

**Summary of Public Comments
and
Department of Environment, Great Lakes, and Energy (EGLE) Responses
to
Wolverine World Wide’s Proposed Response Activity Plan
for
Groundwater Surface Water Interface Investigation
Public Comment Period: May 14, 2020 – June 13, 2020**

Commenter	Comment	EGLE Response
Richard R. Rediske (The Wolverine Community Advisory Group)	Data Integrity. PFOS has the lowest GSI value it is 12 ppt compared to 12,000 ppt for PFOA. GZA states in their report “PFAS analytical data from the groundwater monitoring wells, VAP samples, and residential water well samples collected until December 2019 were combined and used for the interpolation of isoconcentration maps. Where data from multiple sampling depths or sampling events are available at one location, the maximum concentrations were used during interpolation. It is important to note that the isoconcentration maps were geostatistically interpolated from spatially distributed point data, therefore they may overestimate the concentrations or extents in areas where data points were relatively sparse.” We have attached the PFOS+PFOA plume map from MPART (Figure 1) and the PFOS plume map from the GSI Plan (Figure 2) and there appears to be a significant change in the lateral extent of the House Street plume (circled in red) where a portion of the contamination area between the House Street dump and the Rogue River has disappeared. We do not understand the method GZA performed in their analysis that resulted in the disappearance of the plume connecting the dump and the river, and request that EGLE conduct an independent review of the plume extent in all GSI related figures and make sure that the information concerning plume dimensions and extent are accurate in the plan. PFOS has the lowest GSI concentration and we request that the court required GSI plan document contain accurate representations of contaminate concentrations.	EGLE appreciates your analysis of GZA’s isoconcentration figures which were submitted as part of Wolverine’s Draft Groundwater Surface Water Interface (GSI) Response Activity Plan. EGLE does not agree with GZA’s PFAS isoconcentration interpretations, which will be reflected in our review and response to this GSI Response Activity Plan.

Commenter	Comment	EGLE Response
<p>Richard R. Rediske (The Wolverine Community Advisory Group)</p>	<p>The proposed GSI sampling locations are shown in Figure 3. Note that, other than prior investigations at Rum Creek, there are no GSI sampling locations in any of the lakes or tributaries of the Rogue River that may have significant PFOS concentrations (red stars). There are fish consumption advisories in the two lakes from the venting groundwater and loadings from the tributaries can serve as a source of PFOS and contribute to the foaming problem and fish consumption advisories in the Rogue River. We request that these locations be investigated and that any appropriate response actions be taken.</p>	<p>The GSI sampling locations were previously publicly noticed as part of the Consent Decree (Appendix S), in February 2020. The Michigan Attorney General held a Townhall Meeting on February 10, 2020 which went over the contents of the Consent Decree and an Assistant Attorney General also attended the February 13, 2020 Wolverine CAG meeting to go over any concerns or questions the Wolverine CAG had regarding the Consent Decree. The Attorney General’s responsiveness summary to the comments received during the February 2020 public comment period is posted on the Michigan Attorney General’s PFAS website: https://www.michigan.gov/ag/0,4534,7-359-82917_97454---,00.html.</p> <p>Because the GSI sampling locations were determined as part of the Consent Decree and were already subject to public comment, EGLE cannot request additional GSI sampling locations at this time.</p> <p>The GSI investigation areas laid out in the Consent Decree were chosen based on where the greatest likelihood of groundwater venting to surface water above regulatory cleanup criteria would be occurring. Additionally, the Consent Decree requires long-term source control measures be implemented at the House Street and Tannery Sites to address any ongoing release of PFAS compounds into the environment.</p>

Commenter	Comment	EGLE Response
<p>Richard R. Rediske (The Wolverine Community Advisory Group)</p>	<p>We are concerned about the small number of pore water samples Wolverine is collecting. Pore water will be used to define the amount of PFOS entering the Rogue River and GZA/Wolverine is proposing to collect only 1-2 samples in areas where high levels of PFAS may be entering the river (in yellow on Figure 4). We find this map very difficult to review because the plume boundaries are not shown and the circles used to mark porewater well locations are large and seem to cover over 200 ft shoreline based on the scale. GZA/Wolverine needs to provide a justification on how 1 sample in the 1500+ ft shoreline distance in the yellow House Street plume areas is sufficient to characterize the groundwater PFOS concentrations entering the Rogue River. We recommend that samples be collected at 100 ft to 200 ft intervals in red circled areas of Figure 4. In addition, 5 % of the locations should be field duplicates where a replicate pore water well is installed and sampled to determine the precision of their sampling program. Field duplicates are common in environmental investigations and important when critical measurements are taken in heterogeneous areas like the river bottom.</p>	<p>EGLE agrees that the figure depicting the GSI sampling locations is difficult to read due to the scale, which will be reflected in EGLE’s comments back to Wolverine.</p> <p>The GSI sampling locations were previously publicly noticed as part of the Consent Decree (Appendix S), in February 2020. The Michigan Attorney General held a Townhall Meeting on February 10, 2020 which went over the contents of the Consent Decree and an Assistant Attorney General also attended the February 13, 2020 Wolverine CAG meeting to go over any concerns or questions the Wolverine CAG had regarding the Consent Decree. The Attorney General’s responsiveness summary to the comments received during the February 2020 public comment period is posted on the Michigan Attorney General’s PFAS website: https://www.michigan.gov/ag/0,4534,7-359-82917_97454---,00.html.</p> <p>Because the GSI sampling locations were determined as part of the Consent Decree and were already subject to public comment, EGLE cannot request additional GSI sampling locations at this time. While additional locations cannot be added, EGLE intends to discuss appropriate placement of the proposed locations with Wolverine prior to field work.</p> <p>Wolverine’s Quality Assurance Project Plan (QAPP) contains the following quality control requirements:</p> <ul style="list-style-type: none"> • Field Duplicates: a minimum of 1 duplicate per batch of 20 samples

Commenter	Comment	EGLE Response
		<p>must be collected (5%); per matrix; per parameter.</p> <ul style="list-style-type: none"> • PFAS Field Blank: 1 field blank per 20 samples; per matrix; per parameter. • Equipment Blank: one sample per sampling event during equipment use duration; per equipment type; per matrix; per parameter. <p>Additionally, as outlined in Section 7.2 of the Consent Decree, 5% of all data collected under the Consent Decree is required to undergo data validation.</p>
<p>Lynn McIntosh (Member of CCRR and citizen of Rockford)</p>	<p>I am concerned that GSI studies in the cattail islands-- just north of the tannery property, extending all the way west of the last industrial property previously owned and operated by Wolverine on Industrial Drive, are not receiving adequate study. Previously I have submitted extensive documentation regarding this area to the EPA and to EGLE in April of 2018. Please see map summary of these properties. I would surmise that surface waters in these areas far exceed the regulated limit of 12ppt for PFOS in surface water, allowed by the state of Michigan per Rule 57 for HNDV. I suspect that some of the foamy, filmy surface water that collects in these Coves--and that clings to the cattail islands--would likely be quite high, based on the great similarity in appearance to the surface water located directly west of the 15-acre tannery site. At any rate, this area needs to be studied and substantive data collected to better understand its Impacts to the Rogue River watershed. No plume map to date has showed, based on actual study, the amount of PFOS that might very well be entering the Rogue River in these areas.</p>	<p>The area north of the Rockford Tannery Property (123 N. Main Street), including the industrial properties currently and previously owned by Wolverine on Industrial Drive, are not covered by the Consent Decree since they are located outside of the "North Kent Study Area". If further investigation is completed in any area outside of the "North Kent Study Area", it would be conducted under a separate scope of work and would not be part of the Consent Decree.</p>
<p>Lynn McIntosh (Member of CCRR and citizen of Rockford)</p>	<p>This GSI plan does not include the study of PFAS entering the Rogue River from tributaries such as Rum Creek and others that travel through Industrial properties owned/ formerly owned by Wolverine. Wetlands/creeks/lakes, etc. that adjoin or abut any Wolverine owned (or formerly owned) property in North Kent County ought to be studied regarding their possible negative impact on the Rogue River Watershed.</p>	<p>Thank you for sharing these photos. The area north of the Rockford Tannery Property (123 N. Main Street), including the industrial properties currently and previously owned by Wolverine on Industrial Drive, are not covered by the</p>

Commenter	Comment	EGLE Response
	<p>Any filtration system built along the section of the Rogue River that <i>only</i> abuts the 15-acre tannery site will be sorely insufficient to stop PFOS from foaming up the Rogue River and subsequently harming the watershed, if there are other significant sources of PFOS entering the river that have not yet been documented.</p> <p>Please see set of photos from October 2019 documenting foam entering the Rogue River from a tributary north of the tannery site and west of the Sole plant on Industrial drive.</p>	<p>Consent Decree since they are located outside of the “North Kent Study Area”. If further investigation is completed in any area outside of the “North Kent Study Area”, it would be conducted under a separate scope of work and would not be considered part of the Consent Decree.</p> <p>Rum Creek, which bisects the Rockford Tannery Property will be addressed by the response activities required to be implemented in Section 7.7 - “Response Activities at the Tannery” of the Consent Decree.</p>
<p>Lynn McIntosh (Member of CCRR and citizen of Rockford)</p>	<p>I would recommend more Pore Water wells to be required and placed at smaller increments of distance along the Rogue River. The number of samples proposed is insufficient.</p> <p>Furthermore, if a regulator is not present at the time that specific locations are chosen/ approved (and Ideally also present during sampling activities), confidence in the sampling results is at risk.</p>	<p>The GSI sampling locations were previously publicly noticed as part of the Consent Decree (Appendix S), in February 2020. Therefore, EGLE cannot request additional GSI sampling locations at this time. While additional locations cannot be added, EGLE intends to discuss appropriate placement of the proposed locations with Wolverine prior to field work.</p> <p>EGLE staff and/or EGLE’s subcontractor plan to observe field work completed under the Consent Decree as resources and workloads permit.</p>