



GRETCHEN WHITMER
GOVERNOR

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



LIESL EICHLER CLARK
DIRECTOR

November 13, 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 Perimeter Monitoring 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 Perimeter Monitoring of the North Kent Study Area submitted on August 17, 2020, by Rose & Westra, a Division of GZA GeoEnvironmental, Inc. (GZA) on the behalf of Wolverine World Wide, Inc. (Wolverine). The Perimeter Monitoring Response Activity Plan is a requirement of the Consent Decree (effective February 19, 2020) as described in Sections 7.4, 7.9(a), and Appendix N 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 Perimeter Monitoring Response Activity Plan is approved with the following conditions:

- **Section 2.01 Source Areas:**
 - *4th Paragraph: Please update this paragraph 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.*
 - *5th Paragraph: The first sentence of the fifth paragraph is inaccurate as written. Soil sampling completed by EGLE in 2018 and 2019 identified elevated concentrations of select per- and polyfluoroalkyl substance*

(PFAS) compounds in soils which are indicative of a source area. While there is no visible evidence of waste materials, there is physical sampling data which suggests that this area is a PFAS source area. This sentence should be updated to reflect this information.

- *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 Schaider 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 2.06 PFAS Distribution in Groundwater:**
 - *Distribution of PFAS in the House Street Study Area:*
 - *EGLE notes that there is no discussion of any “secondary plumes” or any other PFAS groundwater contamination that appear to be leaving the House Street Disposal Site based on monitoring well and residential well sampling data and depths (example being the contamination found in MW-7, MW-9, and MW-10). Please add in discussion of potential other groundwater contamination in addition to the primary plume referenced, as the House Street Disposal Site is located on a groundwater divide.*
 - *3rd Paragraph, number 2: EGLE notes that Figures 14 and 15 appear to be over-exaggerating PFAS groundwater contamination associated with North Kent Landfill, and it is unclear what data is being used to create the isoconcentration boundary. Refer to the North Kent Landfill Residential Well sampling area data and update this figure as appropriate.*
 - *Distribution of PFAS in the Wolven/Jewell Study Area:*
 - *1st Paragraph: EGLE does not agree that there are only two primary plumes within the Wolven/Jewell Study Area. Based on the data collected to date, a minimum of three to four primary plumes appear to be present. Please update this sentence as to not limit the number of primary plumes to only two (similar to the Consent Decree Statement of Work).*

- *3rd Paragraph, number 1: The second sentence is inaccurate as written. Soil sampling completed by EGLE in 2018 and 2019 identified elevated concentrations of select PFAS compounds in soils which are indicative of a source area. While there is no visible evidence of waste materials, there is physical sampling data which suggests that this area is a PFAS source area. This sentence should be updated to reflect this information.*
- *3rd Paragraph, number 2: EGLE notes that Figures 14 and 15 appear to be over-exaggerating PFAS groundwater contamination associated with North Kent Landfill, and it is unclear what data is being used to create the isoconcentration boundary. Refer to the North Kent Landfill Residential Well sampling area data and update this figure as appropriate.*
- **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.*
 - *HS-MW-13 should be referenced in this section since it is part of the perimeter well network.*
- **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”.*
- **Section 5.01 Sampling Locations:** *Shouldn't the monitoring wells from the other investigation areas which are also serving as perimeter wells be referenced on this table to show they will be sampled as part of the perimeter well monitor network? Below is a list of these wells:*
 - *Area19-MW-19*
 - *Area19-MW-9*
 - *Area19-MW-8*
 - *Area19-MW-14*
 - *Area5-RI-9*
 - *Area5-RI-8*
 - *Area5-RI-11*
 - *Area5-RI-3*
 - *HS-PMW-RI-103*
 - *HS-PMW-RI-104*
 - *HS-PMW-RI-111*
 - *HS-PMW-RI-112*
 - *HS-MW-13*

- **Section 7.0 Investigation Derived Waste:** *This section should be updated to match the agreed upon Investigation Derived Waste language which will be included in the Area 5, Area 6, and Area 11 & 12 Response Activity Plans.*
- **Section 8.0 Anticipated Schedule:**
 - *Add in reference that the long-term sampling/monitoring schedule will be documented and included within the Completion Report discussed in Section 7.12(v).*
- **General Figure Comments:**
 - *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.*
 - *Please add a Figure 17 which incorporates the locations shown on Figure 16, and also shows the proposed monitoring well cluster locations from the Area 5, 6, 11, 12, and 19 investigations together on one map (similar to Figure 3 in the Consent Decree Statement of Work). It would also be helpful to underlay the total PFAS or the perfluorooctanoic acid (PFOA) + perfluorooctanesulfonic acid (PFOS) isoconcentrations on that same figure.*
- **Figures 5 through 11:** *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.*
- **Figures 14 and 15 Comments:**
 - *Many plumes depicted on these figures are not identified as a continuous groundwater plume. Professional geologic interpretation and judgement should be used to estimate the extent of PFAS contamination, even if data is lacking at points between. Please update these figures accordingly.*
 - *What data is being used to draw the extent of PFAS contamination associated with the North Kent Landfill? It appears that the modeling software has overexaggerated the known plume extent associated with the North Kent Landfill. Also, refer to the sampling results of the residential wells located in the North Kent Landfill Sampling Area and update appropriately.*
- **Figure 16 Comments:**
 - *HS-PMW-RI-104, HS-PMW-RI-111, and HS-PMW-RI-112 should be shown as green triangles instead of green squares since they are serving as both investigation and perimeter wells.*

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.

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
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Remediation and Redevelopment Division
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cc: Mr. John Byl, Warner Norcross & Judd LLP
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