

Online Public Meeting

Wolverine's Draft Filter Operation and Maintenance (O&M) Response Activity Plan

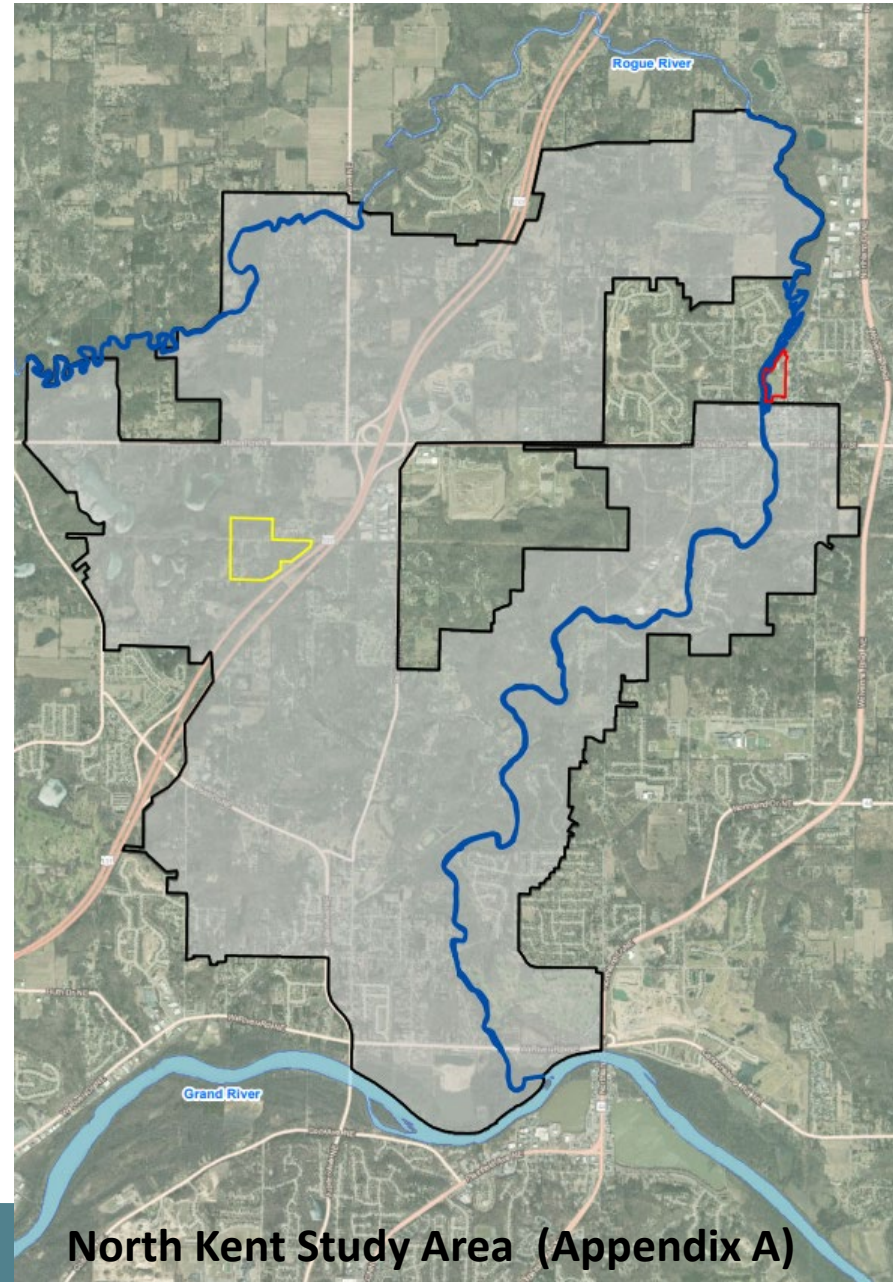
Tuesday, May 26, 2020
6:00 – 7:00pm



MICHIGAN DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY

February 19, 2020 Consent Decree

- Consent Decree between the State of Michigan (Plaintiff), Plainfield and Algoma Townships (Intervening Plaintiffs) and Wolverine (Defendant) became effective on Feb. 19, 2020 (www.Michigan.gov/Belmont)
- Serves as the framework for all future PFAS response activities performed by Wolverine in the “North Kent Study Area”
- Wolverine will conduct these activities under EGLE oversight



Requirements of Consent Decree

General actions Wolverine must take under the Consent Decree:

- Municipal Water Expansion (Section 6.0)
- **Filter Operation & Maintenance (Section 7.5 & Appendix L)**
- Residential Drinking Water Well Sampling (Section 7.6)
- Tannery Site Source Control (Section 7.7)
- House Street Disposal Site Source Control (Section 7.8)
- Groundwater Investigations (Section 7.9)
- Groundwater-Surface Water Interface (GSI) Investigation (Section 7.10)

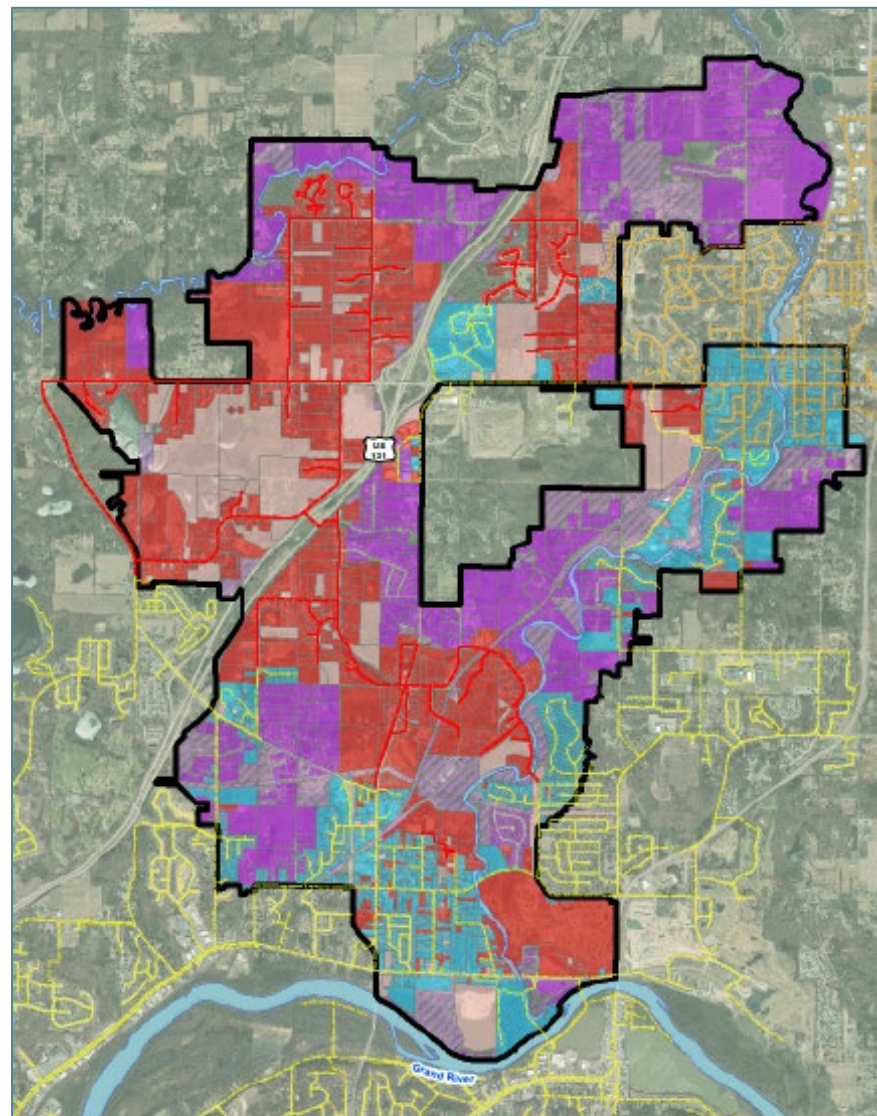


Filter O&M
Response Activity Plan

Consent Decree

Section 7.5 - Filters

- “Filter Areas” means those areas in the North Kent Study Area where municipal water will not be extended as a requirement of this Consent Decree
- Wolverine required to maintain filters at homes with levels above 10ppt for PFOA + PFOS prior to treatment (unless and until new criteria become effective)
- When a home is connected to municipal water, or is below 10 ppt PFOA & PFOS, Wolverine will pay to have filter removed, or homeowner may choose keep filter

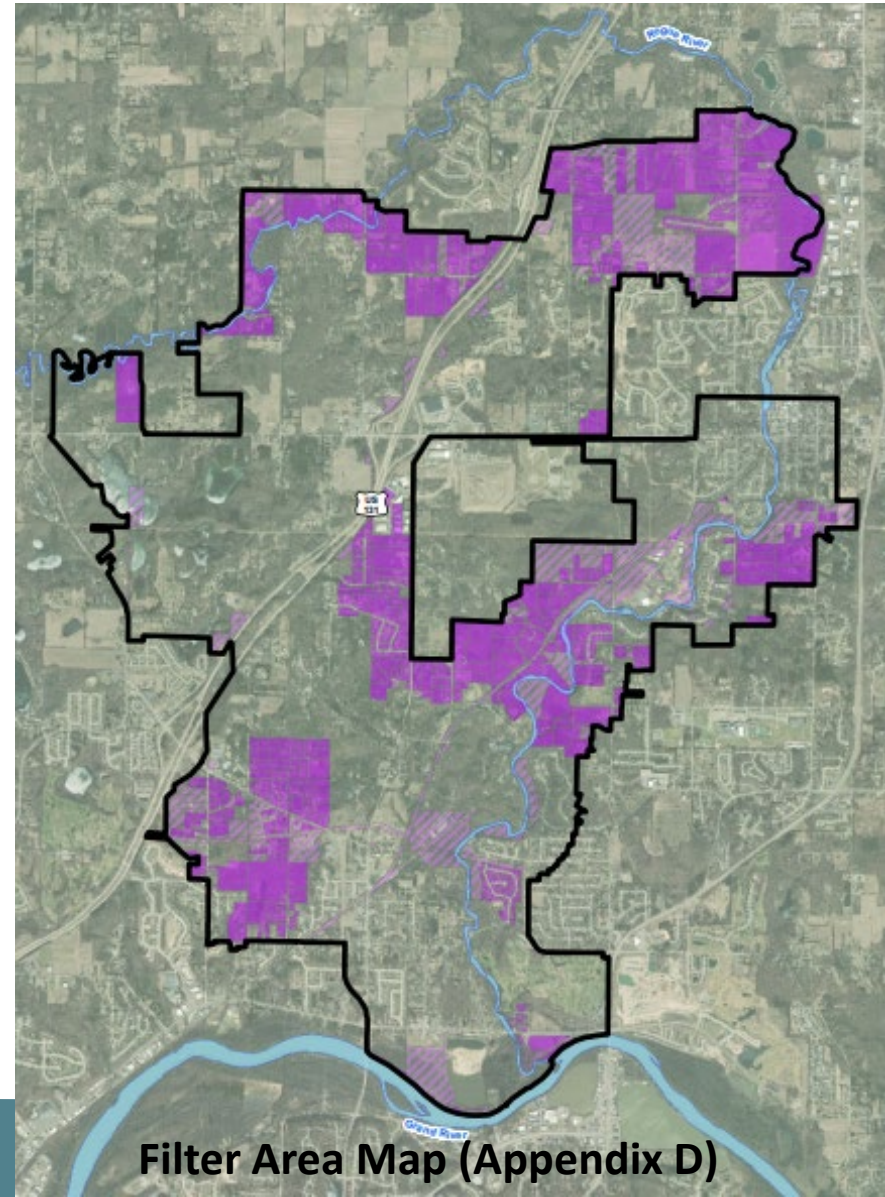


Purple = Filter Area
Red = New Municipal Water Area
Blue = Existing Municipal Water

Consent Decree: Appendix L

Statement of Work for Filter Operation and Maintenance (O&M)

- Appendix L contains a Statement of Work (SOW) which proposed the general approach and rationale for revisions to Wolverine's existing O&M Plan:
 - Point-of-Entry Treatment System (POET) Filter O&M Plan (Dated March 2019) and;
 - Point-of-Use (POU) Filtration Maintenance Memo (dated May 2018).
- Appendix L was publicly noticed and approved as part of the Consent Decree



Filter Area Map (Appendix D)

---Previously Publicly Noticed---

Consent Decree & Appendix L:

Main highlights from Appendix L:

- Presumptive carbon change-out
- Updated routine monitoring schedule
- General cessation plan for filters

Residents were sent letters by Wolverine after the Consent Decree became effective which summarized changes to their home's individual filter O&M status and schedule.

Rose & Westra
A Division of GZA

GEOTECHNICAL ENVIRONMENTAL ECOLOGICAL WATER CONSTRUCTION MANAGEMENT

POET AND POU STATEMENT OF WORK
North Kent Study Area

January 31, 2020
File No. 16.0062335.60

PREPARED FOR:
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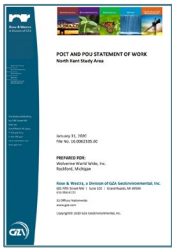
GZA



Appendix L: Granular Activated Carbon Change-Out Schedule

Monitoring Interval prior to CD	Proposed Carbon Change Out Intervals*
Weekly	6 months
Monthly	12 months
Quarterly	16 months
Semi-Annual	16 months
Annual	20 months**

Instead of continually monitoring for PFAS contamination to “break-through” the first carbon vessel, the filters will have the carbon media presumptively changed out to fresh carbon on a schedule which is based on historical sampling for the past 2.5 years.



Appendix L

Routine Monitoring Schedule

Once the presumptive carbon change outs begin, the following routine monitoring will be conducted:

Monitoring Interval Prior to CD	Proposed Carbon Change Out Intervals	Percentage of Random Systems Sampled after GAC Change Out (CO)*	Ports Sampled for Performance Monitoring**
Weekly	6 months	100% first GAC CO and 25% subsequent GAC COs	IN-MP-EF
Monthly	12 months	100% first GAC CO and 12% subsequent GAC COs	IN-MP-EF
Quarterly	16 months	10%	IN-MP
Semi-Annual	16 months	5%	IN-MP
Annual	20 months	5%	IN

**IN= Influent, MP = Midpoint, and EF = Effluent

Further details regarding sampling can be found in Section 6.5.3 of the POET Filter O&M Plan.

---Subject to THIS Public Comment Period ---

Filter O&M Response Activity Plan

- Contains details regarding the maintenance of filters located in the North Kent Study Area in accordance with the Consent Decree
- Parts of this plan that would be subject to this comment period include the sections and plan specifics that were not provided in the Consent Decree or Appendix L

Photo:
Example of a
POET system
installed by
Wolverine



Filter O&M Response Activity Plan

Wolverine submitted two documents for this Response Activity Plan:

**1. Alternate Water Supply Management Plan – Point-of-Entry Treatment Systems
(Revised April 6, 2020)**

- 14-page text document, plus attachments (55 pages total)
- Summarizes the maintenance procedures of whole-house-filters, which are also referred to as Point-of-Entry Treatment (POET) systems

**2. Memorandum: Aquasana 5300+ Point-of-Use Filtration Maintenance
(Revised April 6, 2020)**

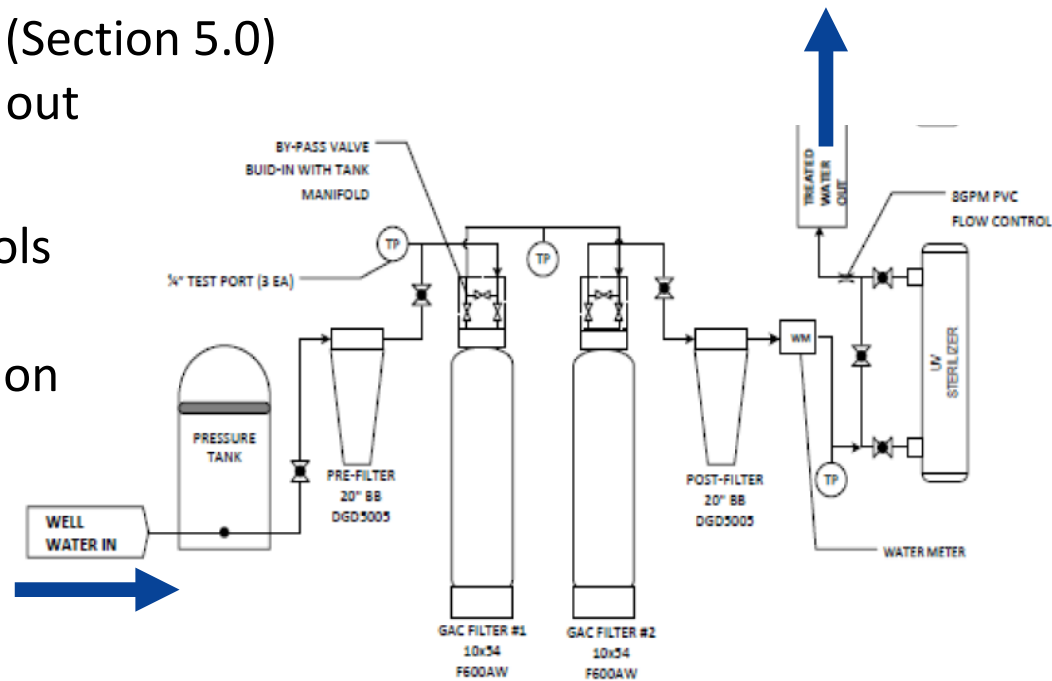
- Two-page memo report
- Discusses maintenance for point-of-use or “under-the-sink” filters (Aquasana 5300+)



Filter O&M Response Activity Plan

Alternate Water Supply Management Plan – Point-of-Entry Treatment Systems (Revised April 6, 2020)

- Introduction, Background, & Communication (Sections 1.0, 2.0, & 3.0)
- System Overview and Design (Section 4.0)
 - Information also provided in Appendices A, B, & C
- Operation and Maintenance Tasks (Section 5.0)
 - Includes carbon vessel change out
- System Monitoring (Section 6.0)
 - Sampling methods and protocols
 - Sampling schedule
 - Data management and validation
 - Reporting
- Filter Cessation (Section 7.0)



Source: Culligan System Flow Design:
Appendix A of POET Filter Plan

Next Steps

Take Comments

EGLE will take written public comments:

EGLE-RRD-Housestreet@michigan.gov

through June 13, 2020.

Prepare Response Document

EGLE will prepare a response document to summarize and address the public comments received.



This response document will be posted to www.Michigan.gov/belmont

Respond to Wolverine

EGLE will complete its review of the Filter O&M Plan and provide Wolverine a response regarding any edits/comments.

Wolverine Response Activity Plan Due Dates:

Response Activity Plan	Due Date to EGLE	Public Meeting Date	Comment Period
Filter Operation and Maintenance (O&M)	4-6-2020	5-26-2020	5/14 to 6/13/2020
Groundwater Surface Water Interface (GSI)	4-20-2020	5-27-2020	5/14 to 6/13/2020
Residential Well Resampling	5-4-2020	TBD	30 days
Groundwater Investigation - Area 5	6-18-2020	TBD (1 meeting to discuss these plans together)	30 days
Groundwater Investigation - Area 6			
Groundwater Investigation - Area 11			
Groundwater Investigation - Area 12			
Groundwater Investigation - Area R-1 (19)			
Perimeter Wells	8-17-2020	TBD	30 days

TBD: To be determined

Consent Decree is posted online at: www.Michigan.gov/belmont

We want to hear from you!

You can continue to submit your written comments through **June 13, 2020** to:

EGLE-RRD-Housestreet@michigan.gov

Or by mail to:

**Karen Vorce
EGLE-RRD
350 Ottawa Avenue NW, Unit 10
Grand Rapids, MI 49503**

**Questions?
Karen's Contact Info:
Phone: 616-439-8008
Email: vorcek@Michigan.gov**

When submitting comments, make sure to note which
Response Activity Plan you are commenting on