



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
GRAND RAPIDS DISTRICT OFFICE



LIESL EICHLER CLARK
DIRECTOR

October 22, 2020

VIA E-MAIL AND U.S. MAIL

Mr. Dave Latchana
Associate General Counsel
Wolverine World Wide, Inc.
9341 Courtland Drive, NE
Rockford, Michigan 49351

Dear Mr. Latchana:

SUBJECT: Notice of Approval with Conditions of the Areas 11 and 12 Response Activity Plan as Required by the Wolverine World Wide, Inc. Consent Decree Court Case No. 1:18-cv-00039

The Michigan Department of Environment, Great Lakes, and Energy (EGLE), Remediation and Redevelopment Division, has reviewed the Response Activity Plan for groundwater investigation in Areas 11 and 12 of the North Kent Study Area submitted on June 18, 2020, by Rose & Westra, a Division of GZA GeoEnvironmental, Inc. (GZA) on the behalf of Wolverine World Wide, Inc. (Wolverine). The Areas 11 and 12 Response Activity Plan is a requirement of the Consent Decree (effective February 19, 2020) as described in Sections 7.4, 7.9(b), and Appendix P of the Consent Decree.

Section 20114b(3) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and as outlined in Section 15.7 of the Consent Decree, states that when a response activity plan is submitted for approval, EGLE may notify the submitter that the plan is approved with conditions, if applicable. The Areas 11 and 12 Response Activity Plan is approved with the following conditions:

- **Section 1.0 Introduction:**
 - *Include a statement referencing that the groundwater investigation activities completed in Areas 11 and 12 need to meet the requirements laid out in Section 7.9(b)(i)(A) and (B) of the Consent Decree as quoted below:*
“Define the vertical and horizontal extent of PFAS Compounds contamination as required by Part 201; and confirm and monitor the location and stability of the PFAS Compounds plume(s) once the plume(s) are defined.”
 - *Include a statement referencing the new perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) Part 201 cleanup criteria which*

became effective on August 3, 2020. Please update and reference to the new criteria throughout the report as needed.

- **Section 2.01 House Street Disposal Site:**

- *Please update this section to include the approximate dates Wolverine used the House Street Disposal Site (HSDS) and what was disposed of at the property. Currently the text only includes reference to the dates of the property becoming a licensed disposal site under Act 87. Wolverine could easily incorporate the information that was provided in Section 3.0 of the May 21, 2019, "House Street Disposal Site Implementation of 2018 Work Plan Summary Report" into this Response Activity Plan.*
- *4th Paragraph: Currently as written, this sentence says that only PFOS and PFOA are migrating from the HSDS. However, other per- and polyfluoroalkyl substances (PFAS) compounds in addition to PFOA and PFOS have been documented to be migrating from the House Street Disposal Site. Please update this sentence accordingly.*
- *Last paragraph:*
 - *The below comments were made during the public comment period for this Response Activity Plan rejecting the applicability of the references noted in this paragraph:*

"While Schaidler et al. (2016) found PFAS compounds in a small sample of 20 shallow wells in Cape Cod, the highest concentration reported was 7 ng/l and a variety of other contaminants such as nitrate, boron, pharmaceuticals/personal care products cooccurred. ITRC (2020) discusses rain deposition which would be uniform across a broad area and not produce the plumes represented by GZA/Wolverine. The EGLE (2019a) reference also does not apply to this situation because the Robinson Township plume is in shallow groundwater and related to Fire Department usage."
 - *If this paragraph is kept in Section 2.01, it should be noted in the text, so it is clear to the reader that the presence of potential other PFAS sources does not change the obligations Wolverine has under the Consent Decree.*

- **Section 2.05 Hydrogeology:** *Under Areas 11 and 12 Groundwater Flow Paragraph the following is written:*

"With the Rogue River, it is unlikely that groundwater from the HSDS area under-flows past the Rogue River and migrates to Areas 11 and 12. Based on the groundwater flow direction evaluation, the PFAS detection in Areas 11 and 12 is believed to originate from areas northeast of Areas 11 and 12."

In EGLE's opinion, there has not been enough data collected to document that deeper PFAS contamination does not undercut the Rogue River. If Wolverine would like to keep the above referenced sentences in the report, EGLE requests that the following sentence is added to the text after those sentences (or

something similar): *“This interpretation is solely that of Wolverine and not representative of EGLE’s opinions, findings or conclusions.”*

- **Section 2.06 PFAS Distribution in Groundwater:** *Last paragraph on page 6 of 14: As the groundwater investigations continue over time, the data collected will indicate whether PFAS groundwater contamination identified within Areas 11 and 12 can be attributed to groundwater contamination migrating beneath the Rogue River. EGLE requests that if the statements in this report which claim that the PFAS impact from the primary HSDS plume is not undercutting the Rouge River are kept in this report, that the following sentence (or something similar) is added after those statements: “This interpretation is solely that of Wolverine and not representative of EGLE’s opinions, findings or conclusions.”*
- **Section 2.07 Applicable Part 201 Cleanup Criteria and Project Action Levels:**
 - *Update this section and the referenced project action levels to reflect the new PFOA and PFOS Part 201 cleanup criteria which became effective on August 3, 2020.*
 - *4th Paragraph: Update the purpose to also include the requirements of the Consent Decree: “Define the vertical and horizontal extent of PFAS Compounds contamination as required by Part 201; and confirm and monitor the location and stability of the PFAS Compounds plume(s) once the plume(s) are defined.”*
- **Section 3.0 Proposed Statement of Work:**
 - *Please update this section so it is clear to the reader that each monitoring well location proposed is a nested well cluster.*
 - *Please include any estimated or targeted well screen depths to this Response Activity Plan which would be necessary to help obtain vertical and horizontal definition, if known.*
 - *Last paragraph should be updated to say “....10ng/L PFOA + PFOS, or applicable criteria.”*
- **Section 5.0 Sampling and Analytical Procedures:**
 - *Under the third bullet, mention that “Following the full year of quarterly sampling of the well network, GZA, in consultation with EGLE, will evaluate the data and determine appropriate next steps.”*
 - *Additionally, after the first year of quarterly sampling, the long-term sampling schedule will be discussed and will be documented and included within the Completion Report discussed in Section 7.12(vi).*
- **Section 7.0 Investigation Derived Waste:** *This section should be updated to match the Consent Decree Statement of Work and the applicable portions of the Investigation Derived Waste section in the final Groundwater-Surface Water Response Activity Plan dated September 23, 2020.*

- **General Figure Comment:** *Color coding for detections above detection level and less than 4 ng/L should be identified on the figures in a color other than white. Currently, it is unclear if white is a lack of data, or if low level detections have been identified.*
- **Figure 2: Shallow Groundwater Elevation Contours:** *What monitoring well data is being used to depict the contour high/mound depicted at Childsdale Avenue and Kuttshill Drive? The computer modeling software used to generate these shallow elevation contours does not appear to be considering the local geology or lack of data. This figure should be updated based on measured field data and geologic setting.*
- **Figure 3: Deep Groundwater Elevation Contours:** *What monitoring well data is being used to depict the deeper groundwater contours east and north of MW-30 and MW-31? The computer modeling software used to generate these deep elevation contours does not appear to be considering the local geology or lack of data. This figure should be updated based on measured field data and geologic setting.*
- **Figure 5:** *Please update this figure to more clearly distinguish between cross-section lines A-A', B-B', and C-C'.*
- **Figures 6, 7, & 8:** *Currently the groundwater table is depicted as being located within and crossing through clay layers. Geologic interpretation should be used, and these cross-sections updated to identify which of the multiple aquifers (shallow, intermediate, deep, etc.) is being depicted on these cross-sections.*
- **Figure 9:** *The isoconcentrations depicted on this figure appear to show elevated detections to the east of Meadowlark Drive and north of Gold Dust Street where there is no sampling data due to the presence of municipal water. However, the figure notes that concentrations were not extrapolated outside of the area of known concentrations which in the above referenced areas does not seem to be true. Please update appropriately.*

EGLE's approval is conditioned on Wolverine making the above changes to the Response Activity Plan. If the above changes are not made, EGLE's approval of the Response Activity Plan is withdrawn.

EGLE would also like to note, that per the requirements of the Consent Decree, Wolverine must define the vertical and horizontal extent of PFAS Compounds contamination as required by Part 201; and confirm and monitor the location and stability of the PFAS Compounds plume(s) once the plume(s) are defined within Areas 11 and 12. EGLE anticipates that after this first round of drilling, additional monitoring wells will be needed to meet that objective.

This approval with conditions of the Response Activity Plan is based upon the representations and information contained in the submittal. EGLE expresses no opinion

as to whether other conditions that may exist will be adequately addressed by the response activities that are proposed.

If you should have further questions or concerns, please contact the Project Manager, Karen Vorce, Remediation and Redevelopment Division, Grand Rapids District Office, at 616-439-8008, or at VorceK@michigan.gov.

Sincerely,



Abigail Hendershott
District Supervisor
Grand Rapids District Office
Remediation and Redevelopment Division
616-888-0528
HendershottA@michigan.gov

cc: Mr. John Byl, Warner Norcross & Judd LLP
Ms. Polly Synk, Department of Attorney General
Ms. Danielle Allison-Yokom, Department of Attorney General
Ms. Karen Vorce, EGLE