



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
GRAND RAPIDS DISTRICT OFFICE



C. HEIDI GREYER
DIRECTOR

April 4, 2018

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

Dear Mr. Latchana,

SUBJECT: House Street Per- and Polyfluoroalkyl Substances (PFAS) Investigation-1855
House Street, Rockford, Kent County, Michigan
Conceptual Site Model Update and Status Report

Staff from the Department of Environmental Quality (DEQ), Remediation and Redevelopment Division, has reviewed the report titled, "Conceptual Site Model Update and Status Report", prepared by Rose and Westra, dated February 9, 2018. Based on our review, we have the following comments and/or requests that should be addressed in future work activities and summarized in update status reports:

- Additional soil sampling is necessary to complete delineation of possible source material on and off the site. Twelve samples were collected from six borings (one "soil sample" and one "waste sample" from WB-1, WB-2, WB-4, WB-11, and WB-14). Based on the results of the soil sample collected from WB-2B at 14-15.8, soil samples cannot be biased to borings where waste material was encountered or on the soil interval immediately beneath material described as "waste". Delineation needs to be completed in all directions as well as on the MDOT property.
- Please provide an assessment of possible waste material on the "MDOT Property" (1758 House Street) via soil and groundwater sampling. The 1965 United States Geologic Service aerial imagery suggests that trenches may have been present between House Street and the excavation area that Wolverine World Wide, Inc. (WWW) has conducted on the MDOT Property.
- Based on residential well sampling data provided (Figure 24), delineation of impacted drinking water wells is not complete along the northern boundary of the sample area. Detections of Perfluorooctanoic Acid (PFOA)/Perfluorooctane Sulfonate (PFOS) have been found along 10 Mile Road and Freska Lake. Please identify how this area will be further assessed and what additional drinking water wells will be sampled to assure no drinking water wells are at risk.
- Assessment of the PFAS impact to the following surface water bodies needs to occur: Freska Lake, Duck Lake, Clear Bottom Lake, and the ponds in Rogue River Park.

- Assessment of risk to drinking water wells along the drainage from Freska Lake to the Rogue River.
- Please provide figures that illustrate PFAS impact in the House Street area (not limited to PFOA/PFOS).
- Please provide a cross-section the length of the plume that includes: water quality from both monitor wells and drinking water wells, pertinent surface features, and soil types.
- Please provide a cross-section across the plume at the MW-11 nest-MW-10 nest-MW-9 nest transect that includes water quality from both monitor wells and drinking water wells, pertinent surface features, and soil types.
- Please provide a cross-section across the plume at the MW-21 nest-MW-15 nest-MW-19 nest transect that includes water quality from both monitor wells and drinking water wells, pertinent surface features, and soil types.
- Please include MW-8 in the Cross-Section A-A', the MW-9 nest in cross-section B-B' and the MW-10 nest on C-C'; these cross-section locations are illustrated on Figure B.
- Please provide ground elevations for the MW-15 nest, MW-19 nest, and MW-21 nest.
- Please provide an analysis of drinking water results verses well screen depth for both impacted wells and wells below method detection levels to assess the risk of the drinking water well to the PFAS plume.
- Additional delineation of the groundwater PFAS plume is necessary both laterally and vertically understanding that the thoroughness of delineation could be dependent on the selected corrective action.
- Delineation of groundwater impact cannot be achieved through the analysis of drinking water wells alone. Additional environmental monitor wells will be necessary to complete delineation of the PFAS plume.

If you have any questions or concerns related to this request, please contact me at your earliest convenience at the Grand Rapids District Office at the contact information below.

Sincerely,



Abigail Hendershott
District Supervisor
Grand Rapids District Office
Remediation and Redevelopment Division
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cc: Ms. Susan Leeming, Deputy Director, DEQ
Ms. Kathleen Shirey, Acting Division Director, DEQ