

Appendix L



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POET AND POU STATEMENT OF WORK North Kent Study Area

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PREPARED FOR:
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1.0 INTRODUCTION

On behalf of Wolverine World Wide, Inc. (Wolverine), Rose & Westra, a Division of GZA GeoEnvironmental, Inc. (R&W/GZA), prepared this Statement of Work (SOW) summarizing the approach and rationale for proposed revisions to the existing March 2019 *Alternate Water Supply Management Plan Point-of-Entry Treatment Systems* (POET O&M) and associated supplemental documentation as well as the May 2018 memo, *Aquasana 5300+ Point-of-Use Filtration Maintenance* (POU O&M). The purpose of this Work Plan is to propose and implement changes to the POET O&M and POU O&M as set forth in the Consent Decree (CD).

2.0 GENERAL APPROACH & PROPOSED CHANGES

Revisions to the filter O&M plans are proposed because monitoring over two years generated a wealth of data demonstrating the effectiveness of the filters, the remedial investigations in the North Kent study Area have better defined the extent of PFAS, and municipal water is planned for numerous homes in the study areas having POETs or POU.

Nearly five thousand monitoring samples have been collected from the mid-point and effluent ports of the POET systems operating over 22 months. The filters have been proven to be highly effective for PFAS removal. The monitoring samples also demonstrate POET carbon will last at least 18 months and/or at least 120,000 gallons even for homes with the highest PFAS concentrations and water use. This is further outlined in the November 2019 memo, *POET Post-Installation Performance Monitoring Sampling Protocol*.

Based on the continued effectiveness of the filter systems, the continued efforts to delineate the extent(s) of contamination, the well-established minimum carbon life for the POETs, and the pending municipal water installation, the following is proposed:

POUS

- In filter areas at residences where influent concentrations are above 10 ppt for PFOS+PFOA as well as in municipal water areas, Wolverine will continue to provide replacement cartridges for the NSF-certified POU, as specified in the existing POU O&M Plan and the manufacturer's suggestion. Two sets of replacement cartridges will be mailed each year to each residence. Wolverine will stop providing POU replacement cartridges when an individual residence is connected to municipal water.
- In filter areas, if a parcel is resampled and a detection of PFOS+PFOA greater than 10 ppt or other applicable PFAS criterion is identified, that resident will be offered a POU which will be maintained as stated above.
- After the Effective Date of the CD, in filter areas, if a parcel has not had detections of PFOS+PFOA exceeding 10 ppt, Wolverine will offer to remove the POU at Wolverine's expense, or the resident may choose to keep the POU if they assume operation and maintenance.

POETS

- The existing maintenance and monitoring program will be modified after the Effective Date of the CD until the first carbon change out at each individual residence for (a) POETs in municipal water areas, and (b) POETs in filter areas where influent concentrations are above 10 ppt for PFOS+PFOA:



Current Monitoring Interval	Proposed Monitoring after Effective Date of the CD until the first Carbon Change Out at Each Individual Residence	Proposed Carbon Change Out Intervals*
Weekly	Monthly	6 months
Monthly	Quarterly	12 months
Quarterly	Semi-Annual	16 months
Semi-Annual	None, if sampled since July 1, 2019. If not sampled since July 1, 2019, one additional sample will be collected within the first eight months after CD is effective.	16 months
Annual	None, if sampled since July 1, 2019. If not sampled since July 1, 2019, one additional sample will be collected within the first eight months after the CD is effective.	20 months**

*Carbon change out is removing the lead carbon vessel(s) and moving the lag vessel(s) into the lead position and installing a new vessel(s) in the lag position(s). On a case-by-case basis carbon change outs may occur off-schedule when unique issues such as unexpected pressure drop occurs across the POET system. If a POET has been installed or a carbon change out has occurred at an individual address within six months prior to the Effective Date of the CD, that POET system will automatically be put on the carbon change out schedule and monitoring will cease. Wolverine, after consultation with and approval from EGLE, may agree to postpone a scheduled change out to accommodate the scheduled installation of municipal water for the home.

**The change out will occur earlier than 20 months if there is a demonstrated reduction in flow rate or increased pressure drop across the POET prior to the expiration of 20 months (i.e. evidence of physical clogging rather than carbon exhaustion due to PFAS burden).

- The initial round of carbon change outs will be completed over an approximately 4 to 8-month period after the Effective Date of the CD. The change outs will be prioritized by PFAS concentrations, with the current weekly intervals being the first group. Once a carbon change out has occurred at an individual system, the specified carbon change-out schedule will begin for that particular address (i.e. if a current weekly system is changed March 1, 2020 as part of the initial change out, the six-month schedule will be triggered with the next scheduled change on September 1, 2020 and so on).
- UV lamp and sediment filter maintenance will continue on annual and thrice yearly basis, respectively.



- After each carbon change out, R&W/GZA will schedule a site visit to confirm configuration and operation of the POET systems.
- Once the presumptive carbon change outs begin, the following performance monitoring will be conducted. The sampling will be completed approximately 2 -4 weeks after the individual carbon change out occurs.

Current Monitoring Interval	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

*For the three POETs installed in the filter areas with known influent concentrations over 70 ppt PFOS+PFOA, influent and mid-point monitoring samples will be collected one time between each carbon change out.

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

- Wolverine will stop providing POET monitoring and/or carbon changeout (as specified above) when the individual residence is connected to municipal water. Wolverine will remove the GAC shortly after the home is connected to municipal water and offer the POET to the homeowner if they wish to continue operating and maintaining it.
- At the locations with Type II water supplies (i.e. Armory and Convent), the POET systems will be maintained and monitored within their permit requirements until municipal water connections are provided.
- After the Effective Date of the CD, in filter areas, if a parcel has not had detections of PFOS+PFOA exceeding 10 ppt, Wolverine will offer to remove the POET at Wolverine's expense, or the resident may choose to keep the POET if they assume operation and maintenance.



3.0 ANTICIPATED SCHEDULE

The schedule for implementation of these changes will commence upon entry of the CD. A revised POET O&M and associated documents as well as revised POU O&M will be prepared based on this SOW and submitted to EGLE no later than 45 days following the date of the CD between EGLE and Wolverine. The O&M plan will be modified, as needed, if new criteria are adopted for PFAS compounds.



GZA GeoEnvironmental, Inc.