



RICK SNYDER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF ENVIRONMENTAL QUALITY
GRAND RAPIDS DISTRICT OFFICE



C. HEIDI GRETHUR
DIRECTOR

November 21, 2018

CERTIFIED MAIL – 7017 2680 0000 0951 5829
RETURN RECEIPT REQUESTED

VIA E-MAIL AND U.S. MAIL

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

Dear Mr. Latchana:

SUBJECT: Wolverine World Wide, Inc. (Wolverine) Per- and Polyfluoroalkyl
Substances (PFAS) Response
Drinking Water Well Resampling Request
Kent County, Michigan

Over the past 18 months, Wolverine has sampled approximately 1,538 residential drinking water wells in northern Kent County as part of the Wolverine investigations to evaluate potential risks to human health. In addition, Wolverine has installed and maintains 530 whole house filters in residential homes to mitigate PFAS impacts in the drinking water wells.

Pursuant to Section 14(1) of Part 201 of the Natural Resource and Environmental Protection Act of 1994, as amended (NREPA), MCL 324.20114(1), Wolverine is obligated to diligently pursue response actions to mitigate contamination that may cause unacceptable risk to the public health, safety or welfare or the environment. Section 20114(1)a states that Wolverine is obligated to determine the nature and extent of the PFAS contamination caused by its releases or disposal practices.

To date, Wolverine has installed approximately 30 monitoring well clusters between the House Street and Wolven/Jewell investigation areas. While these monitoring wells have begun to delineate the extent of groundwater contamination, the full nature and extent of contamination has not yet been defined.

On October 16, 2018, the Department of Environmental Quality (DEQ) received your scope of work for resampling select residential wells in the House Street Study Area. The proposal includes approximately 73 drinking water wells. The DEQ believes this is

a good first step toward resampling residential wells to gather additional data points to assist with the House Street Study Area groundwater assessment.

However, since the full nature and extent of contamination is currently undefined, there is a need for additional sampling and analysis of current conditions to fully understand the risk to residents in all of Wolverine's sampling areas. Therefore, the DEQ is requesting Wolverine to conduct a comprehensive resampling of all drinking water wells within Wolverine sampling areas (set forth in the attached Figure) that do not have a whole house point of entry treatment system (WHF). With input from the local and state public health agencies (Kent County Health Department (KCHD)) and the Michigan Department of Health and Human Services (MDHHS)), this PFAS resampling is being requested to evaluate the following objectives/questions:

- The potential for perfluorooctanoic acid (PFOA) and/or perfluorooctanesulfonic acid (PFOS) concentrations in a drinking water well to fluctuate above 70 parts per trillion (ppt);
- To better understand plume stability and/or dynamics, as the various plumes have not yet been defined vertically or horizontally by environmental monitoring wells;
- To obtain a current data set for PFAS compounds other than PFOA and PFOS that may be present to evaluate potential health risks.

The DEQ believes this request is technically sound and necessary for the continued protection of public health, safety, and welfare of residents who live in the designated Wolverine sampling areas.

The DEQ requests Wolverine resample all wells that do not have a WHF within the next six months. Below is a "tiered" approach that prioritizes the sampling based on previous test results and proximity to contamination.

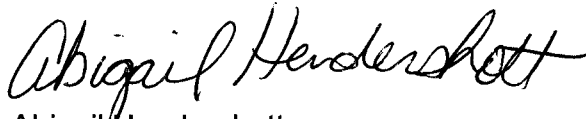
1. Within **30 days** of receiving this letter: Resample all wells that do not have a WHF and previously detected a concentration of PFOA and/or PFOS of 10 ppt or higher (approximately 68 wells; refer to attached Figure);
2. Within **90 days** of receiving this letter: Resample all wells that do not have a WHF and are within a 500-foot radius of a well that previously has detected PFOA and/or PFOS at a concentration of 10 ppt or higher (approximately 244 wells; refer to attached Figure);
3. Within **120 days** of receiving this letter: Resample all wells that do not have a WHF and that had detections of PFOA and/or PFOS at a concentration below 10 ppt, and/or were non-detect for PFOA and/or PFOS, but had one or more other PFAS compounds detected (plume dynamics and stability/degradation; approximately 129 wells; refer to attached Figure);

4. Within **180 days** of receiving this letter: Resample the remaining wells that do not have a WHF that were not already resampled in the above sampling efforts to address plume stability in outlying areas where future monitoring wells are not likely planned to be installed by Wolverine (approximately 486 wells; refer to attached Figure).

Wolverine may propose an alternative sampling strategy that incorporates sampling of these wells within a similar time frame. Any alternative sampling proposal must be submitted for approval within 30 days of receipt of this letter.

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.

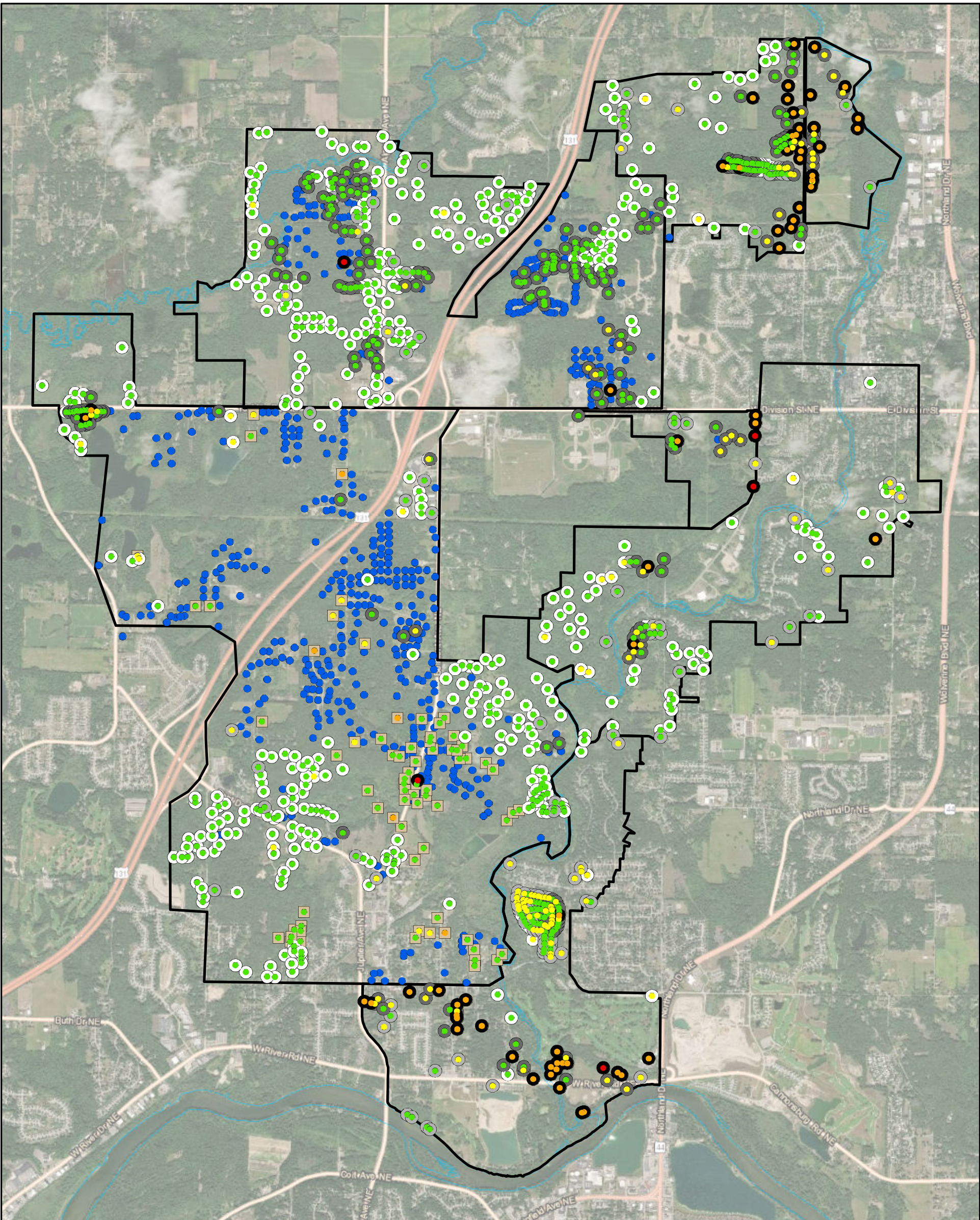
Sincerely,



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

Attachment

cc: Ms. Sara Simmonds, Kent County Health Department
Mr. William Farrell, Michigan Department of Health and Human Services
Ms. Polly Synk, Michigan Department of Attorney General
Ms. Susan Leeming, DEQ
Ms. Kathy Shirey, DEQ
Ms. Karen Vorce, DEQ



Legend
No Whole House Filter

- PFOA + PFOS >70 ppt (5)
- PFOA + PFOS >10 to 70 ppt (68)
- PFOA + PFOS >0 to 10 ppt (140)
- PFOA + PFOS is Non-Detect (787)

- Whole House Filter (531)
- Childsdale, & 12 Mile/Summit Investigation Areas
- Resampled as part of Wolverine's Oct. 16, 2018 Resampling Plan (73)

Resampling of Wells without Whole House Filter

- Priority 1 (68) - PFOA + PFOS >10 ppt
- Priority 2 (244) - Within 500 ft of PFOA + PFOS >10 ppt
- Priority 3 (129) - PFOA + PFOS <10 ppt, but other PFAS compounds detected
- Priority 4 (486) - Remaining Wells

Prepared: 11/1/2018

Map Location

DRAFT

PRIORITY FOR RESAMPLING OF WELLS WITHOUT A WHOLE HOUSE FILTER

**NORTH KENT DISPOSAL AREA
KENT COUNTY, MI**