons, land spray irrigation, and direct discharges,

20118(4) states that notwithstanding any other provision of the subsection, DEQ cannot approve a remedial action for Gelman, as an intentional polluter, unless it complies with R 299,3(5) or R 299.3(6). This section further states that DEQ may only approve an intentional polluter remedial action that doesn't comply with R 299.3 (5) or R 299.3(6) if the degree of control is technically infeasible or if the adverse environmental impact of implementing a remedial action to satisfy the rule would exceed the environmental benefit of that remedial action. In the Gelman project, these exceptions are not the case.

¹ MCLA 324,20119(1)

² MCL 324.20118(4)

https://www.legislature.mi.gov/(S(rguzyq443uxrqe4ptbfiyywd))/mileg.aspx?page =getobject&objectName=mcl-324-20118

³ MCL 324,20126(b)

https://www.legislature.mi.gov/(S(t0ax40kvnehgywagnrld3dxg))/mileg.aspx7page =get0bject&objectName=mcl-324-20126

R 299.3(5) of the Michigan administrative code states that the horizontal and vertical extent of a hazardous substance concentration in an aquifer must not increase after the initiation of the remedial actions.³ In the Gelman project, the original 1992 remedy and amended remedy was initiated, yet the Gelman groundwater dioxane plume concentrations. continued to spread in all directions, increasing the plume horizontal and vertical extent of contamination. Current onsite and off-site groundwater extraction methods are not stopping the plume from spreading. By not meeting R 299.3(5), Subsection 20118 (4) requires DEQ to approve a remedial action that complies with R 299.3(6).

R 299.3(6) requires that all remedial actions addressing the remediation of an aquifer provide for removal of the hazardons substance or substances from the aquifer, either through active remediation or as a result of naturally occurring biological or chemical processes. Dioxane in the groundwater does not degrade naturally through a biological or chemical process. Under R 299.3(6), dilution or dispersion are not defined as a naturally occurring process. As the DEQ, dilution/dispersion remedy is not covered in R 299.3(6), DEQ must enforce the rule's active remediation provision.

NREPA does not define active remediation but does define remedial action as "including, but not limited to, cleanup, removal, containment, isolation, destruction, or freatment of a hazardous substance released or threatened to be released into the environment, monitoring, maintenance, or the taking of other actions that may be necessary to prevent, minimize, or mitigate injury to the public health, safety, or

⁴ http://w3.lara.state.mi.us/orr/Files/AdminCode/1604_2015-094EQ_AdminCode.pdf_at 5.

welfare, or to the environment."⁵ The DEQ dilution/dispersion remedy has allowed the dioxane groundwater contamination to spread in all directions. This remedy does not prevent, minimize, or mitigate injury to the public health safety, welfare or environment because the hazardous substance continues to migrate, thereby, adversely impacting private-drinking water wells, buildings due to vapor intrusion, and potentially the City of Ann Arbor drinking water supply at Barton Pond. As such, the DEQ dilution/dispersion remedial action does not meet either R 299,3(5) or R 299.3 (6).

Conclusion:

In violation of NREPA and Michigan Administrative Code, the DEQ dilution/dispersion remedial action is neither actively remediating nor stopping the dioxane from spreading within the aquifer. Thus, pursuant to NREPA Subsection 20118 (4), DEQ and cannot approve dilution/dispersion as a remedial action for the Gelman dioxane plume.

5 MCL 324,20101



Mr. Dan Hamel Michigan Department of Environment, Great Lakes and Energy Via email: <u>hameld@michigan.gov</u>.

RE: Comments on the Fourth Amended And Restated Consent Judgment for the Gelman Site in Ann Arbor, MI.

Dear Mr. Hamel

Please consider these comments and questions regarding the Fourth Amended and Restated Consent Judgment for the Gelman Site in Ann Arbor, MI. I am submitting these comments on behalf of myself. I am an environmental scientist with over 35 years of experience with investigation and remediation of contaminated sites in Michigan.

The Consent Judgment, when implemented, will be a significant improvement over the current situation, but also has some gaps that concern me, especially in Scio Township. The complexity of the site and contamination, the long history of investigation and the volume of material make it difficult for anyone to review. An independent review by paid experts is needed.

- 1. The Consent Judgment only address 1,4-dioxane. Are there other contaminants that should be considered?
- 2. The lack of an up-to-date map of the plume (I could not find one on the EGLE's website for this project) makes it difficult to review the provisions of the Consent Judgment. There is a map available from the Washtenaw County Health Department, but it lacks enough detail for some evaluations. The Consent Judgment should require Gelman prepare a plume map on at least an annual basis. The map should include plume contours for the detection limit, the drinking water criterion and the GSI criterion at a minimum.
- 3. The proposed remedial actions should include consideration of infiltration of groundwater into storm sewers such and Allen Creek Drain and its tributaries. The county's plume map indicates there may be potential for groundwater with concentrations that exceed GSI criteria to infiltrate into storm sewers.
- 4. There is no prohibition zone or Land or Resource Use Restrictions (LRURs) in most of the western area. Section V.C requires LRURs only as a condition for terminating extraction wells in the western area. This could take many years. Concentrations of 1,4-dioxane in groundwater in the western area exceed the drinking water criterion. Use of groundwater for drinking water in

the western area is a potentially complete exposure pathway that is not adequately addressed by the Consent Judgment.

- 5. The definition of the plume around Little Lake and the two downstream ponds is not adequate. There is only one well near the groundwater surface water interface of these ponds. There are too few wells around Third Sister Lake and the "Smith Ponds" to define the contamination at the GSI. The GSI investigation required by section V.B.2.b of the Consent Judgment should include a much better definition of the extent of contamination in these areas. Henry samplers (or similar) may be an appropriate sampling method to assess the GSI. The GSI investigation should include seasonal monitoring. The GSI investigation should include venting to wetlands, ponds, lakes, streams, ditches and storm sewers.
- 6. The references to the NPDES permit are to an expired permit. It should be clarified that any new or re-issued NPDES permits may include different technology-based effluent limits.
- 7. The compliance determination in Section V.4.b refers only to Prohibition Zone boundary wells. It does not refer to the GSI and there are surface water features and storm drains in the Prohibition Zone. The compliance determination should consider the GSI in the Prohibition Zone and in the western area.
- 8. The Consent Judgment does not refer to vapor intrusion, which is a potentially complete pathway. The judgment should require evaluation of the vapor intrusion pathway.
- 9. The non-expansion objective for the western area could still allow concentrations to increase within the plume. This could increase future response activity costs and could be exacerbation of contamination.
- 10. Section V.B.1 states "continued migration of groundwater contamination into the prohibition zone... shall not be considered expansion and is allowed." There is no Prohibition Zone in the western area.
- 11. There may be an undefined "hot spot" near the Ann Arbor Cleaners in the western area. This hot spot has not been defined. Additional investigations should include defining this possible hot spot.
- 12. V.B.4.e.v requires "economically reasonable" water supply options. Economically reasonable is not defined. An economically reasonable water supply may not protect public health.
- 13. V.B.5 limits additional investigations except as provided in V.B.3.c. This should also refer to the Western Area Delineation Investigation in V.B.3.b and to the GSI Investigation is V.B.2.b. The requirement to petition the court for additional delineation in the western area is time-consuming for both parties and may not allow timely or adequate definition of threats to the public health and the environment.
- 14. V.D.1.b requires post termination monitoring of the GSI for ten years. The nature and extent of contamination in the western area GSI is not adequately defined. The GSI investigation specified in V.b.2.b should be used to define the post termination monitoring.
- 15. The "non-expansion" objective (V.B.1) for the western area presumes the area of contamination has been defined, which is not the case. This objective is only appropriate after the nature and extent of contamination has been defined.
- 16. The objective for Gelman Property is to prevent migration from soil to ground water that can cause non-compliance in the western area (VI.A) The extraction well objective if 500 ug/L,

exceeds both the drinking water and GSI criteria Migration of groundwater with concentrations of 500 ug/L could result in increasing concentrations in the western area and possibly eventual expansion of the extent of contamination. Explain how the extraction well objective is protective of public health and the.

- 17. The proposed cap over the burn pit (VI.C.4.b) could change redox conditions in soil and mobilize other contaminants. Has this possibility been assessed?
- 18. Section VII should include permits from the City for infiltration of groundwater into City storm sewers.

Thank you for your consideration of these comments. This is a complex project with lots of information to review, and I recognize my limited review may have missed something that addresses my comments.

Sincerely,



Copy: Jack Knowles, Scio Township Supervisor, jknowles@sciotownship.org



National Wildlife Federation Great Lakes Regional Center 213 W. Liberty Street, Suite 200 • Ann Arbor, MI 48104-1398 • 734-769-3351

September 21, 2020

Sent by email to EGLE-RRD-Gelman@michigan.gov

Dan Hamel, RRD Project Manager Michigan Department of Environment, Great Lakes, and Energy Jackson District Office 301 East Louis Glick Highway Jackson, MI 49201

Re: Comment on proposed Fourth Amended and Restated Consent Judgment in Attorney General for the State of Michigan, et al. v. Gelman Sciences, Inc., No. 88-34734-CE before the Washtenaw County Circuit Court

Dear Mr. Hamel:

The stipulated order asking the Washtenaw County Circuit Court to enter the proposed Fourth Amended and Restated Consent Judgment (consent judgment) excludes the intervening Huron River Watershed Council from future involvement in implementation of the consent judgment. That is a mistake. Environmental advocacy organizations are critical to the hazardous waste remediation process. The consent judgment will be significantly weaker without inclusion of the Council.

The court granted intervenor status not only to the local government parties, but also to the Council. By definition, allowing the Council to intervene means that the court did not think the state or the local government parties could adequately represent the Council's interests and that the Council's commitment to environmental protection would be vital to resolving the dispute. To exclude the Council from a consent judgment that the Council's intervention helped to shape is antithetical to the court's decision to allow the Council to intervene. Dan Hamel Comment on proposed consent judgment re Gelman Sciences September 21, 2020 Page 2 of 2

Environmental advocacy organizations generally – and specifically watershed councils – are indispensable for developing and executing a plan to clean up water resources that have been polluted by hazardous chemicals. Those organizations work to protect the interests of recreational users, researchers, policy analysts, and even the natural resources themselves. While there is some overlap, the government bodies' constituencies and priorities are different from an environmental advocacy organization's.

To exclude the Council from further involvement would set a terrible precedent. Environmental agencies and local governments cooperate with public interest organizations like the National Wildlife Federation all the time. We enforce the law when the government cannot; we generate and share data about natural resources; we provide analysis to policy makers. Remediation of pollution works best when government, the private sector, <u>and public interest organizations</u> are performing complimentary tasks to achieve the same goal. The government parties to this litigation should not accept, nor should the court approve, a way forward that takes away the opportunity for the Council to ensure that implementation of the consent judgment protects the Huron River and its many users.

We appreciate the opportunity to comment. Please contact us if there are questions.

Sincerely,

Mike Shriberg, Ph.D. Regional Executive Director

RECEIVED Friday, Sept 18, 2020 SEP 2 3 2020 Near Mr. Hamel, JACKSON DISTRICT OFFICE I'm sad, scared and worried because the 1, I diotane problem in our ground water which was caused in 1966 - 1989 has not been taken care of . It is not a little problem. The pollution and destruction of our local wetland represents a global problem. It says that for 30 years we have neglected to care enough about our planet to be deeply concerned about the destruction of insect and animal species which have been eliminated by reckless and agressive treatment of the environments that our planet provides for them. One of that species is the human being whose body is over 50 % water. We must have safe drinking water to survive. Then go to the process store I want to cry. I have a huge impulse to tap someone on the shoulder and explain the damage that is being done to the universe by cart after grocery cart filled with plastic bottles of water parading through the aisles because people are afraid to drink tap water. The water pollition and plastics problems are related. The plastics are not biodegradable and are infecting our water and lives immensely. Remember, our bodes

are over 50% water and we all need safe drinking with in order to live. It is not a small local problem. D'm not a politician, D'm a neighbor, a Mom, a A randmothe, and a deeply concerned citizen and a human being. Ameriely,

-2-



RECEIVED

SEP 2 3 2020

EGLE - RRD JACKSON DISTRICT OFFICE

September 18, 2020

Dan Hamel RRD Project Manager Michigan Department of Environment, Great Lakes, and Energy, Jackson District Office 301 East Louis Glick Highway Jackson, MI 49201-1556.

Dear Mr. Hamel:

I am a resident of Ann Arbor and a mother of two toddlers. The safe cleanup of the dioxane plume is very important to me. The proposed settlement/cleanup plan that I read about sounds absolutely terrible. I cannot believe that the purged water would be directly returned into a local lake. <u>https://www.mlive.com/news/ann-arbor/2020/09/plan-to-address-ann-arbor-pollution-unbelievably-unacceptable-residents-argue.html</u>

I strongly support petitioning the U.S. Environmental Protection Agency to clean up the dioxane plume under the federal Superfund program.

Sincerely,



Public Comments on the proposed Consent Judgement with Gelman Sciences

September 8, 2020

I am writing to share some thoughts on the information provided to the public on the recent proposed consent judgement with Gelman Sciences. There is likely more science associated with some of these recommendations, but I have yet to see it.

My main area of concern is the proposed discharge of 200 gpm of extracted and treated groundwater into First Sister Lake, which is my neighborhood. I live on top of the plume.

I spent 17 years with the city of Ann Arbor and am fairly familiar with the history of the site and "cleanup" strategies proposed by the polluter and approved by the state.

- Gelman has used a UV system to treat to lower levels of dioxane – the proposed treatment system using ozone is just cheaper for Gelman and a less effective remedy especially with a new 7 ppb limit
- 2) The proposed discharge of contaminated water treated with ozone/hydrogen peroxide system adds more of the probable carcinogen 1,4 Dioxane to the Honey Creek system that discharges upstream of the city water intake
- 3) The proposed discharge of contaminated water treated with ozone/hydrogen peroxide system adds more of the known carcinogen bromate to the Honey Creek system that discharges upstream of the city water intake
- 4) The proposed discharge is into one of two natural lakes in the city with no science to understand the current health of the lake, a baseline, and ongoing monitoring to demonstrate whether the discharge is a problem for lake ecology
 - a) I don't see any science suggesting that adding additional water to the first sister lake will improve the lake ecology although it might if done correctly.
 - b) At a minimum, modeling should occur to explore what the current health of the lake is and how the additional water will improve the ecosystem. If it's not improving the ecosystem, it should not be occurring.
- 5) My math estimates that 5 inches of water per day forever will be placed on top of the existing lake. That's the



Imagery @2020 Mayer Technolo

- equivalent of a 100-year storm every day forever. (NOAA Atlas 14 5.17 inches in 24 hours)
- a) I don't see any science suggesting that this has been modelled and that the lake hydrology and conveyance can handle this amount of new water. I don't see any science showing how 200 gpm will be accommodated by the current hydrology of first sister lake – the conveyance under Wagner and the tributary to honey creek.
- b) There is also no contingency in the consent judgment for what happens when heavy rains overwhelm the system and we get flooding on Parklake.

- 6) The consent judgment shows no mechanism to judge whether the health of the ecosystem is being impaired, or the hydrology is being overwhelmed.
- 7) Typical for this site, there is no contingency plan for when this becomes a cluster.
- 8) I believe that more groundwater should be extracted from areas close to the source and the Parklake extraction site fits that description, however...
 - a) I don't see any science demonstrating that there is an amount that should be extracted from the Parklake site that would make an appreciable difference on future outcomes
 - i) My hypothesis is that 200 gpm was chosen because it is easy Gelman has a mobile ozone/hydrogen peroxide unit that can treat up to that amount.
- 9) Gelman should be required to place all treated discharge water downstream of the city drinking water source.
 - a) Climate change is bringing more intense precipitation we are already seeing more flooding and strain on the Sister lake and Honey creek hydrology. Climate change is also bringing longer periods of drought and low flow conditions that will increase the concentration of 1,4 dioxane and bromate upstream of the city drinking water intake. A pipe has previously been proposed along M-14 to the Huron to take all treated water to the Huron downstream of the intake.
- 10) If this is a consent judgment that is approved
 - a) The city, county water resources commissioner, and HRWC must commit to modeling the lake hydrology to demonstrate very minimal flood risk to the neighborhood with the addition of this water
 - b) The city, county water resources commissioner, and HRWC must monitor the lake ecosystem to develop a baseline and monitor progress over time
 - i) monitoring should be monthly to start and a can be less frequent after a sufficient period showing no detrimental effects. The city water lab can do many of the analytical parameters
 - c) This should be supported by a council resolution requiring a recurring line item in the city budget from the stormwater and water enterprise funds to monitor this system for its life and build a legal fund to go back to court when some part of this fails.

	gpm	gpd	ft3/day	ft2	ft	Inches
First Sister Lake						
proposed discharge	200	288000	38503		0.42	5.05
First Sister Lake						
area (approx)				91543		

Date: September 11, 2020

To: <u>EGLE-RRD-Gelman@Michigan.gov</u> and Distribution Subject: Comment on Proposed Gelman Settlement and discharge from extraction wells into First Sister Lake, Ann Arbor

To the residents of Ann Arbor and all interested parties,

Writing from Ground Zero of Ann Arbor's Dioxin tragedy, and after reviewing the Proposed Gelman Settlement Document, I want to thank all those who have given so much time and thinking about optimizing a clean-up. I also have questions and offer some observations.

By way of background,

And then something peculiar happened.

The abundant toads from the wetland around First Sister lake went silent. The birds went silent. We experienced "Silent Spring" about the same time that Rachel Carson warned that it would happen in the future. What we didn't see or hear were Gelman's efforts to vaporize and pump out the Dioxin that was the waste product from their filter manufacturing process.

It took twenty years before a University of Michigan graduate student discovered Dioxin in Third Sister Lake in Saginaw Forest. Following that environmental horror, everyone who went looking for trouble found it. Dioxin was now a plume in the groundwater and spreading north, east, west and south. It would poison the wells of some township residents and eventually flow under West Park and towards downtown Ann Arbor.

Actions mandated by the Proposed Gelman Settlement document would build on work done to locate, extract and treat some of the many fingers of the Dioxin plume. Ideally, this intervention can happen before Dioxin finds its way into Barton Pond, the City's major source of drinking water. I found the videos by Dr. Larry Lemke, Professor of Environmental Geology at Central Michigan University, very helpful in understanding what would and would not be done by execution of the Proposed Gelman Settlement, and what dangerous-to-human-health waste would remain.

First, a proposal to pump out water along Parklake Drive as it circumnavigates First Sister Lake, which runs due south of Weber's Inn, should have an environmental assessment. I grew up here. I saw First Sister Lake flood in the spring, filling the wetland and rising to the edge and sometimes over Parklake. In the 1950s, the wetlands adjacent to the road were filled in by the City, leaving the lake less room in which to expand.

I understand the rate of water pumped from the extraction well, scrubbed with other toxic chemicals, and then into First Sister Lake is equal to a major 24-hour rainstorm every day of the year. In winter, the lake freezes, and warmer water pumped into the lake weakens the ice and may pose a danger to anyone who wanders out on it. In other words, the action may create an inviting and potentially deadly attractive nuisance.

While it is true that the proposed settlement would clean the water pumped out, is all of the Dioxin removed and how deadly are the agents that would remove it? Or does this extraordinary flow simply add Dioxin reinforced by other toxins to a small body of water in the center of Ann Arbor's most pristine park? Why would it not be better to put this water in a pipe and take it to where its addition would be more effectively diluted?

An alarming fact: First Sister Lake flows into a very narrow stream that takes it to Honey Creek and then the Huron River above the City of Ann Arbor's major water intake. I appreciate that it would be diluted by other tributaries on this journey, but it would also encounter and add to the many west-flowing fingers of the plume along the way. Would that dilution take it to safe levels (and really, no amount of Dioxin is safe)? That would only be discovered by test wells and by then it may be too late, and residents of Ann Arbor may have been poisoned.

This has already happened once when Dioxin from the plume seeped into the City's drinking water cooling wells on its southern boundary. It took the City a while to measure the damage even as some of you reading this may have drunk Dioxin daily.

Let's not allow this to happen again.

Secondly, an action that on the surface appears aesthetically pleasing and scientifically effective is Phytoredmediation. This is the planting of trees to absorb Dioxin from the groundwater and soil. This proposed extraction suggests a question. What happens when these trees, each presumably by then full of Dioxin, die and collapse back into the soil and water they were cleaning?

This would seem like releasing a convicted killer from prison for good behavior only to have them kill again. But is this wrong or unfair? Any answers, and assurance that dead trees would be removed, and that the impact on human, animal, bird, fish and plant life of pumping a 100year flood every day into the Sister Lakes would not be a catastrophe, would be helpful.

Thank you for your interest.



September 21, 2020

Sent by email to EGLE-RRD-Gelman@michigan.gov

Dan Hamel, RRD Project Manager Michigan Department of Environment, Great Lakes, and Energy Jackson District Office 301 East Louis Glick Highway Jackson, MI 49201

Re: Comment on proposed Fourth Amended and Restated Consent Judgment in Attorney General for the State of Michigan, et al. v. Gelman Sciences, Inc., No. 88-34734-CE before the Washtenaw County Circuit Court

Dear Mr. Hamel,

As you are considering a proposed Fourth Amended and Restated Consent Judgment for the Gelman Sciences site in Ann Arbor and Scio Township, I submit the following comments.

It has come to my attention that the Huron River Watershed Council (HRWC) was omitted from the Stipulated Order in the proposed settlement agreement in the legal proceedings between the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and Gelman. Four entities were granted intervenor status in this settlement—The City of Ann Arbor, Washtenaw County, Scio Township, and the Huron River Watershed Council. As part of the settlement agreement package, the Stipulated Order defines the Continuing Rights in the clean-up. Continuing Rights are granted to the local governments but not to HRWC. The court granted HRWC status as intervenor because HRWC is uniquely suited to protect the ecological integrity of river and the safety of the recreational and drinking water uses threatened by the plume. It is therefore my opinion that HRWC should be included in the Stipulated Order with all of the rights of the local govt intervenors.

I served as Executive Director of the HRWC for the past 20 years and led the HRWC through the intervention process up until June 2019. I also am a resident of Ann Arbor and my house sits on top of the plume. Overall, I am pleased to see the progress made in the additional actions in the 4th consent judgement. This is a good step forward and requires a stricter standard for 1,4 dioxane, and additional testing, pump and treat, delineation, and clean-up.

Yet, as Judge Connors made a point to allow the HRWC as an intervenor, as did the Michigan Supreme Court when Gelman and the State of Michigan challenged the ruling, I think it fair and just that HRWC is afforded the same rights going forth with the clean-up as the other

intervenors. I hope you will advocate for a change to include the HRWC in the Stipulated Order with all of the rights of the local government intervenors.

Thank you for your consideration.

Sincerely,



Sept, 3, 2020

Dan Hamel EGLE Project Map. RECEIVED RECEIVED Gelman cleanup SEP - 9) Jackson District office SEP - 9 2020 EGLE - RRD 301 E. Locus Slick Hory. JACKSON DISTRICT OFFICE Jackson, mer 49201-1556 Subject: my personal views segarding Delman, etc. Its been many years since I was envolved en being interested in Gelman & it's like it's never going away. I had newsclippings I had saved for years until I had to finally give up, maybe I can find an answer somehow now because the news article I read today mentioned Legislature, you plin Engles the coasts hamstrunging the cety, It's confusing & Jin an 84 woman who was married, divorced # had raised a family as a couple. He passed away in 2019 but due been single since 1979 when I bought a small bas & grill in Grass Lake & took it over in 1981, had a terrible fire in 1983 after the rough years of the recession, depression years. I had my business & apartment to handle the semodeling to do with two insurance companies, I ded sell it in The mid 80's & moved back to Milan where I'm now at the original house we bought in 1959 & had the Two young gists & our son born in 1960, We had 23 years together but agreed on family togetherness for the sake of all involved. Over the years I got interested in projects like Gelman, grass care & we did have a handseaping

(2)company when we were married with the sol, trees, shrabs, etc. I was interested when Gelman seemed to be the hot topic & that took me to the spot near the plant where I looked at the poisoned water that wasn't right somehow. Then I started calling names to compare notes. my question is why did it dragon so long to get away to get so is sparable & now even Gelman is gone & its been changed over. Has these ever been an investigation into the original group of people to okay the continuing on after the dangerous level was pessed through to hig couldn't the plent have been labeled as infet to be marketable then before it got out of hend & endangered all those minocent people. Then Filent ended up with a horson story of their own & thanks to a leader in our state. I don't understand how those decisions could be made. Was it greed possibly \$ I feel it wasn't fair to the tay payers who possibly have had to or will have more to pay for the sins of others. I'm sick of people being used & taken advantage of These should designated people to do like the Cold Case show does to check the historyout. Maybe Fired Dindoffer who night have had relatives I know in Milan over the years or abigail Elios, both attorneys could dig up some information to satisfy the people in the area. Thanker for hearing me out, It's been too long. Sincerely Enc.

Summary

Fast-Read asticle in easy Ferm Journal bookforeg about grass spray being dangerous & told the parents & bety sat for to stop using it for their pets & children's refety around it. Told a worker for a grass spraying company to stop working these for the danger in his besth. Heard about Gelmon's leakage & new a place across from their plant to overlock some water * saw it was disgarting tasking * overgrows with green growth. maybe the so's? Easly Gelmain. after reading more I talked to others interested in their leakage & heard about sers Koswoski isto was dealth & policy director for the maligue Environmental Couscil. Der clipping, Very old. Enclosing notes & a news estule & found in an old phone book when I was more involved in Gelman problem, I Threw lots of cleppings away when I got bury otherwise & I got disgusted That it should have been taken case of much sooner by closing the plant because it was a langer to The citizens of ann asbor. I wan involved in other projects that seemed to be a danger somehow & called radicel. Milenaus

Notes were written many years ago & my thoughts at the time but could be investigated, I'm even Even very too, was involved in Filint's water scheme.

Sute memo p7 358 nurse Jon Gelman-Bruce left in que 80A Hislaun and readin Frain Journa telle beingbook worker to be careful toldatru 91 bient ho etc Polich name Karowski her husband Goonder if a. a. board lased their lyla \$ got paid magbe? Should have been sed down instea M Jesing l twent eogane iting to instead & wa ners for everything they bette take case of their serious waterproblem lover) P17.3NP20

over -Shes 61 \$ has I children & deres near wash & Staliam Shell send me some info on Senior care henefits that she involved in now.

pected of binding Awad's feet and kidnapping him. Shumate is suspected of hring his M 16 at Awad, then lying to invesligators about what had happened

Court documents do not spell out a possible motive, but say the group went looking for a known terrorisi.

Commercial site's rocket launch fails

UPHAM, N.M. - The first rocket launched from New Mexi co's spaceport failed to reach space Menday, woldsling and dropping back to Earth barely a tenth of the way into its jouraey. The

unmanned, 20-loot SpaceLoft XL rocket, among the first to be launched from any commercial U.S. spaceport, was carrying various carperiments and other phylodas for its planued suborbits) trip 70 miles above Earth.

The nocked took of at 2.10 p.m. and was supposed to drop fack to marily about 13 mondes. later al White Sands Missale Bange, just north of the launch site. But three miles from the launch site, witnesses saw the rocket wobile, then go into a corlisciew motion before die appearing in the clear sky.

Something went wrong shortly after taxeoff. Officials with HP Acrospace, the Connechcut-based company that funded the launch, said the rochet reached only about 40.000 fees - or 7.5 miles.

Il was not immediately clear where the craft landed or what condition it was in.

Professor says Allen used racial slur

RICHMOND, VA - A moved political scientist joined one of Sen. George Allen's lurmer college tootball teammates in claiming the senator used a racial slur to refer to blacks in the early 1970s, a clann Allen dismisses as. "Indicrously false."

Larry J. Sabato une of Virumia's most quoted pointical acience professors and a classmate of Allen's in the curly 1970s, said in a felevised interview Monday that Allen used the epithet.

Sahato's assertion came ou the heets of accusations by Dr. Ken Shelton, a radiologist who was a tight end and wide receiver for the University of Virginte in the carly 1970s when Allen was quarterback Ho said Allan-

Environmentalist gets unwanted Con pesticide, and worker gets lecture gel. BY SI Log R

Advocate discussing pesticide issues when 32215 she discovers lawn Amer getting application The

W/N lonka

CASE

BY TRACY DAVIS AND DAVE GERSHMAN News Staff Reporte) v

Tess Karwoski, one of the state's leading environmental advocates, was working from her Ann Arbor home, speaking by phone to another environ mental wargen about positicide issues, which is her specialty, waen she heard a diesel engine dling out from Thursday effer-DOUT.

narwosti, health and policy Deuclor for the Michigan Envirimmental Council, didrit think much about the muse at arst, figuring it was a debvery truck. Alter h continued for several minutes she looked out the window and saw a TruGreen ChemLawn truck and a hose snaking outs her property, past her "pesticide free zone" sign.

By the time she got outside, the Trodreen workman had already completed a pesticide application to the back yard of ber blivec-quarter-acte property, and was starting on the side yard

"I yelled find Please stop!



DOUBORDEDE DESAUE MERICEOP

less Karwoshi health and policy director for the Michiga Environmental Council, dis in her driveway with her pestidde fr zone sign Thursday. Dadly enough a posibility custion sign is her yard behind har. On Thursday morning Treateen ChemLay accidentally sprayed her yard.

What are you doing?" she said. The worker produced a hill with her name and address on it, indicating that II was time for a fall treatment of fertilizer. weed control and pesticide

Karwoski bild the worker she didn't want the work none, then proceeded to tell him a bent possible risks associated with commun possicide contribuls

I told the young mus, Ryen

more importantly in me is vi don't have a much on. These a chemicus last was sheet you unborn children " Karwes said. She full to him that su chemicals can office sper counts and outer the structu of reproductive ongeny, narrie larty in male tello en

By the time she was done a

SEE LAWIN, LACK FAGE



Wednesday, September 2, 2020 11:28 AM EGLE-RRD-Gelman Gelman plume cleanup plan

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Excellent! I live in Ann Arbor and agree entirely with this plan.

Tuesday, September 8, 2020 2:02 PM EGLE-RRD-Gelman public comment on Gelman plume in Ann Arbor

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Dear EGLE representative,

Thank you for the opportunity to comment on the recently negotiated legal settlement proposing a new cleanup plan for the Gelman dioxane plume in Ann Arbor, Michigan. I am a resident of Ann Arbor residing essentially 4 blocks from the Huron River, in the Water Hill area between the Gelman site and the Huron River.

While I am pleased to see that the agreement will enhance clean up of a dangerously toxic plume, I am also disappointed in the agreement falling far short of the extensive cleanup that is needed. Monitoring strikes me -- now and for as long as we have been aware of the problem -- as necessary but far from sufficient. While there is some cleanup in the proposal, it is less than what is needed. Gelman owes it to the community to clean up the harm he inflicted upon us. He made large amounts of money in the process of harming our environment, and it is long past pay-back time. I want to see more cleanup, with Gelman and associates footing the bill. This whole mess has endangered not only many, many people but also has done harm, no doubt, to all forms of life who have come into contact with the toxic pollution of the plume.

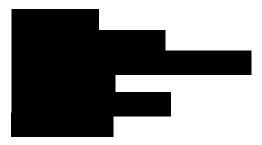
That being said, I was pleased to see that trees are to be planted to assist with the cleanup. Can we do more tree planting than what is proposed? Planting trees is working with nature, with nature helping us clean up the mess made by some people (a.k.a. Gelman, who became rich with such actions). Planting trees is something likely to be highly favored by Ann Arbor residents -- we are, after all, Tree Town. I urge you to push more strongly for additional tree planting with Gelman and associates paying the bill.

If Gelman and associates cannot be made to pay, though their paying for additional tree planting is entirely reasonable, I suggest another way to plant more trees. I just learned of, and subscribed to, an organization called 8 Billion Trees. That organization plants trees around the world in areas deforested by corporations or by natural disasters including fires. With a monthly subscription (currently costing \$43 per month) they plant enough trees to offset my carbon footprint that month. If we cannot get Gelman to pay for additional tree planting, could a public or non-profit entity start a project or organization similar to 8 Billion Trees but aiming the tree planting specifically at the entire area effected by the Gelman toxic pollution? I would be willing to make a monthly subscription payment to help fund such a project. Many other people might be willing to as well. And the whole Ann Arbor area would benefit from the ground water and air cleaning the trees would be doing. Can we do this? Can we plant more trees?

I end with the opening to the song 'What a Wonderful World' by the late, great Louis Armstrong:

"I see trees of green Red roses too I see them bloom For me and you And I think to myself What a wonderful world! " ~ Louis Armstrong ABC Records 1967, 1970

Thank you again for the opportunity to comment.



Thursday, September 10, 2020 4:39 PM EGLE-RRD-Gelman Discharge from extraction wells into First Sister Lake, Ann Arbor

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As a resident since 1976 near First Sister Lake in Dolph Park, Ann Arbor, I am extremely concerned with the Dioxane cleanup being discussed in Ann Arbor by Gelman Sciences and local officials. This cleanup has been delayed for far too long. Now experts conclude the plume has spread so far it's not possible to clean it up to a pristine standard. It's time to get serious.

This is no time to proceed with some hair-brained experimental plan to discharge 200 gallons per minute of somehow treated water from the extraction wells Into our state-protected wetland areas, in a city park, no less. Something is desperately wrong here! Over the years we have intermittently heard of trial treatments, court cases, delays, excuses, company sales and now this is the best negotiated proposal?! Monitoring wells in ground water at shallow, deep, and middle depths to better understand the flow of these aquifers makes sense. When experts are able to glean more data from those and additional extraction wells, perhaps a plan could be made to safely discharge a reasonable amount of water below the source of Ann Arbor's drinking water. Proceeding at this point to consistently discharge a huge volume of water with any amount of carcinogenic 1.4 dioxane and bromate daily into the only remaining natural glacial lake in our city has not been scientifically researched nor should it be recommended. In present times of record breaking rainfall, flooding and even droughts this cannot be condoned! Where are the statistics that show this could work in this situation? What are the alternative plans that have been proposed? Might this just be the cheapest way that Pall might attempt to get out of their commitment? Could they do better? More data is needed.

Citizens who have previously been faced with serious health problems, giving up wells and forced to go on city water, loss of property value, and some who even had to move into hotels for periods of time do not deserve a fly-by-night plan that has no data behind it. Of course it is a positive that attempts are being made to eradicate this tragic result of pollution of drinking water. Further ideas must be explored. Two weeks for comments and development is not sufficient for critical negotiation that precludes future recourse. It is finally time to set standards higher to really do the right thing, even if it might cost the polluters more because it has been allowed to fester this long. Continue to gather feedback and monitor all aspects of actions being chosen. This is no time to rush to a conclusion on a situation this complicated. Water is life.

Sincerely,



Sent from my iPhone

Friday, September 11, 2020 12:23 PM EGLE-RRD-Gelman; citycouncil@a2gov.org

Lakeview Avenue - EGLE Seeks public comment...

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RE: Comment on proposed amended consent judgment for Gelman Sciences

We have lived at **Exercise Solution** since 1992. We have been subject to our well being tested for pollutants due to the Gelman Dioxane contamination since very shortly after we moved into our home. We have been fortunate to have positive results for the nearly 30 years that we have lived here. However, it has been very troublesome for us to have to deal with almost three decades of water testing--never knowing if at some point we will get a negative result that will damage our health, property, and home value.

You are in a unique position to make sure at this point in time that we continue to have positive results. Allowing Gelman to dump ANYTHING into either one of the Sister Lakes is completely irresponsible.

First, the First and Second Sister Lakes are state protected wetlands

Second, the lakes are at Non Detect for dioxane presently, so why would the Polluter be allowed to contaminate our protected lake at flood levels and at 7-10 ppb dioxane?

Third, most of the homes are on wells on Lakeview Avenue, adjacent to Second Sister Lake, which means this discharge into the lake should be 3.4 ppb maximum.

Fourth, is it wise to pursue a path that would prevent us from ever being able to petition the EPA for a Superfund evaluation, which would provide our community with the best protection from the Polluter?

As you make this decision, please keep in mind that our future is in your hands. I hope that you do NOT want to be held responsible for polluting our water supply and causing grievous damage to our health and well being. PLEASE be responsible in your decision and do not take any shortcuts. We are counting on you to do the best for us and hope you will keep in mind what you would do if YOU lived on our street!

If you allow Gelman to dump into the Sister Lakes, I am sure there will be an incredible uproar in our community. We will all be watching on the 14th of September

Kind regards,

Friday, September 11, 2020 3:08 PM EGLE-RRD-Gelman Gelman Comment from Ann Arbor/Scio Township Resident:

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Dear EGLE,

I am writing as a homeowner on Lakeview Avenue (which sits on the Sister Lakes) and as a resident of Ann Arbor and Scio Township to address the current Consent Judgement with Gelman Sciences. I am deeply concerned by some of the Gelman Proposed Settlement solutions in regard to the dioxane problem that the polluter, Gelman Sciences, has caused as well as the legal ramifications that would come about by the proposed settlement amendment between Ann Arbor and Gelman Sciences. As these are two separate but related issues, I will address each below.

In regard to the proposed solutions contained within the document https://www.a2gov.org/Pages/Gelman-Proposed-Settlement-Documents.aspx, I have become increasingly worried about the danger of dioxane in the Sister Lakes area, particularly as I live on a well which would be directly affected by the dioxane plume and my children, neighbors, and family swim in the lake which would be directly impacted if some of the solutions proposed are allowed to proceed. As I understand it, the polluter has proposed that they would be pumping and treating dioxane and discharging the contaminated water at a rate of 200 gmp into the lake/surrounding area. This is completely unacceptable to me as well as unsound and dangerous. Every year I am grateful for the reports that there has yet to be a trace of dioxane in our lake or our well water supply. This action would, by design, introduce pollutants to our lake. Moreover, as has been detailed in the documents/letters submitted by Matthew Naud and Lawrence Dolph, this solution would create a number of negative environmental impacts to the lake and the surrounding area. <u>I ask that you reject this</u> solution, as it only allows the polluter to further endanger Ann Arbor/Scio Township residents, the Sister Lakes are, and the surrounding neighborhoods.

It seems that a much more ecologically sound option is the installation of a pipeline which would carry the processed water to the Gelman Central Treatment Plant on Wagner where it can be processed. This center is only a quarter mile away, making the solution all the more viable. While such a solution may be more costly to Gelman, they are the very cause of the problem and it seems both reasonable and just that they should be responsible for the costs and increased efforts needed to solve the problem rather than furthering the damage they have caused, passing the costs and the dangers along to local citizens and neighborhood residents.

As for the Proposed Settlement between Ann Arbor and Gelman Sciences(contained within the document:

https://www.a2gov.org/Documents/Gelman%20Proposed%20Settlement%20Documents/City_of_Ann_Arbor-Settlement-Agreement---Final.pdf), I am strongly opposed to Part IV as it would forever release the polluter from any claims/lawsuits made against it due to the very real damage that Gelman has caused. This would, if I understand correctly, release Gelman from a lawsuit if an individual or community was poisoned due to their negligence and/or the effects that their spill has caused. Once again, this is unacceptable, and <u>I ask that you</u> strike this clause from the settlement agreement and that this version of the agreement be rejected.

As well, if I understand correctly, this settlement would, in effect, make it increasingly difficult (if not impossible) for governments to petition the EPA for a Superfund evaluation, and would allow the polluter to pull out from culpability, particularly if EGLE says they can, or if dioxine reaches 550 ppb in the hot spots like

Parklake, Rose, and the Core Area. Such allowances for the polluter are completely unacceptable and I ask for you to reject them.

We live in a time when corporations unfortunately have been increasingly let off the hook for the environmental and human disasters they have caused. As an Ann Arbor/Scio Township resident, I've always been proud of the fact that we are a progressive city/township, one which I believed would not allow similar corporate deals to take precedence over the health, wellbeing, and justice of its residents. These proposals, settlements, and amendments however would do just that. They would release a polluter from the very real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, some of the solutions proposed would directly damage our wetlands and the safety of our communities and residents. I ask that you ensure that Gelman Sciences remains liable for the disaster it has caused, increasing the pressure on Gelman to fund their clean-up efforts, and ensuing they are responsible for the legal damages which would result if they fail to do so.

Thank you for your time and consideration of our community, our residents, and our environment. Sincerely,



Monday, September 14, 2020 3:12 AM EGLE-RRD-Gelman Public Comment on Proposed Consent Judgement for Gelman Science

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I have found it informative to review the documents and videos related to the Proposed Consent Judgement with Gelman Sciences. Clearly considerable effort has gone into trying to find a means to get Gelman to clean up the pollution that they created decades ago and that continues to threaten our water.

I have many questions about this consent judgment but will raise here concerns about the plan to pump treated water into the First Sister Lake from the new extraction well at Parklake. I have lived in the Lakewood neighborhood, just up the hill from the First Sister Lake, for 44 years so am well aware of efforts to care for the Sister Lakes and the wetlands of the Dolph Nature area over a number of decades. I am concerned that the proposed discharge into the First Sister Lake could cause damage to the lake and the wetlands.

At this point it appears that little is known, or at least little has been communicated, about the impact of this contaminated water on the ecosystem of the First Sister Lake and the wetlands. In addition to focusing on the extraction of dioxane from the plume, there must be consideration of the impact on the other ecosystems in which these remediation activities are occurring. What can you tell us about the impact of this discharge into the lake, both in terms of the chemicals/contaminants in the discharged water and the amount of water being discharged?

As the agency that is responsible for issuing any permits related to the Consent Judgment activities, how can EGLE issue any such permit related to the Parklake site and discharge into the First Sister Lake without knowing the potential harm that could occur at this site?

Please do not approve any activities that would increase contamination of the Sister Lakes. Thank you for your attention to these concerns.

Mollenhour, Cyndi (EGLE)

From: Sent: Subject: Attachments:

Monday, September 14, 2020 7:31 AM Public Comment on the Proposed Gelman CJ EGLE Wetlands Map First Sister Lake.png; gpm_yr.png; Preserves Legislation Text.pdf

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Hello EGLE representatives, Judge Connors, Ann Arbor City Council representatives, Scio Township Trustees and Washtenaw County Commissioners,

While there are some good parts of this proposed CJ, like cleaning up the Core area and working on the hot spots, I am concerned and disappointed in this final offer. The Settlement Agreement says that the governments would never be able to petition the EPA for a Superfund evaluation in the future. There is also much written into the proposal to let The Polluter "terminate" when EGLE says they can, or "terminate" when the dioxane reaches a certain ppb in the "hot spots" like Parklake, Rose, and the Core Area.

What is very concerning to me and many of us who live in the Sister Lakes area, is the proposed discharge into the First Sister Lake. The Polluter would be pumping and treating dioxane in this "hot spot" down to 7-10 ppb and then discharging this (plus bromate) contaminated water into the lake at a rate of 200 gpm, which equates to about a 100 yr storm event each day, or 5" rainwater in a 24 hour period.

When I asked about this at the most recent CARD meeting,

https://youtu.be/nHFsEviBxd4

I either was not told, or there is no data, no studies, or no science behind this plan?

What will happen when there is a natural 100 year storm event on top of the Polluters discharge?

This is a protected EGLE and federal wetland (see screenshot attachment). It is also a *City of Ann Arbor protected Nature Area preserve* (see attached legislation). <u>Preserves Legislation Text.pdf (63K)</u>

Why would The Polluter be allowed to contaminate our protected lake and surrounding wetlands at flood levels and with 7-10 ppb dioxane?

Wetlands provide carbon sequestration, which should be even more important now to help with our climate crisis and the A2Zero plan.

Wetlands are habitat to many species of wildlife in the Nature Area.

Wetlands should not be allowed to be "converted" by contamination and a Polluter to discharge a carcinogen. Period.

Here are the main questions I still have for all the voting elected politicians and Judge Connors: 1) What does it cost to place a pipe from Parklake to Gelman's Central Treatment Plant on Wagner (about 1/4 mile) \$......?

**The CJ has the State agreeing to save Gelman \$...... by allowing them to discharge into our protected lake, wetlands, and Nature Area.

2) Aren't the First and Second Sister Lakes a state and federal protected wetlands (see attached screenshot)?
3) Where will all this water go? I have found that the flow in and around the lakes have storm drains around that could be impacted by the increase in water, overflowing our cities stormwater system (with 7 ppb dioxane in it).

4) I thought that with homes on wells on Lakeview Avenue, adjacent to Second Sister Lake, meant that this discharge into the lake should be 3.4 ppb maximum, if any? Why not treat it to 0 ppb then?

5) The City just put in a \$300,000 rain garden on Parklake, which evidently will be unneeded now or under water?

6) The lakes are at Non Detect for dioxane presently, why would we let them put 7-10ppb dioxane (plus the toxic byproduct, Bromate), into the lake?

7) In the "Goals of the CJ", one of the goals is listed as "To Protect Public Health and the Environment".

8) Where is the study to show this will work? Where is the contingency plan if it doesn't? Were tests done on the turbidity, temperature and outcome of the increase in water to this protected lake?

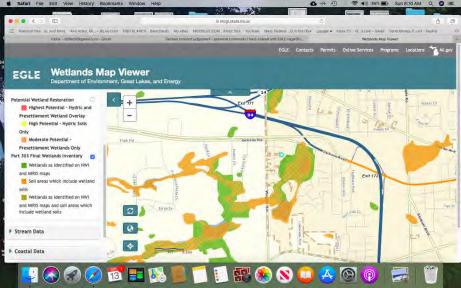
9) What if the wetlands are converted to a lesser guality ecosystem after this process?

EGLE/DEQ/DNR have been overseeing The Polluter these 35+ years and I have been watching as the Polluter dictated what they will and will not conform to, like refusing to place shallow MW's in the West Park area, instead to expand the prohibition zone when the plume moved outward. Like slowing down their pump and treatment flow rate <u>gpm_yr.png (144K)</u> over the years. Like not treating with their own Danaher/Trojan method to 0 ppb. And, remember how for 2 years now, the plume has been allowed to flow into the Allen Creek drain and we just watched it flow (don't even get me started on how this should be an MS4 violation)? This CJ would be more of the same, hobbled by weak state environmental laws. In my opinion, this CJ could result in more movement of the plume and delay of a real clean up for Ann Arbor's future generations. Who of you will still be living here in 35 years, waiting to see what happens? I will be.

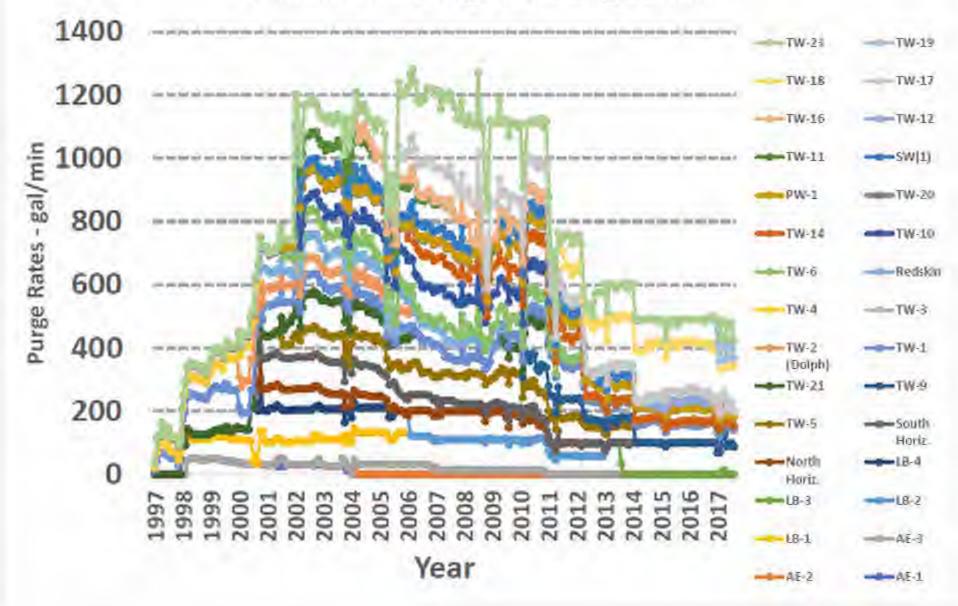
I think it was almost 4 yrs ago some of the entities started the process to ask for **EPA Superfund status** on this site, combined with EGLE to make the **Polluter pay**. Four years wasted on these negotiations with a Polluter, while our hands and feet are tied. This is the best we've got? To now allow them to degrade our natural features and add a carcinogen into our surface waters of these glacier made "kettle lakes" that have been here off Jackson and Wagner for 15,000 years? NO......

Thank you for listening and for your service to our state, city, county, township, Sincerely,





Gelman Site Cumulative Purge Rates - gal/min





Legislation Text

File #: 07-0350, Version: 1

Title

Resolution to Establish Preserve Areas Within the City Park System Staff

Proposed by: Parks Advisory Commission

Body

Whereas, The goals of the City of Ann Arbor Natural Features Master Plan 2004 call for preserving high-quality woodlands and prairies, and protecting native forest and savanna fragments, and habitats rich in native flora and fauna. The disturbance of such areas can cause the introduction of invasive and destructive species along with erosion and other detrimental effects on plant and wildlife habitat;

Whereas, The 2006-2010 PROS plan states that "the Nature Preserve designation signifies that these are the highest quality natural areas within the City and thus deserve the highest level of protection.";

Whereas, The City of Ann Arbor recognizes that the preservation of nature's diversity is an important goal;

Whereas, For many urban residents, an opportunity to experience an environment where non-human forces define the landscape is a valued respite from everyday life and a recreational and visual resource;

Whereas, The City has extensive 'natural areas' in our parklands that contribute to these goals;

Whereas, The Natural Area Preservation program (NAP) has undertaken an extensive analysis of the ecological status of natural areas within the city parklands, and classified them, based on floristic quality, as either Conservation Areas (higher quality, restorable sites) or Greenspace (lower quality disturbed sites);

Whereas, The Natural Area Preservation program has designated as Wildlife Sanctuaries those Conservation Areas or Greenspace that meet one or more of these criteria: A) part of a contiguous block of 20+ acres of Natural Area or other undeveloped habitat, or B) part of a contiguous block of 5+ acres of Natural Area or other undeveloped habitat and adjacent to the Huron River or one of its tributaries, or C) known to contain useable habitat for note-worthy species of wildlife;

Whereas, At the present time there are no designated Preserves within the City's parks;

Whereas, The Parks Advisory Commission has discussed these considerations and held a public hearing on the question; and

Whereas, In the attached resolution, the Parks Advisory Commission at its October 16, 2007,

File #: 07-0350, Version: 1

meeting unanimously recommended the establishment of *Preserve* areas within the City Parks:

RESOLVED, That Council designate certain parklands as *Preserves*, as described in the 2006-2011 PROS Plan, in order to protect the ecological integrity and character of the *Preserve* for present and future generations. *Preserve* sites are designated based on floristic quality, biodiversity of native plant and animal species and habitat, sensitivity to disturbance, and ecological integrity, and proximity to the Huron River;

RESOLVED, That City will not build on, develop, or grade parkland designated as *Preserve* for any purpose, including athletic fields or facilities, or off-trail uses. Trail maintenance, trail development, and recreational and educational activities that the Natural Area Preservation program finds do not negatively affect the ecological resources of the *Preserve* are allowed. Maintenance to existing underground infrastructure is permitted in Preserves, provided that the disturbed area is restored to its original state;

RESOLVED, That the following Conservation Areas and Wildlife Sanctuaries as shown on the Natural Area Preservation maps (on file in the City Clerk's Office) shall be designated as "*Preserves*": Furstenberg Nature Area, Gallup Park Wet Prairie, Barton Nature Area, Bird Hills Nature Area, Cedar Bend Nature Area Woods, Dolph Nature Area, Mary Beth Doyle Nature Area Woods, Scarlett Mitchell Nature Area, and Black Ponds Woods Nature Area. Excluded from the *Preserves* are the existing parking, picnic, garden, mowed, or otherwise developed areas; and

RESOLVED, That designation of additional *Preserves* or modification of boundaries of existing *Preserves* shall be by recommending Resolution of the Parks Advisory Commission and approval by City Council.

From: Sent: To: Cc:

Monday, September 14, 2020 6:28 PM EGLE-RRD-Gelman

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

to citycouncil

6:15 PM (0 minutes ago)

Hello

My name is Avenue and as far as I can tell, I am only about 60 feet from the edge of the Gelman plume running below Sunnywood in Lakewoods neighborhood. I have many concerns about the proposed project including the impact on wildlife and the quality of Second Sister Lake which is enjoyed by many people. Both First and Second Sister Lakes are protected as Wetlands.

However I have a very personal fear that if this goes through my property will be contaminated and my well will be contaminated.

Please consider what you would feel like if you suddenly could not drink your water or take a shower because some company was too cheap to do the right thing!



Monday, September 14, 2020 8:27 PM EGLE-RRD-Gelman Gelman Consent Judgement

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

I am a resident of Ann Arbor and have examined the summary materials and Lemke webinars, and attended the EGLE public hearing on zoom this evening.

The Consent Judgment is insufficient and unacceptable as it is. I agree with the many reasons voiced by the public commentators this evening as to why this agreement should be REJECTED. The attorneys who worked on this on behalf of the Intervenors and the RESIDENTS the Intervenor entities are supposed to represent, should be ashamed. This let's the Polluter call all all the shots. Sure, it's marginally better than the amended CJ currently in force. But marginally better is not good enough. This CJ hamstrings the citizens and affected polities with regard to future actions. This amended CJ should be REJECTED.

Regards,



Tuesday, September 15, 2020 8:24 PM EGLE-RRD-Gelman dioxane@washtenaw.org; CityCouncil@a2gov.org; townshipboard@sciotownship.org Gelman Consent Judgment

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dear EGLE, Mayor Taylor, Scio Township & Ann Arbor City Council:

I strongly oppose the current draft of the EGLE v Gelman Fourth Amendment Consent Judgment for the following reasons:

1) The polluter has proposed they would be pumping and treating dioxane and discharging the contaminated water at a rate of 200 gmp into the Siser Lakes Area.

I oppose the suggested well at Park Lake and the plan to divert treated water to the Sister Lakes Area. This action would, by design, introduce pollutants to protected wetlands.

I ask that you reject this solution as it only allows the polluter to further endanger Ann Arbor/Scio Township residents, the Sister Lakes area, and surrounding neighborhoods.

2) I strongly oppose Part IV in the Proposed Settlement between Ann Arbor and Gelman Sciences [contained within the document: https://www.a2gov.org/Documents/Gelman%20Proposed%20Settlement%20Documents/City_of_Ann_Ar bor-Settlement-Agreement---Final.pdf

as it would forever release the polluter from any claims/lawsuits made against it due to the very real damage that Gelman has caused.

3) I oppose expansion of Gelman's prohibition zone as well as their ability to independently expand this zone in the future. This is completely unacceptable as it allows the polluter to set the terms of their clean up and responsibility.

This proposal is unacceptable: it releases the polluter, Gelman, from very real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, **the solutions proposed would directly damage our wetlands and the safety of our communities and residents.**

I ask you to reject this version of the 4th Amended Consent Judgement.

Thank you for your time and consideration of our community, our residents, and our environment.

Hamel, Daniel (EGLE) Tuesday, September 15, 2020 9:41 PM EGLE-RRD-Gelman Negele, Brian (AG) FW: Gelman - cost to connect Park Lake Well to Gelman Lagoon

Sent: Tuesday, September 15, 2020 4:41 PM To: Hamel, Daniel (EGLE) <HamelD@michigan.gov>

Subject: Gelman - cost to connect Park Lake Well to Gelman Lagoon

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dan

Has anyone calculated the cost to run a transmission line for 200 gpm from the Park Lake Well in the 4th Amended CJ to the Gelman lagoon?

Thanks

Hamel, Daniel (EGLE) Tuesday, September 15, 2020 9:44 PM EGLE-RRD-Gelman FW: Gelman - Soil Contamination Definition

Sent: Tuesday, September 01, 2020 2:20 PM To: Hamel, Daniel (EGLE) <HamelD@michigan.gov> Subject: Gelman - Soil Contamination Definition

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dan:

For the proposed 4th Amended CJ, can you please tell me how the 500 ug/kg value for the definition of Soil Contamination was derived?

Thank you.

Very best regards,



Tuesday, September 15, 2020 10:09 PM EGLE-RRD-Gelman Gelman Dioxane Spill Proposal

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

We are writing you to ask that you take urgent action to slow down this process of accepting the Gelman Dioxane Spill Proposal until there has been more sophisticated modeling and scientific study, and more discussion and consideration of the long term consequences of these proposed actions. The following are some of our biggest concerns about this proposal.

—Methods are available to extract Dioxane down to Non Detectable levels (using the Danaher/Trojan method). Apparently Gelman wants to use a cheaper, less effective method (ozone/hydrogen peroxide) which removes Dioxane down to only a 7 ppb level instead. Why? Because it would be less expensive for the polluter, Gelman, it would appear. Why ever would we agree to this? Adding Dioxane and the additional known-carcinogen Bromate, to First Sister Lake (which is currently at a No Detect level for Dioxane) makes no sense. This water will eventually make its way to Honey Creek which discharges upstream of the city water intake, and will contaminate all of the surface water it joins along the way. We are dumbfounded that you are agreeing to this!

—The amount of contaminated water that would be discharged into First Sister Lake is of GREAT concern. The amount of 5 inches of new water per day will be placed into the existing lake. Have studies been done to show that the lake and Honey Creek can handle this additional water without flooding? What happens when we have heavy rains, which have been happening and will continue to happen more frequently due to global warming? Periods of drought, which are also increasing, and the resulting low flow conditions will increase the concentration of Dioxane and bromate upstream of the drinking water intake. What are the plans for flooding onto Parklake, especially in winter when the water will be discharged onto the frozen surface of the lake, making flooding and freezing of that water on Parklake?

-There appear to have been no studies done to determine the effects of this action on the health of the ecosystem and the hydrology of First Sister Lake. It seems to be very short-sighted to agree to this (especially when agreeing to release Gelman and Ann Arbor from any legal claims from resulting effects) without considerable scientific study and modeling. There has been a proposal to build a pipeline along M-14 to take all treated water to the Huron River downstream of the drinking water intake. What has happened to this idea?

-There are no conditions in the proposal for ongoing monitoring the impact of such action on the lake ecosystem.

—The proposal allows Gelman to expand the territory for which they will no longer be responsible for clean-up and long term consequences and expenses, and to independently expand that range in the future. We can understand why Gelman would want this, but it is baffling why all of you would agree to this. It is definitely NOT in the best interests of the City of Ann Arbor and its residents, the plaintiffs in this case. In addition, Gelman and the City of Ann Arbor would be released forever from any legal claims due to the dioxane spill and related poisoning of wells/drinking water. Why are we agreeing to let Gelman, the polluter, off the hook financially and in terms of responsibility?

—The area around First Sister Lake is a federally protected wetland, and lake is part of a City of Ann Arbor protected Nature Area Preserve. Why would we allow this polluter to contaminate the lake and threaten the surrounding wetlands? It makes no sense and should NOT be allowed.

-It also makes no sense that the City of Ann Arbor would spend \$300,000 on a rain garden on Parklake only to agree to action that will flood and destroy it. It would appear to be a rather casual waste of taxpayer money.

Thank you for your attention and consideration of these concerns,



From: Sent: To:

Subject:

Wednesday, September 16, 2020 11:44 AM EGLE-RRD-Gelman; dioxane@washtenaw.org; CityCouncil@a2gov.org; townshipboard@sciotownship.org Gelman spill

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dear EGLE, Mayor Taylor, Scio Township & Ann Arbor City Council:

I am writing to strongly oppose the current draft of the EGLE v Gelman Fourth Amendment Consent Judgment. I oppose this document for the following reasons:

-The polluter has proposed that they would be pumping and treating dioxane and discharging the contaminated water at a rate of 200 gmp into the Siser Lakes Area. I oppose the suggested well at Park Lake and the plan to divert treated water to the Sister Lakes Area. This action would, by design, introduce pollutants to protected wetlands. I ask that you reject this solution as it only allows the polluter to further endanger Ann Arbor/Scio Township residents, the Sister Lakes area, and surrounding neighborhoods.

-I am strongly opposed to Part IV in the Proposed Settlement between Ann Arbor and Gelman Sciences(contained within the document:

https://gcc01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.a2gov.org%2FDocuments%2FGel man%2520Proposed%2520Settlement%2520Documents%2FCity_of_Ann_Arbor-Settlement-Agreement--- Final.pdf&data=02%7C01%7Cegle-rrd-

gelman%40michigan.gov%7C81d5350f3bc04b46db9f08d85a5764e1%7Cd5fb7087377742ad966a892ef47225d 1%7C0%7C1%7C637358678692509342&sdata=5B77j81rt0y0tUUR1jbDXPGd9eDsSaWIm2vKLgKzIM4%3D &reserved=0), as it would forever release the polluter from any claims/lawsuits made against it due to the very real damage that Gelman has caused.

-I oppose the expansion of Gelman's prohibition zone as well as their ability to independently expand this zone in the future. This is completely unacceptable as it allows the polluter to set the terms of their clean up and responsibility.

This proposal is unacceptable as it releases the polluter, Gelman, from very real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, the solutions proposed would directly damage our wetlands and the safety of our communities and residents.

I ask you to reject this version of the 4th Amended Consent Judgement. Thank you for your time and consideration of our community, our residents, and our environment.

Sincerely,



Wednesday, September 16, 2020 12:07 PM EGLE-RRD-Gelman Fwd: Dioxane Clean-up proposal is Bad for all of us!

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dear EGLE, Mayor Taylor, Scio Township & Ann Arbor City Council:

I am writing to strongly oppose the current draft of the EGLE v Gelman Fourth Amendment Consent Judgment. I oppose this document for the following reasons:

-The polluter has proposed that they would be pumping and treating dioxane and discharging the contaminated water at a rate of 200 gmp into the Siser Lakes Area. I oppose the suggested well at Park Lake and the plan to divert treated water to the Sister Lakes Area. This action would, by design, introduce pollutants to protected wetlands. I ask that you reject this solution as it only allows the polluter to further endanger Ann Arbor/Scio Township residents, the Sister Lakes area, and surrounding neighborhoods.

-I am strongly opposed to Part IV in the Proposed Settlement between Ann Arbor and Gelman Sciences(contained within the

document: <u>https://www.a2gov.org/Documents/Gelman%20Proposed%20Settlement%20Documents/City_o</u> <u>f_Ann_Arbor-Settlement-Agreement---Final.pdf</u>), as it would forever release the polluter from any claims/lawsuits made against it due to the very real damage that Gelman has caused.

-I oppose the expansion of Gelman's prohibition zone as well as their ability to independently expand this zone in the future. This is completely unacceptable as it allows the polluter to set the terms of their clean up and responsibility.

This proposal is unacceptable as it releases the polluter, Gelman, from very real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, the solutions proposed would directly damage our wetlands and the safety of our communities and residents.

I ask you to reject this version of the 4th Amended Consent Judgement. Thank you for your time and consideration of our community, our residents, and our environment.

Best Regards,

There are far better things ahead than any we leave behind. --C.S. Lewis

Wednesday, September 16, 2020 12:54 PM EGLE-RRD-Gelman EGLE v Gelman Fourth Amendment Consent Judgment

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

This message was sent securely using Zix®

Dear EGLE, Mayor Taylor, Scio Township & Ann Arbor City Council,

I strongly oppose the current draft of the EGLE v Gelman Fourth Amendment Consent Judgment.

-The polluter has proposed that they would be pumping and treating dioxane and discharging the bromate/dioxane contaminated water at a rate of 200 gmp into the Sister Lakes Area. I oppose the suggested well at Park Lake and the plan to divert treated water to the Sister Lakes Area. This action would, by design, introduce pollutants to protected wetlands. I ask that you reject this solution as it only allows the polluter to further endanger Ann Arbor/Scio Township residents, the Sister Lakes area, and surrounding neighborhoods.

-I am strongly opposed to Part IV in the Proposed Settlement between Ann Arbor and Gelman Sciences (contained within the document:

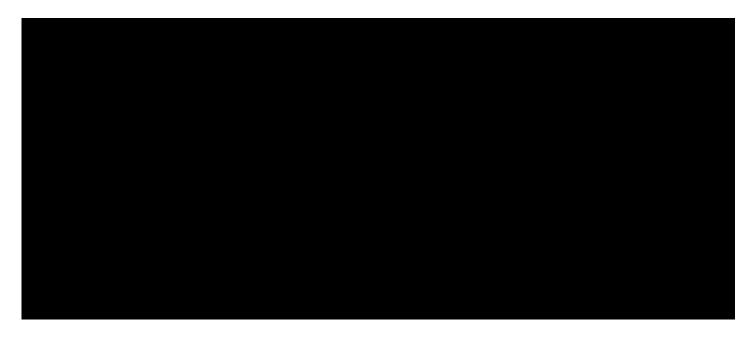
https://www.a2gov.org/Documents/Gelman%20Proposed%20Settlement%20Documents/City_of_Ann_Arbor-Settlement-Agreement---Final.pdf), as it would forever release the polluter from any claims/lawsuits made against it due to the very real damage that Gelman has caused.

-I oppose the expansion of Gelman's prohibition zone as well as their ability to independently expand this zone in the future. This is completely unacceptable as it allows the polluter to set the terms of their clean up and responsibility.

This proposal is unacceptable as it releases the polluter, Gelman, from very real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, the solutions proposed would directly damage our wetlands and the safety of our communities and residents.

I ask you to reject this version of the 4th Amended Consent Judgement. Thank you for your time and consideration of our community, our residents, and our environment.

Best,



This message was secured by Zix®.

From:	
Sent:	
To:	

Subject:

Wednesday, September 16, 2020 6:46 PM townshipboard@sciotownship.org; CityCouncil@a2gov.org; EGLE-RRD-Gelman; dioxane@washtenaw.org EGLE vs Gelman

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dear EGLE, Mayor Taylor, Scio Township & Ann Arbor City Council:

I am very concerned with protecting our precious water — here in Ann Arbor, and for all those who "live downstream". I am writing to strongly oppose the current draft of the EGLE v Gelman Fourth Amendment Consent Judgment. I oppose this document for the following reasons:

-The polluter has proposed that they would be pumping and treating dioxane and discharging the contaminated water at a rate of 200 gmp into the Siser Lakes Area. I oppose the suggested well at Park Lake and the plan to divert treated water to the Sister Lakes Area. This action would, by design, introduce pollutants to protected wetlands. I ask that you reject this solution as it only allows the polluter to further endanger Ann Arbor/Scio Township residents, the Sister Lakes area, and surrounding neighborhoods.

-I am strongly opposed to Part IV in the Proposed Settlement between Ann Arbor and Gelman Sciences(contained within the document:

https://www.a2gov.org/Documents/Gelman%20Proposed%20Settlement%20Documents/City_of_Ann_Arbor-Settlement-Agreement---Final.pdf),

as it would forever release the polluter from any claims/lawsuits made against it due to the very real damage that Gelman has caused.

-I oppose the expansion of Gelman's prohibition zone as well as their ability to independently expand this zone in the future. This is completely unacceptable as it allows the polluter to set the terms of their clean up and responsibility.

This proposal is unacceptable as it releases the polluter, Gelman, from very real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, the solutions proposed would directly damage our wetlands and the safety of our communities and residents.

I ask you to reject this version of the 4th Amended Consent Judgement. Thank you for your time and consideration of our community, our residents, and our environment.

Sincerely,

Sent from Yahoo Mail for iPhone

Wednesday, September 16, 2020 10:51 PM EGLE-RRD-Gelman Opposition to EGLE v Gelman Fourth Amendment Consent Judgment

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dear EGLE,

I oppose the current draft of the EGLE v Gelman Fourth Amendment Consent Judgment and ask you to Reject it.

I urge you also to pursue EPA Superfund site designation to more thoroughly address the toxic legacy of Gelman Sciences.

This proposal unacceptably releases the polluter, Gelman, from real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, the solutions proposed would directly damage our wetlands and the safety of our communities and residents. It is completely unacceptable to allow the polluter to set the terms of their clean up and responsibility.

Thank you for your consideration of my concerns for our community and environment.





From: Sent: To:

Thursday, September 17, 2020 6:38 AM dioxane; gelmanquestions@a2gov.org; citycouncil@a2gov.org; townshipboard@sciotownship.org; CARDadmin@googlegroups.com; EGLE-RRD-Gelman One more very important question

Subject:

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Hi City, Township, and County,

Please ask this question to EGLE.

If the EGLE Water Resources group who evaluates NPDES permits, says that the discharge into the First Sister Lake and protected wetlands is NOT OK, then what? Does The Polluter just *not* treat in this "hot spot", or are they required to pipeline the partially treated water elsewhere?

This should be discussed by the elected officials and all parties prior to them voting. This would decrease the planned amount of dioxane treated and removed, diminishing this plan.

Has an NPDES permit been DENIED here at First Sister Lake (or any of the Sister Lakes) ever in the past? I believe it may have been in past negotiations. Please answer this question on the 24th. Thank you,

From:	
Sent:	
To:	

Thursday, September 17, 2020 7:03 AM EGLE-RRD-Gelman

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Danaher, the company who owns Gelman, also owns Trojan Technologies which specializes in Dioxane 1:4 cleanup without hazardous by-products. Plus, their technology cleans many other toxins in water. However, this is not what they will be using in the Consent Judgment agreement. The technology they will be using creates a toxic by-product ~ bromate. Why aren't our leaders demanding the best and safest clean up technology which the \$18 billion company already has?

Danaher Needs to use the safest and cleanest technology possible.



From:	
Sent:	
To:	
Subject:	

Thursday, September 17, 2020 10:52 AM EGLE-RRD-Gelman; dioxane@washtenaw.org Please Reject Unacceptable Plan

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dear EGLE,

I am writing to strongly oppose the current draft of the EGLE v Gelman Fourth Amendment Consent Judgment. I oppose this document for the following reasons:

-The polluter has proposed that they would be pumping and treating dioxane and discharging the contaminated water at a rate of 200 gmp into the Siser Lakes Area. I oppose the suggested well at Park Lake and the plan to divert treated water to the Sister Lakes Area. This action would, by design, introduce pollutants to protected wetlands. I ask that you reject this solution as it only allows the polluter to further endanger Ann Arbor/Scio Township residents, the Sister Lakes area, and surrounding neighborhoods.

-I am strongly opposed to Part IV in the Proposed Settlement between Ann Arbor and Gelman Sciences(contained within the

document: https://www.a2gov.org/Documents/Gelman%20Proposed%20Settlement%20Documents/City_o_fann_Arbor-Settlement-Agreement---Final.pdf), as it would forever release the polluter from any claims/lawsuits made against it due to the very real damage that Gelman has caused.

-I oppose the expansion of Gelman's prohibition zone as well as their ability to independently expand this zone in the future. This is completely unacceptable as it allows the polluter to set the terms of their clean up and responsibility.

This proposal is unacceptable as it releases the polluter, Gelman, from very real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, the solutions proposed would directly damage our wetlands and the safety of our communities and residents.

I ask you to reject this version of the 4th Amended Consent Judgement. Thank you for your time and consideration of our community, our residents, and our environment.

Sincerely,	

From: Sent: To:

Thursday, September 17, 2020 4:53 PM EGLE-RRD-Gelman; dioxane@washtenaw.org; CityCouncil@a2gov.org

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dear EGLE, Mayor Taylor, Scio Township & Ann Arbor City Council:

I am a resident and business owner in the city of Ann Arbor, and I am writing to strongly oppose the current draft of the EGLE v Gelman Fourth Amendment Consent Judgment. I oppose this document for the following reasons:

First, and most importantly, I am a pediatrician caring for hundreds of Ann Arbor children, and I want everything possible to be done to protect their health while they grow up in our community. I also have children and grandchildren who live here, and any agreement that limits our power to force the bastards who did this to clean it up is a travesty of justice. They should not only be paying for this cleanup already but should be in jail for their corrupt malfeasance!

-The polluter has proposed that they would be pumping and treating dioxane and discharging the contaminated water at a rate of 200 gmp into the Siser Lakes Area. I oppose the suggested well at Park Lake and the plan to divert treated water to the Sister Lakes Area. This action would, by design, introduce pollutants to protected wetlands. I ask that you reject this solution as it only allows the polluter to further endanger Ann Arbor/Scio Township residents, the Sister Lakes area, and surrounding neighborhoods.

-I am strongly opposed to Part IV in the Proposed Settlement between Ann Arbor and Gelman Sciences(contained within the

document: <u>https://www.a2gov.org/Documents/Gelman%20Proposed%20Settlement%20Documents/City_of_Ann_Arbo</u> <u>r-Settlement-Agreement---Final.pdf</u>), as it would forever release the polluter from any claims/lawsuits made against it due to the very real damage that Gelman has caused.

-I oppose the expansion of Gelman's prohibition zone as well as their ability to independently expand this zone in the future. This is completely unacceptable as it allows the polluter to set the terms of their clean up and responsibility.

This proposal is unacceptable as it releases the polluter, Gelman, from very real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, the solutions proposed would directly damage our wetlands and the safety of our communities and residents.

I ask you to reject this version of the 4th Amended Consent Judgement. Thank you for your time and consideration of our community, our residents, and our environment.

Sincerely,

He/him/his

Today is a good day to check your voter registration. https://www.usa.gov/election-office

From:	
Sent:	
To:	

Thursday, September 17, 2020 5:24 PM EGLE-RRD-Gelman; dioxane@washtenaw.org; citycouncil@a2gov.org; townshipboard@sciotownship.org Gelman and dioxane in Ann Arbor Water.

Subject:

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Dear EGLE, Mayor Taylor, Scio Township & Ann Arbor City Council:

I am writing to strongly oppose the current draft of the EGLE v Gelman Fourth Amendment Consent Judgment. I oppose this document for the following reasons:

-The polluter has proposed that they would be pumping and treating dioxane and discharging the contaminated water at a rate of 200 gmp into the Siser Lakes Area. I oppose the suggested well at Park Lake and the plan to divert treated water to the Sister Lakes Area. This action would, by design, introduce pollutants to protected wetlands. I ask that you reject this solution as it only allows the polluter to further endanger Ann Arbor/Scio Township residents, the Sister Lakes area, and surrounding neighborhoods.

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document: https://www.a2gov.org/Documents/Gelman%20Proposed%20Settlement%20Documents/City_o f_Ann_Arbor-Settlement-Agreement---Final.pdf), as it would forever release the polluter from any claims/lawsuits made against it due to the very real damage that Gelman caused.

-I oppose the expansion of Gelman's prohibition zone as well as their ability to independently expand this zone in the future. This is completely unacceptable as it allows the polluter to set the terms of their clean up and responsibility.

This proposal is unacceptable as it releases the polluter, Gelman, from very real and deserved legal claims that it may face due to its own negligence and environmental pollution. Furthermore, the solutions proposed would directly damage our wetlands and the safety of our communities and residents.

I ask you to reject this version of the 4th Amended Consent Judgement. Thank you for your time and consideration of our community, our residents, and our environment.

Sincerely,



Friday, September 18, 2020 9:37 AM EGLE-RRD-Gelman 1:4 Dioxane clean up agreement

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

As a mother, and as a resident of Scio Township, I am disgusted by the low bar that has been set for Gelman's 1:4 Dioxane clean up. This should not be a negotiation for Gelman to do the minimum, but to do the what is in their power to clean up the toxic environmental disaster they have made of our home.

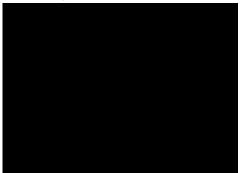
Danaher and Trojan Technologies specializes in Dioxane 1:4 cleanup without hazardous byproducts, and can clean many other toxins in water. This is the plan that should be set forth for the clean up in our community. If Michigan has learned anything from the Flint water crisis, it should be that states/cities/municipalities should first and foremost act in the interests of public health.

There is an important decision to make here, and I hope that those involved will push towards a full clean up (not a truncated version) that will ensure the health and safety of our water and land, and the people who live here. Do not allow them to dump pollutants into our lakes in the process.

Our family has seriously considered moving out of Ann Arbor, and even Michigan, because of officials' seeming disregard for public health, and our acute fear of cancer-causing 1:4 Dioxane and PFAS that we know we are living amongst.

Please do the right thing here, and hold Gelman and Danaher FULLY accountable for their devastating and wide-reaching pollution of our communities.

Thank you,



president emerita / aiga detroit / / / e l e v a t e d e s i g n . o r g

Friday, September 18, 2020 12:56 PM EGLE-RRD-Gelman 1,4 dioxane in ground water

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

I'm sad, scared and worried because the 1,4 dioxane problem in our ground water which was caused in 1966-1989 has not been taken care of. It is not a little problem! The pollution and destruction of our local wet land represents a global problem. It says that for 30 years we have neglected to care enough about our planet to be deeply concerned about the destruction of insect and animal species which have been eliminated by reckless and aggressive treatment of the environments that our planet provides for them. One of that species is the human being whose body is roughly 65% water. We must have clean drinking water to survive.

I go to the grocery store and I want to cry. I have a huge impulse to tap someone on the shoulder and explain the damage that is being done to the universe by grocery cart after cart filled with plastic bottles of water parading through the aisles because people are afraid to drink our tap water. The water pollution and plastic problem are related. The plastics are not biodegradable and are infecting our waterways and our lives immensely. Remember, our bodies are over 50% water. We all need safe drinking water in order to live. It is not a small local problem! I'm not a polished politician, just a neighbor, a Mom, a Grandmother, and a deeply concerned citizen. Please reconsider your suggestions and their consequences if they are inadequate or causing further damage to our habitat and drinking water.

Friday, September 18, 2020 1:25 PM EGLE-RRD-Gelman; gelmanquestions@a2gov.org; dioxane@washtenaw.org Horrified regarding proposed plan to clean dioxane plume

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

To whom it may concern,

I am a resident of Ann Arbor and a mother of 2 toddlers. The safe clean up of the dioxane plume is very important to me. The proposed settlement/clean up plan that I read about sounds absolutely terrible. I cannot believe that the purged water would be directly returned into a local lake.

I strongly support petitioning the U.S. Environmental Protection Agency to clean up the dioxane plume under the federal Superfund program.

Sincerely,



From: Sent: To:

Subject:

Friday, September 18, 2020 5:42 PM

gelmanquestions@a2gov.org Danaher/Gelman questions

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

Reading through the Scio Township Settlement Agreement proposal, and other documents, one question keeps crossing my mind...Why does this agreement benefit Gelman/Danaher and does very little for Scio Township and our surrounding community/environment? .

My questions address the Scio Board of Trustees but are valid for EGLE, Washtenaw County Commissioners and Ann Arbor City Council.

1. (B) Neither party admits any fault or liability. Gelman purposely dumped Dioxane 1:4 into our environment. Our groundwater contamination is the direct fault of Gelman Sciences. Danaher purchasing Gelman/Pall knew what they were getting into at that time. They are now responsible for Gelman Science irresponsibility. *Why would Scio BoT agree to allow them to be off the hook for total and complete cleanup?*

2. Why would Scio BoT agree to Danaher demand "NOT to ever solicit a USEPA, the Governor or have the site listed on the National priorities list"? Gelman/Pall/Danaher contaminated our ground water and has done very little to contain and/or clean the mess they created for the past 30 years. The Plume has spread and will continue to. If they do not uphold their agreement, what other resources do we have, other than to spend hundreds of thousands of dollars in court fees?

3. Why would Scio Bot agree to a release of claims to a company, before the company has completely and thoroughly cleaned up the ground water they contaminated?

4. Why did our Scio BoT originally agree to seek EPA Superfund but changed their minds? It was said to hold the polluter accountable but this agreement is nothing close to it.

5. How is Scio Township and our surrounding community specifically benefiting from a settlement agreement which further pollutes (bromate by-product) our environment by allowing discharge water into an uncontaminated first Sister Lake with potential overflow into the residential neighborhood and potentially contaminated those undetected wells?

6. Why is our Scio BoT not holding Danaher to its own mission statement? "<u>https://www</u>.danaher.com/" See attachment

	Danaher and its operating companies are focused on reducing the environmental impact of our operations and our products. Our operating companies have a long history of enacting environmental sustainability programs and other green initiatives.
--	--

This settlement agreement does not reduce the environmental impact of it's proposed operations and in fact, the technology they will/have been using to maintain, monitor and clean up has done very little to prove they live up to their claim of environmental sustainability and green initiatives! If they had the Plume would not be 4 miles long and 1 mile wide, previously non-detect wells are now detecting Dioxane AND we wouldn't be here negotiating again.

7. Why is our Scio BoT not pushing for Danaher to use the technology from their subsidiary company Trojan Technologies to completely and thoroughly clean our water? <u>https://www.trojantechnologies.com/about/</u>

https://www.trojantechnologies.com/about/	
Home 🕼 About Us	
About Us	The Latest From Trojan
Water touches every person on the planet, every single day. As the world's population increases, so too does the demand for this precious resource.	Webinar: Understanding UV Disinfection – Muncipa
Water – A Precious Resource	Join us on Tuesday, August 25 at 7:00 a.m. EDT / 3:00 p.m. GST as we discuss the parameters
The world's supply of clean water is under substantial stress due to industrialization, increasing demand, rising biological and chemical contamination amongst other	required to design ultraviolet (UV) systems for municipal disinfection applications, monetary
factors. This stress represents a significant threat to world health, our environment, and current and future generations around the globe.	nuncipal usine clone approximities, nunceary and non-monetary factors to consider when evaluating disinfection systems, and review the periodic maintenance req
Dur Purpose	READ MORE
Ve enable customers to meet their water quality objectives by providing eco-efficient olutions that reduce and recover costs, energy, resources and space.	
collaboratively solving problems with our customers, we deliver low-risk, innovative echnologies that offer sustainable results.	Water Quality Concerns When Reopening Your Busines
We ensure greater water confidence and environmental stewardship for people, ndustries and municipalities, improving the lives of over one billion people globally.	Due to the COVID-19 pandemic, many business closed their facilities. As regions are now reopening, business owners should be thinking

8. Why is our Scio BoT not putting the best interest of our communities health as a top priority but instead settling for an agreement which seems to benefit the polluter?

This could be a Win-Win for Danaher and our community, if we create it to be so. Danaher could use their Trojan UV technology, which the city of Tucson Arizona uses to remove Dioxane 1:4.

(https://www.trojantechnologies.com/dedication-ceremony-for-tucson-ect-system/)

Our groundwater would be back to a healthy state, benefiting current residents and future generations. Danaher would have another positive endorsement and testimonial to promote their business Nationally and Internationally. And in turn, other communities could benefit from a system that actually cleans contaminates to non-detect.

I am completely and totally against this proposal and I impress upon you to be the same and Vote NO. Go back to the drawing board and insist upon total and complete clean up OR walk away and begin the process of EPA Superfund.

--Thank you,

Sunday, September 20, 2020 8:35 PM EGLE-RRD-Gelman Gelman Consent Judgement Public Comment

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

I write in response to the request for public comment concerning the Consent Judgement related to the Gelman 1,4 Dioxane cleanup. I would like to begin and end with the notion that I am in full support of efforts to clean up the pollutants that continue to threaten our existence here in Ann Arbor.

In addition to the very insightful questions posed by those such as Lenny Kafka, Beth Collins and Andrew Balazer, I intend to focus in on the Parklake remediation site particularly. For the sake of clarity, I have posed my questions in bullet point format.

- The consent judgement modifies 85ppb to 7.2 ppb drinking water is not as good as other states. For example, The state of New York is at 1.0ppb. Why did we only require 7.2?
- It appears that 3 new extraction wells at Gelman each will be 75 GPM, 3 additional wells may also be added what will drive that decision?
- What technology is being used in the new wells on the Gelman property? Is it ozone hydrogen peroxide? Or something different? What is the expected concentration of the discharge water from these wells?
- Ozone hydrogen peroxide system is not the most effective technology available as we understand. Please let us know why we are not using better processes.
- The Parklake remediation area is in a Nature preserve and will use a mobile treatment unit to discharge directly to a non detectable level lake. What led EGLE to determine that discharging to the lake was the best of the outlined alternatives listed in the CJ? Why was the option to pump the raw ground or treated groundwater back to the Gelman site not taken as the primary solution?
- The new extraction well on Parklake is to discharge at 200GPM Why is this so much more than the new wells being installed on the Gelman property?
- At the Parklake site, It is not clear what the size or location of this mobile unit will be. Is it the size of a coffee pot or a semi-trailer? I believe that it is the latter, the likes of which are currently in service on Maple Rd. Can you please send a description or rendering or picture of the proposed mobile treatment unit?
- At the Parklake Site, Can you please clarify exactly where the well, mobile unit and discharge line will be located?
- At the Parklake site, It is not clear how much chemical will be stored on site for 1,4 Dioxane treatment or how often it will need to be replenished. Can you please clarify these details?
- At the Parklake site, Is there a safeguard against pumping raw ground water at >2800ppb into First sister lake if the processing fails for any number of reasons such as running out of treatment chemicals or other chemical, electrical or mechanical failures?
- At the Parklake site, It is not clear as to how much noise this mobile unit will make or how it will be powered. Can you please clarify these details?
- It was mentioned that some type of NPDES Permit was needed to discharge to the First Sister Lake What is involved in getting that permit? Has this permit already been obtained?

• Can you please clarify if it is possible for the dioxane in the discharge water to become vapor once dumped into First Sister Lake?

Some closing comments...

I want to voice the overwhelming response from all I have spoken to that it feels disingenuous that this consent judgment was delivered without any discussion with the residents of the areas where new remediation sites will be constructed. For example, I get letters in the mail when my neighbor wants to move their fence 3 inches... Here we are installing a processing station of some sort with no notification of the immediate neighbors to the site.

The entire process has been shrouded in secrecy and is still not clear as to how we will proceed from here. Are these decisions finished and we are moving forward? What is the point of a "Public Comment"? Is this just like sending a letter to the editor or is this my subtle cue to hire counsel to intervene in what appears to be a lazy agreement to keep the herd quiet...?

As a Dolph Park volunteer steward for the past decade, I refuse the idea of a used shipping container filled with pumps and chemicals sitting at the edge of the only natural lake in the city limits, pumping pollutants out of the ground and into the lake. I believe that there are multiple solutions outlined in the Consent Judgement that will help accelerate the cleanup of our joint 1,4 Dioxane problem. I urge the team to reconsider the path forward, particularly in the case of the Parklake Ave remediation plan.

Monday, September 21, 2020 10:18 AM EGLE-RRD-Gelman please oppose Gelman proposed settlement

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Dear EGLE personnel,

The proposed settlement for Gelman's dioxane remediation is wholly unacceptable. I respectfully urge EGLE to reject this settlement. While there are some positive aspects to the settlement, such as incorporating the drinking water standard of 7.2 ppb and increasing the number of monitoring and extraction wells, the disadvantages of the settlement make it entirely unsuitable for EGLE and the intervenors to sign it.

These disadvantages include:

1) The large extent of the prohibition zone expansion, combined with weak language that makes it easy to expand even more yet difficult to contract in reality.

2) The lack of performance criteria for the phytoremediation and heated soil vapor extraction technologies.

3) Weak language for ensuring that the West Park groundwater/surface water interface (GSI) investigation would incorporate additional wells beyond the initial three proposed.

4) Lack of clear language to ensure that GSI objectives in the Eastern and Western Areas would actually be met by reaching concentrations of
280 ppb or less, given the mixing/dilution option permitted by Part 201.

5) The inclusion of discharged of treated groundwater at 7.2 ppb to First Sister Lake. This lake does not contain any dioxane currently. It is unconscionable to deliberately introduce pollutants into this pristine lake.

6) The provision that Local Governments would lose their Continuing Rights if they solicit EPA Superfund intervention or request the governor to do so. This restriction is entirely unacceptable.

7) The provision not to sue once a Certificate of Completion is issued, even if future liability is determined. We do not know what will happen in the future and cannot allow this restriction.

It is unfortunate the public was not able to participate in the negotiations. Given that our only choice is to take or leave the proposed settlement as is, we must reject it. Thank you for your consideration.

Yours truly,



Monday, September 21, 2020 12:05 PM EGLE-RRD-Gelman RE: Gelman Consent Judgement Public Comment

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Very well said. Thanks for your effort of addressing these concerns. I look forward to any follow up to this.

From: Sent: Sunday, September 20, 2020 8:35 PM

To: EGLE-RRD-Gelman@michigan.gov Subject: Gelman Consent Judgement Public Comment

I write in response to the request for public comment concerning the Consent Judgement related to the Gelman 1,4 Dioxane cleanup. I would like to begin and end with the notion that I am in full support of efforts to clean up the pollutants that continue to threaten our existence here in Ann Arbor.

In addition to the very insightful questions posed by those such as Lenny Kafka, Beth Collins and Andrew Balazer, I intend to focus in on the Parklake remediation site particularly. For the sake of clarity, I have posed my questions in bullet point format.

- The consent judgement modifies 85ppb to 7.2 ppb drinking water is not as good as other states. For example, The state of New York is at 1.0ppb. Why did we only require 7.2?
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- The Parklake remediation area is in a Nature preserve and will use a mobile treatment unit to discharge directly to a non detectable level lake. What led EGLE to determine that discharging to the lake was the best of the outlined alternatives listed in the CJ? Why was the option to pump the raw ground or treated groundwater back to the Gelman site not taken as the primary solution?
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Some closing comments...

I want to voice the overwhelming response from all I have spoken to that it feels disingenuous that this consent judgment was delivered without any discussion with the residents of the areas where new remediation sites will be constructed. For example, I get letters in the mail when my neighbor wants to move their fence 3 inches... Here we are installing a processing station of some sort with no notification of the immediate neighbors to the site.

The entire process has been shrouded in secrecy and is still not clear as to how we will proceed from here. Are these decisions finished and we are moving forward? What is the point of a "Public Comment"? Is this just like sending a letter

to the editor or is this my subtle cue to hire counsel to intervene in what appears to be a lazy agreement to keep the herd quiet...?

As a Dolph Park volunteer steward for the past decade, I refuse the idea of a used shipping container filled with pumps and chemicals sitting at the edge of the only natural lake in the city limits, pumping pollutants out of the ground and into the lake. I believe that there are multiple solutions outlined in the Consent Judgement that will help accelerate the cleanup of our joint 1,4 Dioxane problem. I urge the team to reconsider the path forward, particularly in the case of the Parklake Ave remediation plan.

Hamel, Daniel (EGLE) Monday, September 21, 2020 2:56 PM EGLE-RRD-Gelman Negele, Brian (AG) FW: Fourth Gelman CJ Comments

From: Sent: Monday, September 21, 2020 2:52 PM To: Hamel, Daniel (EGLE) <HamelD@michigan.gov> Cc:

Subject: Fourth Gelman CJ Comments

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Dan Hamel, RRD, EGLE, Michigan

My name is

Ann Arbor, MI 48103

I am disappointed in this Fourth Amendment and Restated Consent Judgement (CJ) to move forward on resolution of the Gelman pollution situation. I have urged my local elected officials, Scio Township and Washtenaw County to reject this amended CJ at this time.

There are only a few modest improvements to the current treatment and I have heard no arguments for its approval other than the weak "It was the best we could do after 3 ½ years of argument". One benefit to the community that I am aware of in this new document is that we would be dealing with the "devil we know", that is, EGLE and the relatively weak Michigan legislation. Yes there would be the benefit of moving promptly to implement the modest improvements specifically listed in the CJ. However, any changes or additions would be subject to the slow litigation process that we have experienced for the past 30 years. A significant downside to approval of this new CJ is the three local governments (Scio Township, City of Ann Arbor and Washtenaw County) giving up their right to pursue legal actions, in spite of potentially changing conditions at the site and new information on 1,4-dioxane over the next approximately 200 years that the pollution will be in Ann Arbor and Washtenaw County.

The alternative, rejecting the proposed CJ preserves the option of petitioning for EPA "Superfund status" as well as further litigation. There is no great need for urgency in approving this CJ. The community needs time to digest ALL the information supporting this CJ before accepting it or deciding on an alternative course of action.

I have a couple of specific questions about this 2020 version of the CJ:

1) How does the Financial Assurance Mechanism work? I understand that the legal entity Gelman Sciences, Inc. pays now, but what about 100 years from now?

2) Are there additional, non-public documents and data that support the proposed changes to the CJ as being adequate to protect health and the environment for the next 200 years? These need to be made available to the public to allow evaluation of the amended CJ. Three examples are:

a) What data support the promise of only three new monitoring wells (with maybe a few more) to adequately characterize near surface groundwater that could enter Ann Arbor basements?

b) What data suggests that planting a few trees in the marshy and pond areas on the old plant site off Wagner Rd., north of Liberty, will do anything useful?

c) What data suggests that the heated air stripping of soil in the burn pit area on the old plant site will do anything useful with the deep pollution reported in nearby monitoring wells?

One of my major complaints about this revised CJ is that many of the goals are expressed as actions rather than results. For example, install a well and pump until it yields XXX ppb 1,4-dioxane rather than pump until the probable concentration in the aquifer is XXX ppb 1,4-dioxane. The benefit for the company is a more defined termination time, leaving the community with whatever is left. Another major complaint is that the CJ is silent about the deeper pollution under Gelman property. If untreated, this pollution will move into the surrounding area for centuries requiring monitoring for centuries. I am mystified as to why Gelman has never pumped and aggressively treated much of this localized pollution as a part of strategy to terminate this entire project.

From: Sent: To: Subject: Attachments:

Monday, September 21, 2020 4:27 PM EGLE-RRD-Gelman; Hamel, Daniel (EGLE) Gelman Site - Proposed 4th Amended CJ Comments; Do not support Gelman - Settlement - 4th Amended CJ Comments - Final with signature.pdf

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Michigan Department of Environment, Great Lakes & Energy:

I would like to support the attached comments signed and submitted by Mike Moran relating to the Proposed 4th Amended CJ recommending it not be accepted.

I additionally would like to comment on the Proposed 4th Amended CJ (4th CJ) regarding the proposed **monitoring of shallow groundwater** (SG) in Ann Arbor's near West Side.

The 4th CJ has **too few monitoring wells** and they **do not monitor** the current area where the highest 22ppb in SG was found last year in the southwest area in West Park. This site has had increasing SG levels since 2016 the time on initial testing at this location. The proposed are **too far west** not at the location in West Park and too few to be effective and protective.

The 100 ppb Action Level for basement exposure submitted to EGLE by **Dr. Robert Bailey's vapor intrusion** (**VI**) **analysis** is not addressed and would be a likely exposure route given the large number of homes on Ann Arbor's westside with wet and damp basements almost or always year-round. Many homeowners in Ann Arbor use their basements for bedrooms, offices, play spaces, workrooms and other functions, due to the high cost of living space, which will cause VI exposures in confined spaces.

The 280ppb proposed GSI seems clearly an issue with 100 ppb potentially a reasonable VI Action Level.

These aquifers in Ann Arbor have been shown to be connected and will crosstalk and equilibrate potentially causing shallow groundwater exposures into structures in years to come.

The **Termination level of 500 ppb is not appropriate**. With Michigan setting a drinking water standard of 7.2ppb, many states using 1ppb and the Environmental Working Groups recommending .35ppb the 500 ppb is not protecting the environment and residents of this area.

This revised proposed 4th CJ is basically an exit route for Danaher and Gelman with an unacceptable partial cleanup and no further action required by law.

Please reject this revised proposed 4th CJ as not adequately protective of life, health and property.

Thank you,

Founding and Board Member - CARD: Coalition for Action on Remediation of Dioxane

Founding and Coordinating Member - <u>ACWG.ORG: Allen's Creek Watershed Group</u> Former Executive Board Member - Sierra Club Huron Valley Group (SC HVG) 556 Glendale Cr., Ann Arbor MI

From:
Sent: Saturday, September 19, 2020 1:22 PM
To: EGLE-RRD-Gelman@michigan.gov; Hamel Daniel (EGLE); Dan Bicknell
Subject: Fw: Gelman Site - Proposed 4th Amended CJ Comments

Michigan Department of Environment, Great Lakes & Energy:

EGLE is requesting public comments on the Proposed Fourth Amended Consent Judgment (4th Amended CJ) for the Gelman Sciences, Inc. Michigan Contaminated Site located in Scio Township, Michigan. The 4th Amended CJ was provided to the public for comment on August 31, 2020. The attached document is submitted as comments to the 4th Amended CJ.

Overall, the 4th Amended CJ should not be accepted by EGLE.

If you have any questions, please contact me.

Thank you.

Very Truly Yours,

Michael Moran

Ann Arbor Charter Township Trustee

Monday, September 21, 2020 6:41 PM EGLE-RRD-Gelman Gelman - 4th Amended Consent Judgement

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The 4th amended Consent Judgement and Settlement Agreements are extremely disappointing. After years of negotiations and hundreds of thousands of dollars in legal fees, the Intervenors may be tempted to acquiesce to a totally unsatisfactory agreement out of utter exhaustion. They should not acquiesce.

As it stands, the CJ requires relatively little from the Polluter, and the Settlement Agreements require the four intervening jurisdictions to give up virtually all their rights in the matter in perpetuity in exchange for very little.

In the event any of the local Governments invoke the dispute resolution procedures, final decisions are left up to EGLE, and

with regard to Termination of Post-Termination Monitoring, "EGLE shall consult with the Local Governments and consider in good faith their comments and concerns...".

With all due respect to individual employees of EGLE, and I believe they are hard-working and most of them are trying to act in good faith, EGLE as an institution has not inspired trust in its handling of the Gelman toxic plume since it was discovered in 1984. The phrase "will consider in good faith" the concerns of local Governments is vague and virtually meaningless to the extent of embarrassment.

As a resident living at the edge of the plume and drinking from the Huron River, I request that EGLE support a petition to the USEPA to put this site on the National Priorities List as a Polluter-Pay Superfund site.

This is not risky since there is a known Responsible Polluter with the funds and technology to do the fullest cleanup possible, and USEPA has the authority to enforce compliance. There is no risk because there is no need to rely on federal dollars.

Yes, it may take time. That's why we must start the process now. We just wasted over three years in secret negotiations that resulted in a plan that gives Gelman all the power to decide when its role is complete, and allows Gelman to utilize its cheapest technology, and says that EGLE will resolve any disputes after considering local government's concerns in toothless "good faith."

As an affected resident, I am unwilling to give up all my future rights in this matter by accepting this new CJ and Settlement Agreement. I am willing to petition USEPA for Superfund status and wait for a proper cleanup paid for by the Polluter who has the ability to pay. The Polluter has the ability but not the will to pay. We need the USEPA to help the Polluter find the will.

Respectfully,



Monday, September 21, 2020 11:44 PM EGLE-RRD-Gelman Comments re Gelman Consent Judgment

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I write as a citizen particularly impacted by the Gelman Consent Judgment. We, my family that includes four school-aged children, live on Parklake Avenue in Ann Arbor, directly across from First Sister Lake and the Dolph Nature Area in which it sits. This also puts us directly above the Gelman dioxane plume, so we are especially grateful that, for ourselves and the broader public, further cleanup efforts are being prescribed. But this also puts us directly across from the proposed Parklake treatment site and the First Sister Lake dumping location defined in the consent judgment.

With the consent judgment, I have three broad areas of concern that I hope can be addressed, not simply answered. I will hold several of my related and more specific questions, hoping that they will be answered when the broader concerns are addressed and other citizens' questions are answered. My genuine hope is that these concerns prove unfounded, but the opacity from the litigating parties and past experience suggests otherwise.

These three areas of concern are: (1) Notice and Process, (2) Quality of Life, and (3) Engineering and Execution.

(1) Notice and Process. We are concerned about not having received notice, when and how notice will be provided in the future, and whether and how our concerns will be heard, let alone addressed.

Though we live immediately across from both the Parklake extraction site and the First Sister Lake dumping site that were agreed upon by the litigating parties, we have NOT received any direct notification from Gelman, any governmental authorities, or elected representatives. This seems contrary to the spirit of public engagement, for example, when city code would have required notice for even trivial zoning variances, such as fence placement and setbacks. Rather, we learned of the consent judgment only through our neighbors and their careful research. <u>Please explain for any proposals, decisions, and actions impacting us and our neighborhood: (a)</u> whether and when we will receive direct notice, (b) how such notice will come if not directly, (c) circumstances in which no notice will be provided, and (d) whether and how our concerns will be considered and addressed in influential manners.

(2) Quality of Life. We are concerned with the costs to quality of life uniquely borne by us and our neighbors.

Again, considering that we live directly across from both the Parklake extraction site and the First Sister Lake dumping site, the potential impact on our quality of life is unclear from available documents, considering at least (a) the dumping of contaminated effluent into First Sister Lake, which to our knowledge is not currently contaminated with dioxane or other contaminants of the effluent, and (b) the possible nature of necessary buildings/equipment, installation, and ongoing operations.

Please explain any potential negative health effects, both physical and mental, from dumping dioxane and other pollutants into a previously uncontaminated body of water neighboring a residential area. Relatedly, please ALSO explain why other dumping sites are not being considered and are explicitly excluded for the Parklake well, such as with a pipeline back to the Gelman site (as has been considered with other well sites).

<u>Please also explain necessary equipment and ongoing operations, including size, placement, noise, traffic, and any other public costs</u> (monetary and non-monetary) associated therewith.

(3) Engineering and Execution. We are concerned with the engineering, feasibility, and execution of the equipment and operations on Parklake Avenue based on a recent city project related to First Sister Lake.

In 2019, a \$350,000 rain garden was engineered and constructed between Parklake Avenue and First Sister Lake to improve the ecology of the lake. However, from our available understanding, suffered from poor engineering -- this project was ultimately constructed as engineered but is not functioning as intended. Furthermore, significant errors were made during its building, notably the cutting down of several landmark trees that served as buffers from our neighborhood and busy streets and more industrial/commercial areas. Importantly, knowledgeable and respectful citizens raised questions to responsible city personnel about these very problems that later materialized, but these questions have gone unanswered.

For the Parklake "well", please explain how we can have confidence that the project will be engineered, built, and operated as intended, including any existing studies/plans and future oversight and accountability. Furthermore and more specifically, please also explain: (a) whether best available remediation techniques are planned (e.g., based on dioxane removal or other criteria), (b) the expected impact on the ecology and water levels of First Sister Lake, AND (c) the hydrology or other considerations of the lake and surrounding land receiving effluent at the rate of 200 gallons per minute (i.e., 10.6 inches of effluent per acre each day).

Again, we are incredibly grateful that further dioxane cleanup efforts are being planned for both our benefit and those of broader Ann Arbor. We are also hopeful that our concerns prove unfounded. We appreciate your efforts with this cleanup effort, and look forward to your responses and these concerns being practically addressed.

Kind regards,

From:Hamel, Daniel (EGLE)Sent:Tuesday, September 22, 2020 9:35 PMTo:EGLE-RRD-GelmanCc:Negele, Brian (AG); Mollenhour, Cyndi (EGLE); Lund, Kevin (EGLE)Subject:FW: Sierra Club HVG Comments on Gelman CJ

This is a resubmittal of the Sierra Club Huron Valley Group. The original attachment could not be opened.

From:

Sent: Tuesday, September 22, 2020 8:34 PM To: Hamel, Daniel (EGLE) <HamelD@michigan.gov> Subject: Re: Sierra Club HVG Comments on Gelman CJ

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Mr. Hamel, Thanks for informing me. Here you go:

HVG Comments on the Gelman Amended Consent Judgement

Sept. 21, 2020

Greetings, Councilmembers, Commissioners, Trustees, and EGLE,

Thanks for all the work you do to keep our environment clean and healthy.

The comments below are submitted on behalf of the Sierra Club Huron Valley Group regarding the Fourth Amended Consent Judgement for the Gelman dioxane plume. While the negotiations over the past four years have produced some changes, we do not feel these are sufficient. The 4th Amended CJ provides limited gains to the plaintiffs, while requiring minimal changes in what Gelman is currently doing:

- The new 7.2 ug/L standard is a positive (which would now be required by state law in any event), and some new monitoring and extraction wells are added, but the dilution and dispersion strategy remains rather than a more aggressive clean-up strategy.
- Rather than halting and cleaning up plume migration, the strategy relies on expanding the Prohibition Zone and converting private wells to the city water system.
- Treatment short of best management practice remains. Extraction procedures and rates are set to accommodate existing Gelman equipment rather than identifying the most effective procedures and equipment needed to control and treat the dioxane plume.
- Treated water would be discharged into First Sister Lake -- one of two natural lakes in the city-- in the absence of effective studies of the impact on the health of the lake. The 200 gallons per minute volume of the Gelman wastewater discharge will likely harm the wetland. This volume equates to a 100-year rain event entering the lake every day.
- The intervenors (city, county, township and HRWC) would be required to submit an Order of Dismissal, terminating their rights to participate in the CJ. They would also be required to agree not to support any requests to the EPA for Superfund designation for the site.

After four years of negotiations we are still not far from where we were when the process started. Gelman and EGLE are still focused on dilution and dispersion. The one new effort at extraction and clean up would result in treated water discharged into a natural lake, with unknown impact on the health of the lake. The plume will continue to migrate toward the Huron River and possibly the city's drinking water source. We will once again be unable to participate in the Consent Judgement and, in addition will be barred from pursuing the alternative of Superfund status.

These conditions are not a sufficient outcome for years of negotiations. If we accept this amended CJ, we will be locked in to a process with minimal gains, and at the same time locked out of any role in directing change. We urge the intervenors to REJECT this Fourth Amended Consent Judgement.

Dan Ezekiel Chair, Executive Committee Sierra Club Huron Valley Group

On Tue, Sep 22, 2020 at 5:12 PM Hamel, Daniel (EGLE) <<u>HamelD@michigan.gov</u>> wrote:

Mr. Ezekiel,

Please note that EGLE could not open the attachment containing the Sierra Club Huron Valley Group comments on the Gelman CJ which you sent on 9/21/20. Please resend the attachment in a format that can be opened so that we can document the Sierra Club HVG comments. Because the EGLE comment period ended on 9/21/20 please also send the attachment directly to my email address which is listed below. Please call me with any questions. Thank you.

Dan Hamel

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Michigan Department of Environment, Great Lakes, and Energy

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Mollenhour, Cyndi (EGLE)

From:
Sent:
To:
Subject:

Thursday, September 24, 2020 1:30 AM EGLE-RRD-Gelman Public Comment

CAUTION: This is an External email. Please send suspicious emails to abuse@michigan.gov

I am a new resident to Scio Township, and today I read about the proposed settlement with Gelman Sciences. As you mull over this big decision, I would like to offer my feedback/concerns with the settlement. I hope this is the correct avenue to do so, and I hope that you can sympathize with my concerns for the health of my family.

It seems to me that this solution is more reactive than proactive in protecting those of us in Scio Township on the edge of the plume. Our wells are tested once a year or every 2 years. This means that my wife, my newborn, and I could be drinking water contaminated by Dioxane for a year or two between tests. If the well did test positive for Dioxane then this settlement would *react* to the newly found Dioxane and fix the problem. This does not seem like a solution that puts residents living on the edge of a growing plumes health first. I would expect a solution to be *proactive* in protecting our health. Residents with wells on the border should be hooked up to city water before the Dioxane enters their drinking water. A proactive response that values resident's health would stay a block or so in front of the plume.

Thank you,

