

# **Pollutant Minimization and Source Evaluation Program for PFOS and PFOA**



October 1, 2019  
January 30, 2020; Rev 1



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Rev 1: January 30, 2020

Ms. Laura Verona  
District Supervisor  
Southeast Michigan District Office  
Michigan Department of Environment, Great Lakes, and Energy (EGLE)  
Water Resources Division  
27700 Donald Court  
Warren, MI 48092-2793

Regarding: Pollutant Minimization and Source Evaluation Program for PFOS and PFOA

Dear Ms. Verona:

The Great Lakes Water Authority (GLWA) submits this "Pollutant Minimization and Source Evaluation Program for PFOS and PFOA" (hereinafter PFAS Plan) as required in Part I., Section A.17 of the National Pollutant Discharge Elimination System (NPDES) Permit MI 0022802. This report describes our strategies and commitments to identify sources of PFOS and PFOA; monitor for PFOS and PFOA; and control, reduce and eliminate contributions of PFOS and PFOA into the wastewater collection system.

The October 1<sup>st</sup> submission has been revised to reflect comments made by EGLE in December 2019. If you have questions or need additional information, please feel free to contact me at (313) 297-5804.

Respectfully,

Stephen Kuplicki, P.E., J.D.  
Operations Manager, Industrial Waste Control  
Great Lakes Water Authority

cc: Navid Mehram, GLWA  
Majid Khan, GLWA  
Thomas Eapen, GLWA

**Pollutant Minimization and Source Evaluation Program for PFOS and/or PFOA**  
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The Great Lakes Water Authority (GLWA) is required to develop and implement a “Pollutant Minimization and Source Evaluation Program for Perfluorooctane Sulfonate (PFOS) and/or Perfluorooctanoic Acid (PFOA)” under the terms of its NPDES Permit MI0022802 issued on July 1, 2019. The following program description is submitted in compliance with the NPDES permit requirement.

**Introduction**

PFOA and PFOS are two chemical compounds from a whole family of manmade chemicals that contain a carbon and fluorine backbone known as Per- and Poly- Fluoroalkyl Substances (PFAS). These compounds came into common use in the 1950s and '60s given their ability to resist heat, water, and oil, and have been used in hundreds of industrial processes and consumer products. There are hundreds of known PFAS compounds with varying functional groups, which can include other elements such as oxygen, hydrogen, or sulfur.

Although there are hundreds of PFAS compounds, only a small number have been studied and our understanding on their impact upon human health and the environment is limited. Long-chain PFASs are believed to be more toxic and more persistent in the environment. Two of the compounds which have been studied for toxicity are PFOA and PFOS, however the extent to which these compounds break down in the environment or within municipal treatment plants is not well understood.

The U.S. Environmental Protection Agency has set lifetime health advisories for PFOA and PFOS, and the State of Michigan has set a water quality standards (WQS) for PFOS at 11 ng/l and a water quality-based effluent standards (WQBEL) at 8.04 ug/l for PFOA. Additional states have established other limits and standards. Research and investigation into these and other PFAS compounds are continuing and the science remains fluid.

GLWA is committed to implement this Minimization Program with the goal to reduce and maintain the WRRF effluent quality below the applicable WQS and/or WQBEL standards.

**Background**

GLWA was notified in February 2018 by the State of Michigan to identify and classify sources of PFOA and PFOS, initiate reduction and elimination activities with such sources and initiate effluent monitoring of the WRRF. Through an intensive inspection and monitoring program, GLWA identified 52 significant sources of PFOS and/or PFOA as of March 31, 2019. WRRF effluent monitoring over an approximate 12-month period has baselined an average concentration of PFOS in effluent at 11.16 ng/l (WQS = 11 ng/l) and PFOA at 8.47 ng/l (WQBEL = 8.04 ug/l).

The information compiled in the past 12-month period serves as a foundation to development of this Minimization Program document.

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The NPDES Permit seeks GLWA to develop a Minimization Program for PFOS and PFOA that addresses the following elements.

**Element #1: Identification of and strategies to identify any additional potential and probable PFOS and/or PFOA sources**

The GLWA Minimization Program will include non-domestic source contributions from industrial and commercial sources that are identified through (i) actual notice from the source(s); (ii) analytical data results from a specific source or which may represent a source class; (iii) sources discharging wastewater using materials known to contain PFOS and/or PFOA and (iv) on-going information received about “other” non-domestic sources presented in literature, research findings, etc.

As a result of the work initiated in 2018, we have already evaluated and identified a number of industry groups as potential sources of PFOS and PFOA in their wastewater discharge (See Attachment 1). New Users falling in one or more of these groups will be evaluated as potential sources using inspection and monitoring as necessary and either classified as a “Significant Source”<sup>1</sup> or as “Not a Source”<sup>2</sup>, based upon Best Available information. The following additional commitments are made:

<b>GROUP</b>	<b>ACTION/ACTIVITY</b>	<b>MINIMUM FREQUENCY</b>
Existing Significant Industrial and/or Categorical Industrial Users	Review BMR or Permit (Re)Application and Supporting data	At time of submittal
New Significant Industrial and/or Categorical Industrial Users	Review BMR or Permit Application and Supporting data	At time of submittal
Other Non-domestic Users	Survey Inspection and Application Information	At time of submittal
Groundwater	Application Information	At time of submittal

GLWA decisions to classify a facility as a Significant Source or otherwise will be documented in the main file.

To fulfill these objectives, we have added additional questions to our Survey Questionnaire form, Permit application form and Special Discharge Application form. Sample copies of these forms are attached (see attachment #2). GLWA has also developed Guidance Information for Users (see attachment 3).

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<sup>1</sup> See Glossary

<sup>2</sup> See Glossary

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The GLWA Minimization Program will not seek to control PFOS and/or PFOA contributions from Consumer (Domestic) sources at this time, such as non-stick cookware, grease-resistant paper, fast food wrappers, microwave popcorn bags, stain-resistant carpets and fabrics, water-resistant clothing, cleaning products, and personal care products. We believe that federal and state agencies are better positioned to identify and regulate such sources.

As new information is obtained about other commercial/industrial potential sources of PFOS and/or PFOA, GLWA will use its best efforts to identify and evaluate such sources.

**Element #2: Monitoring plan for the permitted facility’s influent and effluent and effluent from potential sources**

Part I: Water Resource Recovery Facility (WRRF)

Effluent data collected during the past 12-month period displays a positive downward trend in the concentrations of PFOS and PFOA found in the effluent stream and are summarized in the Table below and graphicly – see attachment 4. Additionally, the average concentrations are already below or approaching the established WQBEL/WQS standard for PFOA and PFOS.

**Table 4.1 GLWA - WRRF Effluent  
Sampling Data  
2018/19 (all results in ng/l)**

Column1	PFOS	PFOA
Apr-18	15	7.5
Sep-18	13	12
Oct-18	13	9.6
Nov-18	9.3	7.18
Jan-19	9.1	7
Apr-19	13	9.6
Jul-19	5.7	6.4

These results are encouraging however additional information is needed. Therefore, we propose the following monitoring schedule for the WRRF:

	Calendar 2020	Calendar 2021 through 2024	Comment
Jefferson Influent	Six (6) Samples	Quarterly	Establish Baseline data in 2020 to support Local Limits Re-evaluation Study
Oakwood Influent	Six (6) Samples	Quarterly	
NIEA Influent	Six (6) Samples	Quarterly	
Effluent (Zug)	Six (6) Samples	Quarterly	
Biosolids	Semi-Annual	Semi-Annual	

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*Note: GLWA recognizes that the sampling for calendar year 2020 includes 2 extra samples above that specified in the NPDES permit MI0022802. The additional monitoring is intended to provide data for performing an evaluation of local limits (due June 1, 2021). These additional data results will be reported on the DMR.*

Part II: Significant Sources of PFOS and/or PFOA

- A. Self-Monitoring Program: Under its IPP, the GLWA issues permits or equivalent Control Documents that includes self-monitoring requirements for User's maintaining a Wastewater Discharge Permit. Facility self-monitoring frequencies are determined by GLWA in accordance with R323.2310(6)(c) of the Michigan Administrative Code, "...a frequency of monitoring that is necessary to assess and assure compliance by nondomestic users with applicable pretreatment standards and requirements." and will be at a minimum, Once per Year for Significant Sources of PFOS and/or PFOA. *Note: GLWA determines self-monitoring frequencies by considering multiple factors including but not limited to the volume of wastewater discharged, the operations performed at the facility, and the compliance status of the facility; it should be noted that GLWA generally sets self-monitoring frequencies above the minimum.* Self-monitoring requirements shall be defined in an enforceable document, i.e. Wastewater Discharge Permit, Compliance Agreement, etc.
  
- B. GLWA Monitoring: Monitoring will be conducted through the GLWA IPP Program Team at a minimum monitoring frequency of Once per Year for Significant Sources of PFOS and/or PFOA.
  
- C. Both GLWA and User Samples will be analyzed using ASTM D7979 or USEPA Method 537 (as modified) or any method(s) recognized by the USEPA or EGLE. *Note: Method Detection Limits and Reporting Ranges are described in each method (See glossary).*

Part III: Exploratory Monitoring of Potential Sources of PFOS and/or PFOA

GLWA shall maintain resources to conduct exploratory monitoring of potential Sources of PFOS and/or PFOA that are identified from information collected in Element #1 above.

Element #3: **Implemented measures thus far to eliminate, reduce, and/or control sources, and an assessment of the degree of success and the strategies used to measure success**

Since February 2018, GLWA has identified 52 significant sources of PFOS and/or PFOA using inspection, and monitoring resources through its Industrial Pretreatment Program (see attachment 5). Significant Sources have been notified of the classification, the basis of determination (Self-monitoring and/or Control Authority sampling) and required to "reduce and eliminate" source contributions of PFOS and/or PFOA from their discharge. In accordance with current legal authority, Significant Sources have been directed to develop a Best Management Plan (BMP) to describe the means by which the individual facility will reduce and eliminate source contributions of PFOS and/or PFOA from their discharge. BMP elements have been incorporated into an enforceable document, i.e. a Wastewater Discharge Permit or Compliance Agreement.

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The basic elements of the enforceable document include the following:

- A. Baseline Monitoring – a majority of users identified a need to collect additional information to quantify the contributions of PFOS and/or PFOA. A 90-day period has been generally granted for this purpose.
- B. Periodic Monitoring – following the period of Baseline Monitoring, we have identified a periodic frequency for self-monitoring to be reported with the Six Month reports due June 30<sup>th</sup> and December 31<sup>st</sup> of each year.
- C. Management Controls – contemporaneously with the Baseline Monitoring effort, we have required a review of current and future material inventories for PFOS and PFOA.
- D. Report of Additional Controls and/or Treatment – We have established a submittal date after approx. a 180-day period, to review Baseline data, evaluate Management Controls and address the applicability of treatment (on or off site). Implementation schedules are also required.

Following submission of the reports, GLWA will review the reports and data submissions and accept or reject the plans and schedules. If rejected, GLWA will request a revision and re-submittal.

Assessing the Degree of Success

GLWA recognizes that it will take a concerted effort to eliminate PFAS compounds and we expect that the collective efforts of the significant sources will lead toward the minimization, elimination, and reduction of PFOS and PFOA from the local environment.

GLWA WRRF Data

Data collected by the GLWA WRRF (see prior attachment 4) indicates a positive downward trend towards compliance with the NPDES Permit goal. GLWA attributes this observation to the awareness factor raised by GLWA with the industrial community overall and specifically with those identified as Significant Sources of PFOS and/or PFOA.

Significant Sources – Additional Data

Prior to the re-issued NPDES Permit (July 1, 2019), GLWA reported the quarterly WRRF data as it has been available. Analytical data after this period will be reported in accordance with DMR requirements.

GLWA – IPP activity has been reported since February 2018, however the key reports are March 31, 2019 and June 27, 2019. These reports are incorporated by reference into this Minimization Plan.

Significant sources and GLWA have collected additional analytical data to supplement the previous reports. The data received as of September 15<sup>th</sup>, 2019 is summarized in attachment 6.

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Progress Assessment for Significant Sources

Based upon the information available as of September 15<sup>th</sup>, 2019, we have summarized the progress reported by the SIU or as determined by ourselves, and as appropriate, provided our comment(s) (see attachment 7). One additional significant source has been identified since the last summary report, i.e. Envirosolids and is included in this summary.

As of October 1, 2019, nine (9) of the original 52 significant sources have or are in the process of installing treatment for the removal of PFAS compounds. The predominant treatment uses GAC (Granular Activated Carbon) or ion resin adsorption. The progress and actions of the remaining users will be updated in the December 31, 2019 status report currently scheduled in MiWaters.

**Element #4: Proposed measures and implementation schedules for elimination, control, and/or reduction of the identified sources (prioritizing highest loadings and concentrations), and the strategies that will be used to measure success**

Based on the positive downward trend observed thus far in the WRRF effluent, GLWA believes that its prior efforts have provided a good foundation that can be continued. GLWA will continue to use its best efforts to reduce and eliminate the concentrations of PFOS and PFOA discharged from the WRRF. GLWA is confident that source control efforts can achieve the stated goal (discharge below the respective WQS or WQBEL).

The following measures will be taken (after October 1, 2019) to eliminate, control and/or reduce PFOS and PFOA.

**A. Rules and Standards**

The current state WQS and WQBEL standards do not, by themselves, easily translate into enforceable limits or criteria at this time. EGLE has encouraged GLWA and other POTWs to create local limits and/or other requirements, for PFOS and PFOA, however the process for creating such limits is rigorous and will require additional time. GLWA will do the following:

1. Implementation of Rules for PFOS and PFOA – GLWA has drafted a rules amendment for source control of PFAS Compounds (including PFOS and PFOA). These amendments are scheduled to be presented to the GLWA Board. As with all public rulemaking, a public comment period will be open to solicit input from interested parties prior to an actual vote to adopt by the GLWA Board. Prior to the enactment date, GLWA will inform EGLE of the rules and request a Non-Substantial Modification in accordance with R 323.2309.
2. Local Limits Evaluation – In accordance with the July 1, 2019 NPDES permit, GLWA is scheduled to provide a technical evaluation of local limitations, and present in the report due on or by June 30, 2021. Although the NPDES permit does not specifically require GLWA to develop local limitations for PFOS and/or PFOA, GLWA plans to include these parameters in its evaluation along with other pollutants of concern. GLWA will initiate data collection efforts beginning in 2020 to achieve this objective.

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**B. Source BMP Development, Implementation and Enforcement**

Until such time as the rules and any local limitations are enacted, GLWA will consider known source discharges in excess of the WQS and/or WQBEL to be significant sources and require the reduction, control and elimination of PFOA and PFOS from source discharges. GLWA believes the BMP approach along with its general enforcement tools, is an effective means of accomplishing this goal. Any progress (or lack thereof) of a significant source will be reported to EGLE District Office staff in accordance with the NPDES permit.

To support this effort, GLWA will prepare Guidance to assist significant sources in using the BMP approach. Several examples are included in attachment 8.

**C. WRRF Performance**

The WRRF shall report available PFOS and PFOA data in accordance with the DMR reporting requirements. Additionally, GLWA will track the quality of its discharge in a spreadsheet with appropriate charts or graphs. The next progress submittal is due December 31, 2019 and will include all available information as of the reporting date.

**D. GLWA – IPP**

The progress of significant sources in implementing the BMPs and reducing and eliminating the contributions of PFOS and PFOA will be tracked and a summary provided with each annual or status report. In evaluating the success achieved by individual significant sources in reducing or eliminating their respective contributions of PFOS and PFOA, GLWA will provide an independent comment as to whether the affirmative actions<sup>3</sup> taken by a particular source towards reducing or eliminating their respective contributions of PFOS and PFOA are achieving the Minimization goal. [Note: In assessing progress, we will focus primarily on results that are supported by factual documentation.]

The NPDES Permit specifies that an Annual report is required each October 1 (beginning in 2020). GLWA will comply with this requirement. This report will include analytical reports for WRRF (PFAS Compounds other than PFOS and PFOA).

**E. Information and Education Activities**

GLWA is committed to communicate openly with the Industrial Users and community about developments, findings, and other information on the subjects of PFOS, PFOA and other PFAS compounds. GLWA will use its best efforts to participate in seminars, publications, and other outreach activities to make such information available.

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<sup>3</sup> We recognize that there may not be an immediate or 1:1 relationship between an action and effluent data results. We desire to recognize progress both great and small.

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F. Other

GLWA is active in supporting the efforts of the Water Research Foundation to address water-quality issues affecting POTWs across the nation, including PFAS compounds.

Finally, GLWA will use its best efforts to stay abreast of new information developed by federal, state or other entities, and endeavor to incorporate such information into future PFOS and PFOA Minimization Program improvements or enhancements.

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**GLOSSARY OF TERMS**

**Significant Source** (of PFOS and/or PFOA) – any non-domestic source whose discharge of PFOS and/or PFOA exceeds by any amount the Water Quality Standards established by EGLE, based on one or more analytical results. At this time, GLWA understands EGLE’s WQS for drinking water streams are 420 ng/l for PFOA and 11 ng/l for PFOS.

**Not a Source** (of PFOS and/or PFOA) – any non-domestic user who is not a “significant source”.

**Method detection limit (MDL)** is defined as the minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

**TABLE 1 Method Detection Limit and Reporting Range for ASTM D7979**

Analyte <sup>A</sup>	MDL (ng/L)	Reporting Ranges (ng/L)
PFTreA <sup>B</sup>	1.2	10 – 400
PFTriA <sup>B</sup>	0.7	10 – 400
PFDoA <sup>B</sup>	1.2	10 – 400
PFUnA <sup>B</sup>	1.2	10 – 400
PFDA <sup>B</sup>	1.4	10 – 400
PFOS <sup>B</sup>	2.2	10 – 400
PFNA <sup>B</sup>	1.1	10 – 400
PFecHS <sup>B</sup>	1.9	10 – 400
PFOA <sup>B</sup>	1.7	10 – 400
PFHxS <sup>B</sup>	1.2	10 – 400
PFHpA <sup>B</sup>	1.0	10 – 400
PFHxA <sup>B</sup>	2.0	10 – 400
PFBS <sup>B</sup>	0.8	10 – 400
PFPeA <sup>B</sup>	4.6	50 – 2000
PFBA <sup>B</sup>	4.6	50 – 2000
FHEA	92.9	300 – 8000
FOEA	106.8	300 – 8000
FDEA	47.2	200 – 8000
FOUEA	2.3	10 – 400
FHpPA	3.3	10 – 400
FHUEA	1.5	10 – 400

<sup>A</sup> Acronyms are defined in 3.3.

<sup>B</sup> New MDL study was reported in August 2016, which resulted in a reporting limit and range update.

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**GLOSSARY (CONTINUED)**

**TABLE 5. DLs AND LCMRLs IN REAGENT WATER for EPA Method 537**

Analyte	Fortified Conc. (ng/L) <sup>a</sup>	DL <sup>b</sup> (ng/L)	LCMRL <sup>c</sup> (ng/L)
PFBS	9.1	3.1	3.7
PFHxA	5.0	1.6	2.9
PFHpA	4.1	0.5	3.8
PFHxS	11	2.0	8.0
PFOA	4.6	1.7	5.1
PFNA	4.8	0.7	5.5
PFOS	9.6	1.4	6.5
PFDA	3.7	0.7	3.8
NMeFOSAA	20	6.5	14
NEtFOSAA	21	4.2	14
PFUnA	5.4	2.8	6.9
PFDoA	3.7	1.1	3.5
PFTTrDA	5.5	2.2	3.8
PFTA	4.4	1.7	4.7

<sup>a</sup> Spiking concentration used to determine DL.

<sup>b</sup> Detection limits were determined by analyzing seven replicates over three days according to Section 9.2.7.

<sup>c</sup> LCMRLs were calculated according to the procedure in reference 1.



## **Pollutant Minimization and Source Evaluation Program for PFOS and PFOA**

### Table of Attachments

Attachment 1	2018/19 Summary of Potential Sources of PFOS and PFOA
Attachment 2	Sample Forms for Survey Application, Permit Application and Special Discharge Application w/PFAS Compound Questions
Attachment 3	GLWA-IWC Staff Guidance – Reference Guide for Identifying Potential Significant Sources of PFAS Compounds
Attachment 4	Summary Table and Graphs of WRRF Effluent Results for PFOS and PFOA
Attachment 5	2018/19 Summary of Significant Sources of PFOS and PFOA
Attachment 6	CY2019 - GLWA and User Sampling Results as of September 15, 2019
Attachment 7	October 2019 Progress Assessment Summary
Attachment 8	Guidance Information for Best Management Program Plans for General Users, CWT Facilities and Landfills

ATTACHMENT 1

Attachment 1: Potential Sources Evaluated and Identified for PFOS/PFOA by GLWA - 2018/19

Report_month	User #	Facility Name	Facility Address	City	County	Zip Code	SIU/CIU SIC Code(s) or NAICS Code(s)	SIU/CIU SIC/NAICS Primary Code Indicator	Industrial User Type (SIU/CIU)	For CIUs, list all applicable Categories by 40 CFR Part Number(s)	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Significant Sources
														420	11		
O	1	3M Company	11900 E. 8 Mile Road	Detroit	Wayne	48205	3291	327910	SIU	SIU	15,585	Continuous	8/20/2018	ND	<9.28	Probable Significant Source	Yes
D	2	A. G. Simpson (USA), Inc.	6640 Sterling Drive South	Sterling Heights	Macomb	48312	3471/3479	332813	CIU	433.A.15(a) (PSES) Metal Finishing	31,000.00	Continuous	10/22/2018	ND	350	Significant Source	Yes
N	3	Aactron, Inc.	29306 Stephenson Highway	Madison Heights	Oakland	480712317	3471/3479	332812/332813	CIU	413.54E(b&f) (PSES) Electroplating <10,000 gpd	1,015	Continuous	10/16/2018	ND	ND	Not a Source	
N	4	ACME Plating, Inc.	18636 Fitzpatrick	Detroit	Wayne	48228	3471/3479	332812/332813	CIU	413.14A(b), 413.54E(b) (PSES) Electroplating <10,000 gpd	2,100	Continuous	9/26/2018	ND	ND	Not a Source	
	5	Advanced Disposal Services Solid Waste Midwest, Inc.	501 Collier Road	Pontiac	Oakland	48326	4953		SIU				Seasonal Discharge: Scheduled for April 2019				
O	6	Advanced Resource Recovery, L.L.C.	27140 Princeton Avenue	Inkster	Wayne	48141	5093	562219	CIU	437.D.46b (PSES) Centralized Waste Treatment	96,551	Batch	4/18/2018	290	ND (<23ng/l)	Significant Source	Yes
O		Advanced Resource Recovery, L.L.C.	27141 Princeton Avenue	Inkster	Wayne	48141	5093	562219	CIU	437.D.46b (PSES) Centralized Waste Treatment	96,551	Batch	9/11/2018	470	410	Significant Source	
	7	Aero Box, LLC	20101 Cornillie Drive	Roseville	Macomb	48066	2653	322211	SIU		125.00	Batch	10/23/2018	40	ND	Not a Source	
D	8	Aevitas Specialty Services Corp.	663 Lycaste Street	Detroit	Wayne	48214	5093	562219	CIU	437.B.26 (PSNS) Centralized Waste Treatment	53,000	Batch	10/15/2018	10	70	Significant Source	Yes
O	9	Ajax Metal Processing, Inc	4651 Bellevue Avenue	Detroit	Wayne	48207	3471	332813	CIU	413.14A(c&g), 413.54E(c&g) (PSES) Electroplating; 433.17(a) (PSNS) Metal Finishing	193,393	Continuous	9/10/2018	ND	ND	Not a Source	
N	10	Alpha Resins, L.L.C.	17350 Ryan Rd	Detroit	Wayne	48212	2821	325211	CIU	414.E.55 (PSES) Organic Chemicals, Plastics, and Synthetic Fibers AND 414.K.111 (PSES & PSNS) Organic Chemicals, Plastics, and Synthetic Fibers	25,214	Continuous	10/15/2018	ND	ND	Not a Source	
D	11	American Beverage Equipment Co., Inc.	27560 Groesbeck Highway	Roseville	Macomb	48066	3471	332813	CIU	433.A.15(a) (PSES) Metal Finishing	850.00	Continuous	10/23/2018	ND	ND	Not a Source	
N	12	American Jetway Corp.	3850 Howe	Wayne	Wayne	48184	2899	325998	SIU	SIU	100	Batch	10/15/2018	ND	ND	Not a Source	
D	13	American Metal Finishing, Inc.	35860 Beattie Drive	Sterling Heights	Macomb	48312	3471	332813	SIU	SIU	550.00	Batch	10/23/2018	ND	ND	Not a Source	
D	14	Applied Technology Industries, Inc.	50271 E. Russell Schmidt Drive	Chesterfield	Macomb	48051	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	28,193.00	Continuous	10/24/2018	ND	ND	Not a Source	
O	15	Arted Chrome Plating Inc.	38 Piquette Street	Detroit	Wayne	48202	3471	332813	CIU	413.14 A(d) (PSES) Electroplating <10,000 gpd	6,124	Continuous	8/8/2018	<1.9	69	Significant Source	Yes
N	16	A-W Custom Chrome, Inc.	17726 E. 9 Mile Road	East Pointe	Macomb	48021	3471	332813	CIU	413.A.14(b)(f) (PSES) Electroplating Discharging <10,000 gpd	630	Continuous	9/26/2018	ND	180	Significant Source	Yes
D	17	Baron Industries	999 East Mandoline	Madison Heights	Oakland	48071	3479		SIU	SIU	4,500.00	Continuous	10/30/2018	ND	ND	Not a Source	
D	18	Beacon Park Finishing, LLC (Howard Finishing Roseville)	15765 Sturgeon	Roseville	Macomb	48066	3471	332813	CIU	413.A.14(c)(g), 413.E.54(c)(g) (PSES) Electroplating Discharging >10,000 gpd	71,900.00	Continuous	10/22/2018	ND	2560	Significant Source	Yes
D	19	Black Ox Corporation	35451 Schoolcraft Road	Livonia	Wayne	48150	3471		CIU	413.A.14(c)(g), 413.E.54(c)(g) (PSES) Electroplating Discharging >10,000 gpd	71,900.00	Continuous	2/11/2019	4.3	50000	Additional Data	
D	19	Black Ox Corporation	35451 Schoolcraft Road	Livonia	Wayne	48150	3471		CIU	433.A.17a (PSNS) Metal Finishing	1,000.00	Batch	11/16/2018	ND	ND	Not a Source	
N	20	BMT Aerospace	18559 Malyn	Fraser	Macomb	48026	3724		CIU	433.A.17a (PSNS) Metal Finishing	3,040	Continuous	10/10/2018	ND	ND	Not a Source	
N	21	Burkard Industries, Inc.	35300 Kelly Rd.	Clinton Township	Macomb	48035	3479	332812	CIU	433.A.17(a) (PSNS) Metal Finishing	35,754	Continuous	9/26/2018	ND	ND	Not a Source	

Attachment 1: Potential Sources Evaluated and Identified for PFOS/PFOA by GLWA - 2018/19

Report Month	User #	Facility Name	Facility Address	City	County	Zip Code	SIU/CIU SIC Code(s) or NAICS Code(s)	SIU/CIU SIC/NAICS Primary Code Indicator	Industrial User Type (SIU/CIU)	For CIUs, list all applicable Categories by 40 CFR Part Number(s)	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Significant Sources
														420	11		
N	22	Chemical Process Industries, LLC	25428 John R,	Madison Heights	Oakland	48071	3471		CIU	413.A.14c (PSES) Electroplating AND 433.A.17a (PSNS) Metal Finishing	13,292	Continuous	10/16/2018	ND	ND	Not a Source	
D	23	Chemico Systems, Inc.	50725 Richard West Blvd.	Chesterfield	Macomb	48051	1799/2899	325510	SIU	SIU	5,074.00	Batch	10/25/2018	ND	ND	Not a Source	
D	24	Chor Industries Inc.	500 Robbins	Troy	Oakland	48083	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	12,303.00	Continuous	10/30/2018	ND	250	Significant Source	a
O	25	Cintas Corporation - Westland	39145 Webb Drive	Westland	Wayne	48185	7218	812332	SIU	SIU	71,183	Continuous	9/11/2018	ND	40	Significant Source	Yes
N	26	City of Livonia - Type III Landfill	32500 Glendale Road	Livonia	Wayne	48150	4953	562212	SIU	SIU	16,000	Continuous	10/15/2018	50	100	Significant Source	Yes
N	27	City of Pontiac	575 Collier Road	Pontiac	Oakland	48340	4953	562212	SIU	SIU	97,000	Continuous	10/5/2018	75	15	Significant Source	Yes
N	28	Color Coat Plating Company	355 W. Girard	Madison Heights	Oakland	48071	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing	1,139	Batch	9/26/2018	ND	230	Significant Source	Yes
D	29	Controlled Power Company	1955 Stephenson Highway	Troy	Oakland	48083	3479/3612	335311	CIU	433.A.17a (PSNS) Metal Finishing	551.00	Batch	10/30/2018	ND	20	Significant Source	Yes
O	30	Cross Chemical Co.	1210 Manufacturers Dr.	Westland	Wayne	48186	2843	325613	SIU	NOA	6,330	Batch	9/11/2018	ND	ND	Not a Source	
D	31	Curtis Metal Finishing Company	6645 Sims Drive	Sterling Heights	Macomb	48313	3479	332812	CIU	433.A.17(a) (PSNS) Metal Finishing 442.A.15a (PSES)	245,204.00	Continuous	10/19/2018	ND	ND	Not a Source	
O	32	Dana Container, Inc. Tank Cleaning Division	1551 Caniff Street	Detroit	Wayne	48211	7999	562991	CIU	Transportation Equipment Cleaning NOU	12,950	Batch	9/10/2018	280	140	Significant Source	Yes
D	33	Daniels Sharpsmart, Inc.	5770 Hix Road	Westland	Wayne	48185		562219/562112	SIU	NOU	3,600.00	Continuous	10/19/2018	ND	ND	Not a Source	
	34	DCI Aerotech	7501 Lyndon	Detroit	Wayne	48238	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing Fire in 2018 - Scheduled for April 2019							
D	35	Depor Industries, Inc. (Metal Improvement Co)	14830 23 Mile Rd	Shelby Township	Macomb	48315	3479	332812	CIU	433.A.17(a) (PSNS) Metal Finishing	4,035.00	Continuous	11/1/2018	20	ND	Not a Source	
O	36	Depor Industries, Inc. (Troy)	1902 Northwood	Troy	Oakland	48084		332812	CIU	433.A.17a (PSNS) Metal Finishing	16,000	Continuous	9/17/2018	ND	ND	Not a Source	
O	37	Detroit Chrome Electro Forming Co.	7515 Lyndon	Detroit	Wayne	48238	3471	332813	CIU	413.14 A(b) (PSES) Electroplating <10,000 gpd	2,180	Batch	9/25/2018	ND	9750	Significant Source	Yes
N	38	Detroit Diesel Corporation	13400 W. Outer Drive	Detroit	Wayne	48239-1309	3471	332813/333618	SIU	SIU	117,400	Continuous	9/28/2018	5.3	11	Significant Source	Yes
N		Detroit Diesel Corporation		Detroit	Wayne	48239-1310	3472	332813/333619	SIU	NOU	102,600	Continuous	9/28/2018	5.7	10	Not a Source	
J	39	Detroit Metropolitan Wayne County Airport	One L. C. Smith Terminal - Mezzanine	Detroit	wayne	48242	4581			SIU	700,000	Continuous	12/18/2019	140	220	Significant Source	Yes
N	40	Detroit Name Plate Etching Company	10610 Galaxie	Ferndale	Oakland	48220	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	2,687	Continuous	10/16/2018	ND	ND	Not a Source	
D	41	Detronic Industries, Inc.	35800 Beattie Drive	Sterling Heights	wayne	48312	3444/3471/3479	332322/332812/332813	CIU	433.A.17a (PSNS) Metal Finishing	10,970.00	Continuous	10/19/2018	ND	ND	Not a Source	
O	42	Disposal and Recycling Technologies, Inc.	8647 Lyndon	Detroit	Wayne	48238	4953	562219	CIU	437.D.47e (PSNS) Centralized Waste Treatment	250,300	Continuous	9/11/2018	1790	530	Significant Source	Yes
O	43	Domestic Uniform Rental	3800 18th Street	Detroit	Wayne	48208	7218	812332	SIU	SIU	64,276	Continuous	9/10/2018	20	50	Significant Source	Yes
N	44	Dynamic Metal Finishing	5999 Bewick Street	Detroit	Wayne	48213	3471	332813	CIU	433.A.17(a) (PSNS) Metal Finishing	3,667	Continuous	9/26/2018	ND	10	Not a Source	
N	45	Dynamic Robotic Solutions Inc. (KMT Robotic Solutions Inc.)	1255 Harmon Rd.	Auburn Hills	Oakland	48326			SIU	NOU	2,184	Continuous	10/15/2018	1.7	<1.7	Not a Source	
N	46	Electroplating Industries, Inc.	21410 Carlo Drive	Clinton Township	Macomb	48038	3471	332813	CIU	433.A.17(a) (PSNS) Metal Finishing	16,193	Batch	9/26/2018	ND	ND	Not a Source	
D	47	Elite Fence Products	50925 Richard West Blvd.	Chesterfield	Macomb	48051	3479	332812	CIU	433.A.17(a) (PSNS) Metal Finishing	7,686.00	Continuous	10/24/2018	ND	ND	Not a Source	

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														420	11		
N	48	Emerald Steel Processing	31624 Stephenson Highway	Madison Heights	Oakland	48071	3398		CIU	420.I.95a.1 (PSES) Iron and Steel Manufacturing AND 433.A.15a (PSES) Metal Finishing	35,207	Continuous	10/16/2018	ND	ND	Not a Source	
N	49	EnviroSolids, L.L.C.	6011 Wyoming Ave.	Dearborn	Wayne	48126	4953	562219	CIU	437.D.46e (PSES) Centralized Waste Treatment AND 437.D.46b.1 (PSES) Centralized Waste Treatment AND 437.C.35 (PSES) Centralized Waste Treatment	66,123	Batch	10/15/2018	70	ND	Not a Source	
O	50	EQ Detroit dba US Ecology	1923 Frederick Street	Detroit	Wayne	48211	4953	562211/562219	CIU	437.C.35 (PSES) Centralized Waste Treatment	155,702	Batch	9/11/2018	60	650	Significant Source	Yes
N	51	EQ Resource Recovery Inc.	36345 Van Born Road	Romulus	Wayne	48174-4057	4953/5093	562211/562219	CIU	437.C.35 (PSES) Centralized Waste Treatment	129,358	Continuous	10/15/2018	130	240	Significant Source	Yes
D	52	Extrude Hone Corporation - Sterling Heights	6145 Wall St	Sterling Heights	Macomb	48312	3479	332812	CIU	433.A.17(a) (PSNS) Metal Finishing	5,868.00	Continuous	10/22/2018	ND	ND	Not a Source	
N	53	FCA US LLC - Jefferson North Assembly Plant	2101 Conner Avenue	Detroit	Wayne	48215	3711/3479	336112/332812	CIU	433.A.17(a) (PSNS) Metal Finishing	814,000	Continuous	10/15/18	ND	ND	Not a Source	
D	54	FCA US LLC - Sterling Heights Assembly Plant	38111 Van Dyke Avenue	Sterling Heights	Macomb	48312	3711/3479	336112/332812	CIU	433.A.17(a) (PSNS) Metal Finishing	520,000.00	Continuous	10/19/2018	ND	ND	Not a Source	
D	55	FCA US LLC - Warren Truck Assembly Plant	21500 Mound Road	Warren	Macomb	48091	3711/3479	336112/332812	CIU	433.A.15(a) (PSES) Metal Finishing	751,000.00	Batch	10/23/2018	ND	ND	Not a Source	
N	56	Fitzgerald Finishing L.L.C.	17450 Filer Ave.	Detroit	Wayne	48212-1908	3471/3479	332812/332813	CIU	433.A.17a (PSNS) Metal Finishing AND 413.E.54c (PSES) Electroplating	36,900	Continuous	10/15/2018	ND	ND	Not a Source	
	57	Ford Motor Company - Allen Park Clay Mine Landfill	17005 Oakwood Blvd.	Allen Park	Wayne	MI	48101	4953	562212	SIU	35,020	Continuous	2/20/2019	50	160	Significant Source	Yes
N	58	Ford Motor Company - Dearborn Diversified Mfg. Plant	3001 Miller Road	Dearborn	Wayne	48121	3714		CIU	433.A.17(a) (PSNS) Metal Finishing	52,000	Continuous	10/16/2018	ND	ND	Not a Source	
N	59	Ford Motor Company - Dearborn Truck Plant	3001 Miller Road	Dearborn	Wayne	48121	3711/3479/3465/3714	336112/332812/336399	CIU	433.A.15(a) (PSES) Metal Finishing	534,878	Batch	10/15/2018	30	50	Significant Source	Yes
		Ford Motor Company - Dearborn Truck Plant	3001 Miller Road	Dearborn	Wayne	48121	3711/3479/3465/3714	336112/332812/336399	CIU	433.A.15(a) (PSES) Metal Finishing	534,878	Batch	2/4/2019	2.8	2.5	Additional Data	
										534,878	Batch	2/4/2019	1.7	1.7	Additional Data		
D	60	Ford Motor Company - Michigan Assembly Complex	38303 Michigan Avenue	Wayne	Wayne	48184	3711		CIU	433.A.15a (PSES) Metal Finishing	800,000.00	Continuous	10/19/2018	ND	ND	Not a Source	
N	61	Ford Motor Company - New Model Program Development Center	17000 Oakwood Blvd.	Allen Park	Wayne	48101	3711	336611	CIU	433.A.17a (PSNS) Metal Finishing	120,000	Continuous	10/15/2018	ND	10	Not a Source	
D	62	Ford Motor Company - Sterling Plant	39000 Mound Road	Sterling Heights	Macomb	48310	3465/3479/3711/3714	332812/322813/336399	CIU	433.A.15a (PSES) Metal Finishing	400,000.00	Continuous	10/25/2018	ND	ND	Not a Source	
D	63	Fox Manufacturing Inc.	12333 Schaefer Rd.	Detroit	Wayne	48227	2841	325611	SIU	NOA	325.00	Batch	11/14/2018	ND	ND	Not a Source	
N	64	G2O Energy, LLC	8750 Grinnell	Detroit	Wayne	48213	4953	562219/562119	SIU				10/15/2018	ND	10	Significant Source	Yes
O	65	General Linen and Uniform Service	1016 E. Palmer Street	Detroit	Wayne	48211	7213		SIU	SIU	60,567	Continuous	9/10/2018	ND	ND	Not a Source Probable	
O	66	General Motors Company	2500 East General Motors Boulevard	Detroit	Wayne	48211	3711	336111	CIU	433.A.17a (PSNS) Metal Finishing	488,199	Batch	8/13/2018	ND	ND	Significant Source	Yes
D	67	General Motors LLC., Orion Assembly	4555 Giddings Road	Lake Orion	Oakland	48359	3711		CIU	433.A.15a (PSES) Metal Finishing	293,736.00	Continuous	11/1/2018	ND	30	Significant Source	Yes
		General Motors LLC., Orion Assembly - SL#1								293,736.00	Continuous	1/9/2019	ND	ND	Additional Data		
		General Motors LLC., Orion Assembly - SL#1								293,736.00	Continuous	1/10/2019	ND	ND	Additional Data		
		General Motors LLC., Orion Assembly - SL#1								293,736.00	Continuous	1/11/2019	ND	ND	Additional Data		

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		General Motors LLC., Orion Assembly - SL#2									293,736.00	Continuous	1/12/2019	ND	11	Additional Data	
		General Motors LLC., Orion Assembly - SL#2									293,736.00	Continuous	1/13/2019	ND	11	Additional Data	
		General Motors LLC., Orion Assembly - SL#2									293,736.00	Continuous	1/14/2019	ND	11	Additional Data	
		General Motors LLC., Orion Assembly - SL#1									293,736.00	Continuous	1/30/2019	ND	11	Additional Data	
		General Motors LLC., Orion Assembly - SL#1									293,736.00	Continuous	1/31/2019	ND	11	Additional Data	
		General Motors LLC., Orion Assembly - SL#1									293,736.00	Continuous	2/1/2019	ND	11	Additional Data	
		General Motors LLC., Orion Assembly - SL#2									293,736.00	Continuous	2/2/2019	ND	11	Additional Data	
		General Motors LLC., Orion Assembly - SL#2									293,736.00	Continuous	2/3/2019	ND	11	Additional Data	
		General Motors LLC., Orion Assembly - SL#2									293,736.00	Continuous	2/4/2019	ND	11	Additional Data	
N	68	GST AutoLeather, Inc.	31601 Industrial Road	Livonia	Wayne	48150	3111	316110	SIU	NOU	1,700	Continuous	10/15/2018	20	ND	Not a Source	
D	69	H & S Inspection Service, Inc.	422 Oliver Dr.	Troy	Wayne	48084	3479	541380	CIU	433.A.17a (PSNS) Metal Finishing	3,379.00	Continuous	10/29/2018	ND	ND	Not a Source	
O	70	Hajjar Plating Services, Inc.	38300 Van Born Rd.	Wayne	Wayne	48184	3471	332813	CIU	413.14 A(b&f) (PSES) Electroplating <10,000 gpd	1,400	Continuous	8/8/2018	ND	370	Significant Source	Yes
D	71	Henkel Corporation	32100 Stephenson Highway	Madison Heights	Oakland	48071-1096	2899/3471/3479	325998/332812/332813	CIU	433.A.15a (PSES) Metal Finishing	11,000.00	Continuous	11/1/2018	ND	ND	Not a Source	
O	72	Henry Ford Hospital	2799 West Grand Boulevard	Detroit	Wayne	48202	8062	622110	SIU	SIU	1,240,479	Continuous	8/24/2018	5.62	3.49	Not a Source	
D	73	HHI FormTech, LLC	690 W Maple Road	Troy	Oakland	48084	3462/3479		CIU	433.A.15a (PSES) Metal Finishing	41,613.00	Continuous	10/29/2018	ND	ND	Not a Source	
D	74	Honhart Mid-Nite Black Co.	501 Stephenson Highway	Troy	Oakland	48083-1118	3479	332812	CIU	433.A.15a (PSES) Metal Finishing	5,000.00	Continuous	10/29/2018	ND	ND	Not a Source	
D	75	IDP Inc.	21300 West Eight Mile Road	Southfield	Oakland	48075-5638	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	722.00	Continuous	10/30/2018	ND	ND	Not a Source	
D	76	IHI Ionbond, L.L.C.	1823 E. Whitcomb Avenue	Madison Heights	Oakland	48071	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	9,174.00	Continuous	10/29/2018	ND	ND	Not a Source	
D	77	Industrial Metal Coating	6070 18 Mile Road	Sterling Heights	macomb	48314	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	12,766.00	Continuous	10/22/2018	50	ND	Not a Source	
D	78	Industrial Metal Finishing Company	6070 18 Mile Road	Sterling Heights	Macomb	48314	3471/3632	332813	SIU	NOU	4,700.00	Continuous	10/22/2018	ND	ND	Not a Source	
D	79	International Extrusions, Inc.	32800 Industrial Road	Garden City	Wayne	48135	3354/3471/3479	331316/332812	CIU	467.C.36c.Cleaning or Etching Ri (PSNS) Aluminum Forming	11,072.00	Continuous	10/19/2018	ND	ND	Not a Source	
O	80	International Hardcoat Inc.	12400 Burt Road	Detroit	Wayne	48228	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing	60,000	Continuous	9/11/2018	ND	20	Significant Source	Yes
D	81	K & F Electronics, Inc.	33041 Groesbeck Hwy	Fraser	Macomb	48026	3672	334412	CIU	433.A.17a (PSNS) Metal Finishing	8,700.00	Continuous	10/23/2018	ND	ND	Not a Source	
N	82	K. C. Jones Plating Co.	321 W. 10 Mile Rd.	Hazel Park	Oakland	48030-1136	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing	67,400	Continuous	9/26/2018	ND	ND	Not a Source	
O	83	Lear Corporation dba Eagle Ottawa	2930 W Auburn Road	Rochester Hills	Oakland	48309	3111		CIU	425.D.46 (PSNS) Leather Tanning and Finishing	32,250	Continuous	9/12/2018	ND	10	Not a Source	
O		Lear Corporation dba Eagle Ottawa											9/21/2018	43	14	Significant Source	Yes
O	84	MacDermid, Inc.	1221 Farrow Avenue	Ferndale	Oakland	48220	2899	325998	CIU	433.A.15a (PSES) Metal Finishing	17,119	Batch	8/27/2018	28	840	Significant Source	Yes

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														420	11		
O	85	Marathon Petroleum Company, LP	1300 S. Fort Street	Detroit	Wayne	48217	2911/5171	324110/424710	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,849	Continuous	6/27/2018	30	360	Significant Source	Yes
O		Marathon Petroleum Company, LP	1301 S. Fort Street	Detroit	Wayne	48218	2911/5172	324110/424711	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,850	Continuous	6/27/2018	ND	18	Significant Source	
O		Marathon Petroleum Company, LP	1302 S. Fort Street	Detroit	Wayne	48219	2911/5173	324110/424712	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,851	Continuous	8/2/2018	20	170	Significant Source	
O		Marathon Petroleum Company, LP	1303 S. Fort Street	Detroit	Wayne	48220	2911/5174	324110/424713	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,852	Continuous	8/2/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1304 S. Fort Street	Detroit	Wayne	48221	2911/5175	324110/424714	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,853	Continuous	7/11/2018	17	160	Significant Source	
O		Marathon Petroleum Company, LP	1305 S. Fort Street	Detroit	Wayne	48222	2911/5176	324110/424715	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,854	Continuous	7/11/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1306 S. Fort Street	Detroit	Wayne	48223	2911/5177	324110/424716	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,855	Continuous	6/13/2018	3.5	70	Significant Source	
O		Marathon Petroleum Company, LP	1307 S. Fort Street	Detroit	Wayne	48224	2911/5178	324110/424717	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,856	Continuous	6/13/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1308 S. Fort Street	Detroit	Wayne	48225	2911/5179	324110/424718	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,857	Continuous	5/16/2018			Not a Source	
O		Marathon Petroleum Company, LP	1309 S. Fort Street	Detroit	Wayne	48226	2911/5180	324110/424719	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,858	Continuous	5/16/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1310 S. Fort Street	Detroit	Wayne	48227	2911/5181	324110/424720	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,859	Continuous	5/30/2018	76	800	Significant Source	
O		Marathon Petroleum Company, LP	1311 S. Fort Street	Detroit	Wayne	48228	2911/5182	324110/424721	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,860	Continuous	5/30/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1312 S. Fort Street	Detroit	Wayne	48229	2911/5183	324110/424722	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,861	Continuous	5/23/2018	54	450	Significant Source	
O		Marathon Petroleum Company, LP	1313 S. Fort Street	Detroit	Wayne	48230	2911/5184	324110/424723	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,862	Continuous	5/23/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1314 S. Fort Street	Detroit	Wayne	48231	2911/5185	324110/424724	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,863	Continuous	5/9/2018	33	250	Significant Source	
O		Marathon Petroleum Company, LP	1315 S. Fort Street	Detroit	Wayne	48232	2911/5186	324110/424725	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,864	Continuous	5/9/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1316 S. Fort Street	Detroit	Wayne	48233	2911/5187	324110/424726	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,865	Continuous	5/2/2018	46	210	Significant Source	
O		Marathon Petroleum Company, LP	1317 S. Fort Street	Detroit	Wayne	48234	2911/5188	324110/424727	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,866	Continuous	5/2/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1318 S. Fort Street	Detroit	Wayne	48235	2911/5189	324110/424728	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,867	Continuous	4/18/2018	620	210	Significant Source	

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Report Month	User #	Facility Name	Facility Address	City	County	Zip Code	SIU/CIU SIC Code(s) or NAICS Code(s)	SIU/CIU SIC/NAICS Primary Code Indicator	Industrial User Type (SIU/CIU)	For CIUs, list all applicable Categories by 40 CFR Part Number(s)	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Significant Sources
														420	11		
O		Marathon Petroleum Company, LP	1319 S. Fort Street	Detroit	Wayne	48236	2911/5190	324110/424729	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,868	Continuous	4/18/2018	530	<98	Significant Source	
O		Marathon Petroleum Company, LP	1320 S. Fort Street	Detroit	Wayne	48237	2911/5191	324110/424730	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,869	Continuous	4/18/2018	290	<23	Significant Source	
O		Marathon Petroleum Company, LP	1321 S. Fort Street	Detroit	Wayne	48238	2911/5192	324110/424731	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,870	Continuous	4/26/2018	63	230	Significant Source	
O		Marathon Petroleum Company, LP	1322 S. Fort Street	Detroit	Wayne	48239	2911/5193	324110/424732	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,871	Continuous	4/26/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1323 S. Fort Street	Detroit	Wayne	48240	2911/5194	324110/424733	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,872	Continuous	4/19/2018	44	480	Significant Source	
O		Marathon Petroleum Company, LP	1324 S. Fort Street	Detroit	Wayne	48241	2911/5195	324110/424734	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,873	Continuous	4/19/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1325 S. Fort Street	Detroit	Wayne	48242	2911/5196	324110/424735	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,874	Continuous	4/9/2018	19	390	Significant Source	
O		Marathon Petroleum Company, LP	1326 S. Fort Street	Detroit	Wayne	48243	2911/5197	324110/424736	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,875	Continuous	4/9/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1327 S. Fort Street	Detroit	Wayne	48244	2911/5198	324110/424737	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,876	Continuous	4/9/2018	20	230	Significant Source	
O		Marathon Petroleum Company, LP	1328 S. Fort Street	Detroit	Wayne	48245	2911/5199	324110/424738	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,877	Continuous	4/6/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1329 S. Fort Street	Detroit	Wayne	48246	2911/5200	324110/424739	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,878	Continuous	4/7/2018	20	230	Significant Source	
O		Marathon Petroleum Company, LP	1300 S. Fort Street	Detroit	Wayne	48217	2911/5171	324110/424710	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,849	Continuous	10/8/2018	23	170	Significant Source	
O		Marathon Petroleum Company, LP	1301 S. Fort Street	Detroit	Wayne	48218	2911/5172	324110/424711	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,850	Continuous	10/8/2018	ND	ND	Not a Source	
O		Marathon Petroleum Company, LP	1300 S. Fort Street	Detroit	Wayne	48217	2911/5171	324110/424710	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,849	Continuous	11/7/2018	23	170	Significant Source	
O		Marathon Petroleum Company, LP											11/7/2018	ND	ND	Not a Source	
D		Marathon Petroleum Company, LP	1300 S. Fort Street	Detroit	Wayne	48217	2911/5171	324110/424710	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,849	Continuous	11/7/2018	23	170	MBR	
D		Marathon Petroleum Company, LP											11/7/2018	ND	ND	FRB	
J		Marathon Petroleum Company, LP	1300 S. Fort Street	Detroit	Wayne	48217	2911/5171	324110/424710	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,849	Continuous	1/2/2019	12	140	MBR	
J		Marathon Petroleum Company, LP											1/2/2019	10	140	MBR-Duplicate	
J		Marathon Petroleum Company, LP											1/2/2019	ND	ND	FRB	
J		Marathon Petroleum Company, LP											12/5/2018	34	250	MBR	
M		Marathon Petroleum Company, LP											2/5/2019	9.2	100	MBR A	

Attachment 1: Potential Sources Evaluated and Identified for PFOS/PFOA by GLWA - 2018/19

Report Month	User #	Facility Name	Facility Address	City	County	Zip Code	SIU/CIU SIC Code(s) or NAICS Code(s)	SIU/CIU SIC/NAICS Primary Code Indicator	Industrial User Type (SIU/CIU)	For CIUs, list all applicable Categories by 40 CFR Part Number(s)	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Significant Sources
		Marathon Petroleum Company, LP								419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,850		2/5/2019	7.9	11	MBR B	
M		Marathon Petroleum Company, LP								419.B.25 (PSES) and 419.B.27a Petroleum Refining			2/5/2019	ND	ND	FRB	
O	86	McGean-Rohco, Inc.	38521 Schoolcraft Road	Livonia	Wayne	48150	2842	325612	SIU	SIU	4,600	Continuous	9/11/2018	120	310	Significant Source	Yes
D	87	McNichols Polishing & Anodizing, Inc.	12139 Woodbine	Redford Township	Wayne	48239-2417	3471	332813	CIU	413.44 D(b) (PSES) Electroplating <10,000 gpd	765.00	Continuous	10/31/2018	<5	<10	Not a Source	
D		McNichols Polishing & Anodizing, Inc.	12139 Woodbine	Redford Township	Wayne	48239-2417	3471	332813	CIU	413.44 D(b) (PSES) Electroplating <10,000 gpd	765.00	Continuous	11/29/2018	ND	ND	Not a Source	
N	88	Merlin Entertainments - Sea Life Michigan	4316 Baldwin Road	Auburn Hills	Oakland	48326	8422		SIU	SIU	1,600	Batch	10/3/2018	<1.7	6.4	Not a Source	
D	89	Miba HydraMechanica Corp.	6515 Cobb Dr.	Sterling Heights	Macomb	48312	3444	332322	CIU	433.A.17a (PSNS) Metal Finishing	1,100.00	Continuous	10/31/2018	ND	ND	Not a Source	
D	90	Microphoto, Inc. - Roseville	30499 Edison Drive	Roseville	Macomb	48066	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	2,788.00	Continuous	10/23/2018	ND	ND	Not a Source	
D	91	MNP Corporation	44225 Utica Road	Sterling Heights	Macomb	48317	3315/3398/3452	332722	CIU	420.I.95a.1 (PSES) Iron and Steel Manufacturing AND 433.A.15a (PSES) Metal Finishing	80,119.00	Continuous	10/25/2018	ND	ND	Not a Source	
D	92	ND Industries, Inc	1893 Barrett Drive	Troy	Oakland	48084	2891	325520	CIU	Plastics Molding and Forming Point Source Category, 40 CFR Part 463.26	580.00	Continuous	10/30/2018	ND	ND	Not a Source	
D	93	NJT Enterprises, LLC	42400 Merrill Rd.	Sterling Heights	Macomb	48314	3089		CIU	Plastics Molding and Forming Point Source Category, 40 CFR Part 463.26	11,300.00	Continuous	10/25/2018	ND	ND	Not a Source	
O	94	Oakland Heights Development, Inc.	2350 Brown Rd	Auburn Hills	Oakland		4953	562212	SIU		30,097	Continuous	9/12/2018	840	700	Significant Source	Yes
O	95	Perfection Industries, Inc.	18571 Weaver Road	Detroit	Wayne	48228	3471	332813	CIU	413.A.14(b)(f), 413.E.54(b)(f) (PSES) Electroplating Discharging <10,000 gpd	2,050	Batch	9/12/2018	ND	ND	Not a Source	
	96	Pine Tree Acres, Inc.	36600 29 Mile Road	Lenox Township	Macomb	48048	4953	562212	SIU	Landfill	161,215.0	Continuous	11/20/2018	1800	430	Significant Source	Yes
N	97	Plating Specialties, Inc.	1675 E. Ten Mile Road	Madison Heights	Oakland	48071-4219	3471	332813	CIU	413.A.14b (PSES) Electroplating <10,000 gpd	11,907	Continuous	9/26/2018	ND	10	Not a Source	
D	98	Premier Plating, LLC	32370 Howard	Madison Heights	Oakland	48071	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing	1,000.00	Batch	10/30/2018	ND	ND	Not a Source	
D	99	PSB Credit Services, Inc.	561 Collier Rd.	Auburn Hills	Oakland	48326	4953		SIU	SIU	32,000.00	Continuous	11/28/2018	200	160	Significant Source	Yes
O	100	Quaker Chemical Corporation	14301 Birwood Avenue	Detroit	Wayne	48238	2992	324191	SIU	SIU	85,850	Continuous	9/11/2018	ND	ND	Not a Source	
O	101	Racer Trust (Groundwater)	13000 Eckles Road	Livonia	Wayne					Groundwater	726,850	Continuous	5/24/2018	5	86	Significant Source	Yes
O		Racer Trust (Groundwater)								Groundwater			8/10/2018	5	96	Significant Source	
D	102	Remacon Compressors, Inc.	7939 McGraw Ave.	Detroit	Wayne	48210-2156	3563	333912	CIU	413.64F(b&f) (PSES) Electroplating <10,000 gpd	60.00	Batch	11/2/2018	ND	ND	Not a Source	
D	103	Richcoat, L.L.C.	40573 Brentwood	Sterling Heights	Macomb	48310	3471	332813	CIU	433.A.17(a) (PSNS) Metal Finishing	12,900.00	Continuous	10/22/2018	ND	30	Significant Source	Yes
		Richcoat, L.L.C.	40573 Brentwood	Sterling Heights	Macomb	48310	3471	332813	CIU	433.A.17(a) (PSNS) Metal Finishing	12,900.00	Continuous	1/18/2019	ND	ND	Additional Data	
										433.A.17(a) (PSNS) Metal Finishing	12,900.00	Continuous	2/18/2019	ND	ND	Additional Data	
D	104	Richter Precision, Inc. - Plant #3	17741 Malyn	Fraser	Macomb	48026	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	700.00	Continuous	11/16/2018	ND	ND	Not a Source	
D	105	RJL Equity Holdings, LLC	4430 Lapeer Road	Auburn Hills	Oakland	48326	4953		SIU	SIU	6,000.00	Continuous	11/2/2018	ND	20	Significant Source	Yes
D	106	Roberts & Son Black Oxide Specialist, Inc.	30665 Edison Drive	Roseville	Macomb	48066	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing	3,100.00	Continuous	10/23/2018	ND	ND	Not a Source	

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Report Month	User #	Facility Name	Facility Address	City	County	Zip Code	SIU/CIU SIC Code(s) or NAICS Code(s)	SIU/CIU SIC/NAICS Primary Code Indicator	Industrial User Type (SIU/CIU)	For CIUs, list all applicable Categories by 40 CFR Part Number(s)	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Significant Sources
														420	11		
	107	RT Holdings of Ohio, LLC	530 S. Rouge Street	Detroit	Wayne	48217	4953	562219	CIU	437.B.25 (PSES) Centralized Waste Treatment							
O	108	SAT Plating, LLC.	1837 Thunderbird Street	Troy	Oakland	48084	3471		CIU	433.A.17a (PSNS) Metal Finishing	1,400	Batch	9/10/2018	ND	ND	Not a Source	
O	109	Selfridge Air National Guard Base	127 WG/CE 28890 Selfridge Avenue	Selfridge ANGB	Macomb	48045	9999		SIU	SIU	153,264	Continuous	5/15/2018	21	240	Significant Source	Yes
O	110	Selfridge Plating, Inc.	42081 Irwin Road	Harrison Twsp.	Macomb	48045	3471	332813	CIU	433.A.17(a) (PSNS) Metal Finishing 413.A.14(c)(g), 413.D.44(c)(g), 413.E.54(c)(g); (PSES); Electroplating Discharging >10,000 gpd	17,617	Continuous	9/17/2018	ND	30	Significant Source	Yes
D	111	Selfridge Plating, Inc. - Technologies Division	56851 Gratiot Avenue	Harrison Township - Chesterfield	Macomb	48045-3410	3471	332813	CIU	433.A.17(a) (PSNS) Metal Finishing 433.A.17(a) (PSNS) Metal Finishing	4,910.00	Continuous	10/31/2018	ND	ND	Permit Cancelled Feb_2019 OOB	
D	112	South Macomb Disposal Authority	21290 - 24 Mile Road	Macomb	Macomb	48042	4953	562212	SIU	SIU	69,928.00	Continuous	10/25/2018	30	20	Significant Source	Yes
D	113	Southeastern Oakland County Resource Recovery Authority	1741 School Rd.	Rochester Hills	Oakland	48309	4953		SIU	SIU	37,400.00	Continuous	11/28/2018	30	40	Significant Source	Yes
D	114	SprayTek Inc. - Madison Heights	32451 NOrth Avis Drive	Madison Heights	Oakland	48071	3479		CIU	433.A.17a (PSNS) Metal Finishing	800.00	Continuous	11/3/2018	ND	ND	Not a Source	
D	115	SprayTek, Inc.	2535 Wolcott St.	Ferndale	Oakland	48220	3471		CIU	433.A.17a (PSNS) Metal Finishing	236.00	Batch	10/30/2018	10	ND	Not a Source	
N	116	Standard Coating (Howard Finishing, LLC)	32565 Dequindre	Madison Heights	Oakland	48071-1520	3479	332813	CIU	433.A.17a (PSNS) Metal Finishing	37,000	Continuous	10/23/2018	<1.7	<1.7	Not a Source	
N		Standard Coating (Howard Finishing, LLC)	32565 Dequindre	Madison Heights	Oakland	48071-1520	3479	332813	CIU	433.A.17a (PSNS) Metal Finishing	37,000.00	Continuous	11/3/2018	ND	ND	Not a Source	
	117	Sterling Metal Finishing	2500 Meldrum	Detroit	Wayne	48207	3471	332813	CIU	413.A.14(b) (PSES) Electroplating Discharging						Scheduled for April 2019	
N	118	Superior Metal Finishing	3510 E. McNichols	Detroit	Wayne	48212-1618	3479	332813	CIU	413.E.54b (PSES) Electroplating <10,000 gpd	31,700	Continuous	10/15/2018	ND	ND	Not a Source	
D	119	Supreme Gear Company	17430 Malyn	Fraser	Macomb	48026	3566	333612	CIU	433.A.17a (PSNS) Metal Finishing	1,450.00	Batch	10/23/2018	ND	ND	Not a Source	
D	120	Supreme Gear Company - Plating Department	34410 Commerce	Fraser	Macomb	48026	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing	1,500.00	Batch	11/1/2018	ND	ND	Not a Source	
N	121	The Crown Group Company - Livonia Plant	31774 Enterprise Drive	Livonia	Wayne	48150	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	80,000	Continuous	10/16/2018	ND	ND	Not a Source	
N	122	The Crown Group Company - Lynch Road Plant	6334 Lynch Rd.	Detroit	Wayne	48234	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	9,351	Continuous	10/16/2018	ND	ND	Not a Source	
D	123	The Crown Group Company - Shelby Plant	12020 Shelby Tech Drive	Shelby Township	Macomb	48315	3479	332812	CIU	433.A.17(a) (PSNS) Metal Finishing	19,300.00	Continuous	10/31/2018	ND	ND	Not a Source	
D	124	U.S. Wheel, Inc. (d/b/a Detroit Wheel and Tire)	1027 E 14 Mile	Troy	Oakland	48083	3471/3479	332813/332812	CIU	433.A.17a (PSNS) Metal Finishing	2,000.00	Continuous	10/30/2018	ND	ND	Not a Source	
D	125	Unicote Corporation	33165 Groesbeck Highway	Fraser	Macomb	48026	3479	332812	CIU	413.E.54(b) (PSES) Electroplating Discharging <10,000 gpd	5,980.00	Continuous	10/23/2018	ND	ND	Not a Source	

Attachment 1: Potential Sources Evaluated and Identified for PFOS/PFOA by GLWA - 2018/19

Report Month	User #	Facility Name	Facility Address	City	County	Zip Code	SIU/CIU SIC Code(s) or NAICS Code(s)	SIU/CIU SIC/NAICS Primary Code Indicator	Industrial User Type (SIU/CIU)	For CIUs, list all applicable Categories by 40 CFR Part Number(s)	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Significant Sources
														420	11		
D	126	Unistrut International Corporation	4205 Elizabeth St.	Wayne	Wayne	48184	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing and 420.L.126a.1 (PSNS) Iron and Steel Manufacturing	42,964.00	Continuous	10/19/2018	ND	ND	Not a Source	
N	127	US Ecology Michigan, Inc.	6520 Georgia Street	Detroit	Wayne	48211-1661	4953	562211	CIU	437.D.46b.1 (PSES) Centralized Waste Treatment	75,000	Batch	10/15/2018	ND	30	Significant Source	Yes
O	128	Usher Oil Company	9000 Roselawn Street	Detroit	Wayne	48204	5093	562219	CIU	437.D.46e (PSES) Centralized Waste Treatment	340,000	Batch	9/11/2018	40	120	Significant Source	Yes
M	129	Waste Management of MI, Inc.-Eagle Valley Recycle & Disposal	600 W. Silverbell Road	Orion	Oakland	48359	4953		SIU	Landfill	29,537	Continuous	11/20/2018		170	Significant Source	Yes
M	130	Waste Management of MI, Inc.-Woodland Meadows North Landfill	4620 Hannan Road	Wayne	Wayne	48184	4953	562212	SIU	Landfill	14,917	Continuous	11/20/2018	150	57	Significant Source	Yes
M	131	Waste Management of MI, Inc.-Woodland Meadows RDF-Van Buren	5900 Hannan Road	Wayne	Wayne	48184	4953	562212	SIU	Landfill	36,025	Continuous	11/20/2018	2000	510	Significant Source	Yes
O	132	Waterford Hills Landfill/MDEQ, RRD	7900 Gale Road	Waterford	Oakland	49201	4953		SIU	SIU	2,000	Continuous	8/2/2018	680	130	Significant Source	Yes
D	133	Welders & Presses Inc. (WPI)	27295 LuckiNO Dr	Chesterfield Township	Macomb	48047	3479		CIU	433.A.17a (PSNS) Metal Finishing	5,000.00	Continuous	10/24/2018	ND	ND	Not a Source	
N	134	Westside Flame Hardening, Inc.	38200 Executive Dr.	Westland	Wayne	48185	3398/3479	332811/332812	CIU	433.A.17a (PSNS) Metal Finishing	1,000	Continuous	10/15/2018	ND	ND	Not a Source	
N	135	Williams Diversified, Inc.	13170 Merriman Road	Livonia	Wayne	48150-1816	3471	332813	CIU	413.14A©, 413.54E© (PSES) Electroplating; 433.17A(a) (PSNS) Metal Finishing	55,784	Continuous	10/15/2018	ND	ND	Not a Source	
O	136	Wolverine Plating Corporation	29456 Groesbeck Highway	Roseville	Macomb	48066	3471	332813	CIU	413.A.14c (PSES) Electroplating	114,150	Continuous	9/10/2018	ND	60	Significant Source	Yes
D	137	X-Cel Industries, Inc.	21121 Telegraph Road	Southfield	Oakland	48033	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	39,800.00	Continuous	10/30/2018	ND	ND	Not a Source	
N	138	Xcel Steel Pickling	4343 Wyoming	Dearborn	Wayne	48126	5051	423510	CIU	420.I.95b.2 (PSES) Iron and Steel Manufacturing	39,800	Continuous	10/15/2018	ND	ND	Not a Source	
D	139	XRI Testing	1961 Thunderbird	Troy	Oakland	48084	8734/3479		CIU	433.A.17a (PSNS) Metal Finishing	9,452.00	Continuous	10/30/2018	ND	ND	Not a Source	
N	140	Z Technologies Corporation	26500 Capitol Avenue	Redford Township	Wayne	48239-2506	2891	325520	CIU	446.16a (PSNS) Paint Formulating	510	Continuous	10/15/2018	20	60	Significant Source	Yes
J, F	141	MDOT - Parcel 5348	330/340 Livernois	Detroit	Wayne	48209	N/A			Groundwater	320,000.00	Continuous	1/18/2019	29	14	Significant Source	Yes
	142	Domestic Background Sample	7 Mile @ Hamilton	Detroit	Wayne	N/A	N/A	N/A	N/A	N/A	N/A	N/A	11/1/2018	ND	ND	Not a Source	

Permit Canceled - Change in Facility Operation or Status

143	Ferro Industries Inc.	35200 Union Lake Road	Harrison Township	Macomb	48045	3089	326199	Not CIU	Plastics Molding and Forming Point Source Category, 40 CFR	MDEQ List		No Sample			Permit Canceled
144	General Dynamics Land Systems	38500 Mound Road	Sterling Heights	Macomb	48310-3200	8711	541330	Not SIU	433.A.17(a) (PSNS) Metal Finishing	MDEQ List		No Sample			Permit Canceled
145	IBC Precision Inc.	2715 Paldan Drive	Auburn Hills	Oakland	48326	3471	332710	Not SIU	433.A.17a (PSNS) Metal Finishing	MDEQ List		No Sample			Permit Canceled
146	Metal Improvement Co., LLC-Part of Curtiss-Wright Surface T	14830 23 Mile Road	Shelby Township	Macomb	48315	3479	332812	Not SIU	433.A.17(a) (PSNS) Metal Finishing	MDEQ List		No Sample			Permit Canceled
147	Troy Laboratories, Inc.	440 South Street	Rochester	Oakland	48307	3471	332813	OOB	413.44D(b&f) (PSES) Electroplating <10,000 gpd	MDEQ List		No Sample			Permit Canceled
148	Curtis Industrial Services, Inc.	9797 Erwin Ave	Detroit	Wayne	48213	1799	238320	OOB				No Sample			Cancelled

ATTACHMENT 2



## Industrial Pretreatment Program

### Wastewater Discharge Disclosure (Short Form)

User ID Nbr: \_\_\_\_\_ (office use)

*It shall be unlawful for users to discharge into the POTW any wastewater which will cause interference or pass through, or otherwise not comply with the discharge prohibitions of Section 56-3-59.1 of this Code. [Ch 56, Division 3].*

The Great Lakes Water Authority (Authority) is required to maintain a record of Industrial and Commercial users who utilizes the sewerage collection and treatment system operated by the Authority. Please complete and return this form to us within fourteen days. We will contact you if additional information is needed. Should you have questions, please contact us at (313) 297-5874 or [Omran.Sherif@glwater.org](mailto:Omran.Sherif@glwater.org).

Facility Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Facility Address: \_\_\_\_\_ [ ] Same as Mailing Address

City and Zip Code: \_\_\_\_\_

Facility Contact Person: \_\_\_\_\_

Title of Contact Person: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Business Type: [ ] Retail/Merchandise [ ] Food Establishment

[ ] Manufacturing [ ] Light Industrial [ ] Commercial [ ] Other

Provide additional narrative description if Manufacturing, Light Industrial, Commercial or Other is checked above for activities performed on premises:

\_\_\_\_\_

\_\_\_\_\_

Water Consumption: [ ] 0 – 10,000 gallons per day [ ] 10,000 – 25,000 gallons per day  
[ ] 25,000 – 50,000 gallons per day [ ] More than 50,000 gallons per day

Are any wastes other than wastewater of human origin (Sanitary) being discharged to the sewer system that is heating/cooling, cleaning, manufacturing or process waste? [ ] Yes [ ] No

If yes, describe: \_\_\_\_\_

Do you: Store more than 55 gallons of: [ ] Solvents [ ] Oil [ ] Paints  
[ ] Acids [ ] Caustics [ ] Other Chemicals (Describe) \_\_\_\_\_  
[ ] Waste Manifests Available

Do you: Use or store PFOS, PFOA, PFAS containing substances [ ] Yes [ ] No

Print name and Title of Person Completing this Form: \_\_\_\_\_

Signature of Person Completing this Form: \_\_\_\_\_

Place Stamp Here

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GREAT LAKES WATER AUTHORITY  
INDUSTRIAL WASTE CONTROL  
SURVEY SECTION  
9300 W. JEFFERSON, SUITE 210  
DETROIT, MI 48209  
ATTN: Omran Sherif



**Wastewater Operating Services  
Industrial Waste Control**  
9300 W. Jefferson, Ste. 210  
Detroit, MI 48209  
Phone: 313-297-5850

### PERMIT APPLICATION FOR SIGNIFICANT INDUSTRIAL USER

This application/questionnaire is designed to enable the Great Lakes Water Authority (GLWA) to make a determination for issuance/reissuance of Industrial Wastewater Discharge Permits. Significant Industrial User who discharge process wastewater in addition to sanitary waste into the sewerage system tributary of the GLWA Water Resource Recovery Facility are required to file this application/reapplication.

- 1) This application must be filed ninety (90) days prior to commencement of discharge and signed by an Authorized Representative of the industrial user.
- 2) This application must include all information specified in section 56-3-61.1(c) of the Detroit City Code and (as applicable) include all information needed to satisfy the federal Baseline Monitoring Report (BMR) requirements of 40 CFR 403.12(b)(1-7).
- 3) A separate application is required for each separate facility.

<b>Section A. General Information</b>		<input type="checkbox"/> BMR	<input type="checkbox"/> Application	<input type="checkbox"/> Reapplication	Permit No. ....
1	Company Name				
2	Facility Address	....			
3	Mailing Address	....			
4	Name of Authorized Representative	....			
	Title	....	Telephone Number	....	
5	Facility Contact Person	....			
	Title	....	Telephone Number	....	
6	Certification Statement				
	I certify under penalty of law that I have personally examined and I am familiar with the information in this application and all attachments and that based on my inquiry of those persons immediately responsible for obtaining the information contained in this application. I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment.				
	Authorized Representative Signature	....			
	Date	....			

Section B. Business/Product/Service		
1	Do you perform any of the processes listed in Appendix A?	<input type="checkbox"/> Yes <input type="checkbox"/> No
	If yes, please list process(es) below ****	
2	Give a narrative description of all processing operations or service activities taking place at the facility address. ****	
3	Describe your principal product or service (Please see Appendix B and answer all items pertaining to Per- and Poly-flouroalkyl Substances (PFAS)). ****	
4	North American Industrial Classification (NAICS) Code	****
5	Standard Industrial Classification (SIC) Code	****
6	Shift and Employee Information	
	Discharge on legal holidays *	****
	Number of workdays per week	****
	Number of shifts per day	****
	Operating hours per day	****
	Number of Employees	****
7	What month and year did your operations begin?	****
8	What month and year did the facility's categorical operation(s) begin at the current location?	****
9	What month and year did the facility begin discharging wastewater to the sewer?	****

\* Legal Holidays: [New Year's Day](#), [Martin Luther King Day](#), [Memorial Day](#), [Independence Day](#), [Labor Day](#), [Thanksgiving Day](#), [Christmas Day](#)

Section C. Other Federal, State and Local Environmental Control Permits		
List any Environmental Control Permits held by or for this facility		
Regulatory Agency Name	Permit Number	Purpose of Permit
****	****	****
****	****	****
****	****	****
****	****	****

**Section D. Water Consumption**

Water usage for last twelve (12) months including volume purchased through water meter and volume of any water, wastewater brought into facility (truck, drum, etc.). If BMR or new Application, include copies of water bills.

From	****	To	****
1 <sup>st</sup> Quarter	****	2 <sup>nd</sup> Quarter	****
3 <sup>rd</sup> Quarter	****	4 <sup>th</sup> Quarter	****
Please check unit below that applies to the water usage information above			
<input type="checkbox"/> Cubic Feet (ft <sup>3</sup> )	<input type="checkbox"/> 100 Cubic Feet (ccf)	<input type="checkbox"/> Gallons	<input type="checkbox"/> Other ****
Water from other sources (groundwater, truck, other) Please describe sources and quantities used			
****			

Section E. Wastewater / Solid – Liquid Wastes		
1	Does your company have a wastewater treatment system or operation designed to reduce pollutant levels prior to discharge to the sewer? If yes, describe your specific pretreatment system below. .....	<input type="checkbox"/> Yes <input type="checkbox"/> No
2	Please check all applicable methods of disposal used for wastewater and any solid/liquid waste materials from your facility.  Method of Disposal (Check all that apply)  <input type="checkbox"/> Discharged to sewer <input type="checkbox"/> Hauled to Landfill <input type="checkbox"/> Treated On-site <input type="checkbox"/> Discharged to Pond or Lagoon <input type="checkbox"/> Hauled to off-site Treatment facility (see #3) <input type="checkbox"/> Other (Describe ☞) .....	
3	For wastes hauled off-site, are waste manifests available?  If yes, provide copies of all waste manifests for last 12 months	<input type="checkbox"/> Yes <input type="checkbox"/> No
4	Does your facility have secondary containment for spill control? (Dikes, trenches, storage controls)	<input type="checkbox"/> Yes <input type="checkbox"/> No
5	Does your facility have any floor drains in the chemical storage area?	<input type="checkbox"/> Yes <input type="checkbox"/> No
6	Does your company submit Tier I or II information under the SARA Title III Program?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7	Please indicate if you are required to submit any of the following regulatory documents. (Check all that apply)  <input type="checkbox"/> Spill Prevention Countermeasure Control Plan (SPCC) <input type="checkbox"/> Pollution Incident Prevention Plan (PIPP) <input type="checkbox"/> Contingency Plan <input type="checkbox"/> Material Safety Data Sheet <input type="checkbox"/> R Form (Toxic chemical release reporting form) <input type="checkbox"/> Treatment, Storage and Disposal Facility Operating License <input type="checkbox"/> I discharge substances characterized as hazardous waste under 40 CFR 261 ( <a href="#">attach copy of 40 CFR 403.12(p) report</a> ) <input type="checkbox"/> Other Regulatory Documents (Describe ☞) .....	

**Section F. Process Descriptions/Wastestream Discharge Flows**

Process Descriptions	Wastewater Flow (Gallons/Day)		Discharge Frequency	
	Average	Maximum	Batch <sup>1</sup> , Intermittent <sup>2</sup> , or Continuous <sup>3</sup>	Regulated <sup>4</sup> , Non-regulated, or Dilution
----	----	----	####	####
----	----	----	####	####
----	----	----	####	####
----	----	----	####	####
----	----	----	####	####
----	----	----	####	####
----	----	----	####	####
----	----	----	####	####
Non-Contact Cooling Water	----	----	####	####
Sanitary	----	----		####
Total Plant Flow	----	----		

<sup>1</sup> Batch – wastewater discharge occurs on a periodic or episodic basis as part of a volume

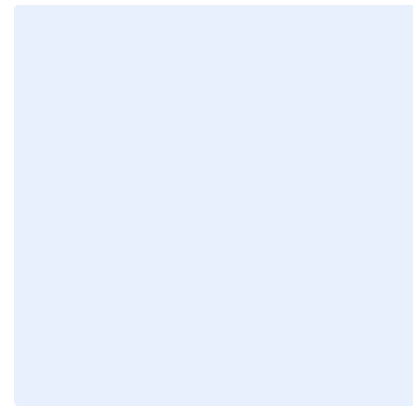
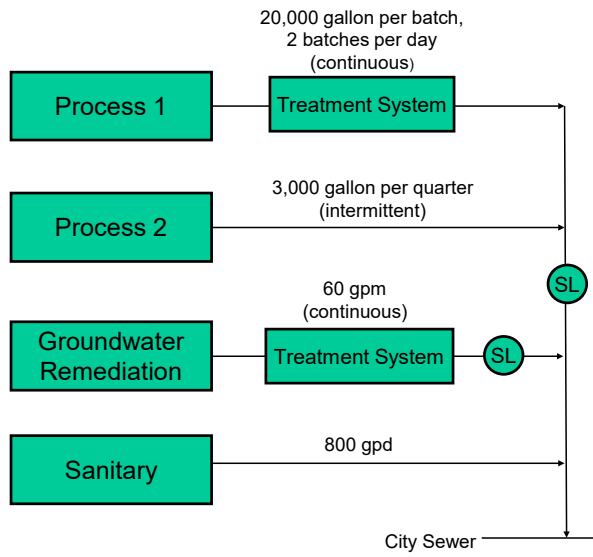
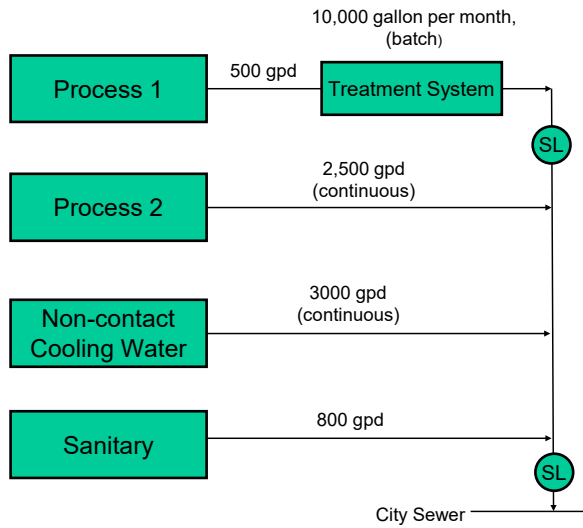
<sup>2</sup> Intermittent - wastewater discharge infrequently e.g., discharge occurs at intervals of 30 days or greater

<sup>3</sup> Continuous - wastewater discharge occurs on a regular basis

<sup>4</sup> As defined by 40 CFR 403.6

## Section G. Wastewater Flow Schematic

Please draw a simplified schematic showing the wastewater flows from each process as they combine to discharge into the city sewer. Refer to the drawing example shown on the left below.



## Section H. Wastewater Sampling Location Description

Describe the location(s) of all sampling site(s) and reference to facility schematic (Section G)

\*\*\*\*

## Section I. Sampling Methodology

SL1	SL2	SL3	SL4	Composite Sampling Method <a href="#">(Elect one method only per Sampling Location)</a>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Flow</u> -Proportional Composite Sampling
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Time</u> -Proportional Composite Sampling <a href="#">(Submit demonstration that requires approval from GLWA)</a>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>Flow/Time</u> -Proportional Composite Sampling <a href="#">(If undecided, submit sampling plan)</a>

All wastewater sampling must be collected in a manner and form intended to represent the wastewater discharged. Following written notice from the Authority, a permittee shall provide an approvable sampling plan within 60 days of permit issuance. The sampling plan shall describe the sampling protocols and methods of sampling that will be used at their facility during the term of this permit.

At a minimum, the sampling plan shall describe the sampling methods to be used for each pollutant parameter identified in the permit. All composite samples shall be collected using flow-proportional sampling methods unless the Authority authorizes time-proportional sampling.

Where flow-proportional sampling methods are used, the sampling plan shall identify the flow measuring equipment available for performing such sampling, the most recent calibration records and the expected daily wastewater discharge volume, hours of discharge, sample volume and the sample aliquot volume.

Time-proportional sampling will only be authorized by the Authority where (i) the permittee can demonstrate with recorded flow data, or through equivalent methods, that their wastewater has a constant discharge rate or (ii) the volume of discharge is no greater than 10,000 gallons and the period of discharge is 4 hours or less.

If needed, a schedule for installation of flow measuring equipment. During the construction period, time-proportional sampling shall be used to collect samples until the flow measuring equipment is installed and calibrated. The time available for this schedule shall not exceed 180 days following permit issuance.

**Section J: Wastewater Analytical Results and Analyses**

1 Do you have any analytical results of your wastewater discharge? (Mandatory Requirement for BMR and/or Permit Application)  Yes  No

If yes, please record your data below and attach copies of the analytical results with this application. Where data is not available, you will be required to provide sampling results following notice of permit eligibility.

Wastestream	Arsenic	Cadmium	Chrome	Copper	Available Cyanide	Iron	Lead	Mercury	Nickel	Silver	Zinc	Total PCB	Total Phenol	pH	BOD	FOG	P	TSS
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....

2 Based on the analytical data provided, are pretreatment standards being met on a consistent basis?  Yes  No

If No, what additional operational and maintenance plans are under consideration to attain compliance? Describe below.

....

3 If you respond "Yes" to any items in Appendix B, the company is required to sample and analyze the following PFAS pollutants (Analytical Requirement: US EPA Method 537 (modified) or ASTM D7979).

Perfluorobutanoic acid	PFBA	....	Perfluorododecanoic acid	PFDODA	....	Perfluorononane Sulfonic acid	PFNS	....
Perfluoropentanoic acid	PFPeA	....	Perfluorotridecanoic acid	PFTTrDA	....	Perfluorodecane Sulfonic acid	PFDS	....
Perfluorohexanoic acid	PFHxA	....	Perfluorotetradecanoic acid	PFTeDA	....	Perfluorooctane sulfonamide	FOSA	....
Perfluoroheptanoic acid	PFHpA	....	Perfluorobutane Sulfonic acid	PFBS	....	4:2 Fluorotelomer sulfonic acid	4:2 FTSA	....
Perfluorooctanoic acid	PFOA	....	Perfluoropentane Sulfonic acid	PFPeS	....	6:2 Fluorotelomer sulfonic acid	6:2 FTSA	....
Perfluorononanoic acid	PFNA	....	Perfluorohexane Sulfonic acid	PFHxS	....	8:2 Fluorotelomer sulfonic acid	8:2 FTSA	....
Perfluorodecanoic acid	PFDA	....	Perfluoroheptane Sulfonic acid	PFHpS	....	N-Ethyl perfluorooctane sulfonamidoacetic acid	EtFOSAA	....
Perfluoroundecanoic acid	PFUnDA	....	Perfluorooctane Sulfonic acid	PFOS	....	N-Methyl perfluorooctane sulfonamide	N-MeFOSA	....

Section K: Additional Requirements for Permit Reapplication Only			
1	Indicate if you intend to monitor for the Individual Phenolic Compounds or Total Phenols	<input type="checkbox"/> Elect to monitor Individual Phenolic Compounds	<input type="checkbox"/> Elect to monitor Total Phenols
2	For facilities subject to Electroplating (40 CFR 413), Metal Finishing (40 CFR 433) and/or Electrical and Electronic Components (40 CFR 469), did you include an updated Toxic Organic Management Plan (TOMP) or submitted a Total Toxic Organic (TTO) Analyses?	<input type="checkbox"/> Submit an updated TOMP	<input type="checkbox"/> Submit current TTO analyses
3	For facilities subject to Aluminum Forming (40 CFR 467), Metal Molding & Casting (40 CFR 464), Copper Forming (40 CFR 468), or Coil Coating - Subpart D Can-Making (40 CFR 465), indicate if you intend to monitor for Oil & Grease or Total Toxic Organics	<input type="checkbox"/> Elect to monitor Oil and Grease	<input type="checkbox"/> Elect to monitor Total Toxic Organics
4	For facilities subject to Transportation Equipment Cleaning (40 CFR 442), submit an updated Pollutant Management Plan.	<input type="checkbox"/> Attached submitted plan	<input type="checkbox"/> None attached
5	For facilities subject to Mass or Production Based Categorical Pretreatment Regulations, include the Mass (raw materials processed onsite), Volume (corresponding water usage) and processing period (at least last 12 months).		
	Raw Materials Processed	Amount Materials Processed per Unit Time*	Water Usage Volume
	****	****	****
	****	****	****
	****	****	****
* specify the amount of materials processed per unit time (e.g. pound/year, ft <sup>2</sup> /day, meter <sup>2</sup> /week, kg/month, etc.)			
Processing Period		from	****
		to	****

**Section L: For each sewage flow-meter installed at your facility, provide the following information**

(Add additional sheets as necessary)

Flow Meter Information	
Model	****
Serial Number	****
Units	****
Totalizer	****
Pulse/Volume	****
Gallons/Pulse	****

Flow Meter Information	
Model	****
Serial Number	****
Units	****
Totalizer	****
Pulse/Volume	****
Gallons/Pulse	****

For each Water Meter installed at your facility, provide the following information

(Add additional sheets as necessary). Indicate if "Fire only", etc..

Water Meter Information	
Community	****
Wholesale Provider	****
Water Meter ID #	****
Units	****
Size:	****
Comment	****

Water Meter Information	
Community	****
Wholesale Provider	****
Water Meter ID #	****
Units	****
Size:	****
Comment	****

**Appendix A INDUSTRIAL PROCESSES**

No.	PROCESSES	40 CFR Part
<input type="checkbox"/> 1	Aluminum Forming	467
<input type="checkbox"/> 2	Anodizing	413, 433
<input type="checkbox"/> 3	Asbestos Manufacturing	427
<input type="checkbox"/> 4	Battery Manufacturing	461
<input type="checkbox"/> 5	Builder's Paper & Paperboard Mills	431
<input type="checkbox"/> 6	Carbon Black Manufacturing	458
<input type="checkbox"/> 7	Canned and Preserved Fruits / Vegetables	407
<input type="checkbox"/> 8	Canned and Preserved Seafood Processing	408
<input type="checkbox"/> 9	Casting Operations	421, 464, 467, 471
<input type="checkbox"/> 10	Cement Manufacturing	411
<input type="checkbox"/> 11	Centralized Waste Treatment	437
<input type="checkbox"/> 12	Chemical Etching	413, 433
<input type="checkbox"/> 13	Coal Mining	434
<input type="checkbox"/> 14	Coating	413, 433
<input type="checkbox"/> 15	Coil Coating	465
<input type="checkbox"/> 16	Cold Rolling	420, 467, 468, 471
<input type="checkbox"/> 17	Copper Forming	468
<input type="checkbox"/> 18	Dairy Products Processing	405
<input type="checkbox"/> 19	Drawing	420, 467, 468, 471
<input type="checkbox"/> 20	Electrical & Electronic Components	469
<input type="checkbox"/> 21	Electroless Plating	413, 433
<input type="checkbox"/> 22	Electroplating	413, 433
<input type="checkbox"/> 23	Explosives Manufacturing	457
<input type="checkbox"/> 24	Extruding	420, 467, 468, 471
<input type="checkbox"/> 25	Feedlots	412
<input type="checkbox"/> 26	Ferroalloy Manufacturing	424
<input type="checkbox"/> 27	Fertilizer Manufacturing	418
<input type="checkbox"/> 28	Forging	420, 467, 468, 471
<input type="checkbox"/> 29	Foundries	420, 421, 464
<input type="checkbox"/> 30	Fruits & Vegetable Processing	407
<input type="checkbox"/> 31	Glass Manufacturing	426
<input type="checkbox"/> 32	Grain Mills Manufacturing	406
<input type="checkbox"/> 33	Gum & Wood Chemicals Manufacturing	454
<input type="checkbox"/> 34	Hospitals	460
<input type="checkbox"/> 35	Hot Rolling	420, 467, 468, 471

No.	PROCESSES	40 CFR Part
<input type="checkbox"/> 36	Ink Formulating	447
<input type="checkbox"/> 37	Inorganic Chemicals Manufacturing	415
<input type="checkbox"/> 38	Iron & Steel Manufacturing	420
<input type="checkbox"/> 39	Landfills	445
<input type="checkbox"/> 40	Leather Tanning & Finishing	425
<input type="checkbox"/> 41	Meat Processing	432
<input type="checkbox"/> 42	Metal Finishing	433
<input type="checkbox"/> 43	Metal Molding & Casting	421, 464, 467, 471
<input type="checkbox"/> 44	Metal Products & Machinery	438
<input type="checkbox"/> 45	Milling	413, 433
<input type="checkbox"/> 46	Mineral Mining & Processing	436
<input type="checkbox"/> 47	Nonferrous Metals Forming & Metal Powders	471
<input type="checkbox"/> 48	Nonferrous Metals Manufacturing I and II	421
<input type="checkbox"/> 49	Oil & Gas Extraction	435
<input type="checkbox"/> 50	Ore Mining & Dressing	440
<input type="checkbox"/> 51	Organic Chemicals, Plastics, & Synthetic Fibers	446
<input type="checkbox"/> 52	Paint Formulating	446
<input type="checkbox"/> 53	Paving & Roofing Materials (Tars & Asphalt)	443
<input type="checkbox"/> 54	Pesticide Chemicals Manufacturing	455
<input type="checkbox"/> 55	Petroleum Refining	419
<input type="checkbox"/> 56	Pharmaceutical Manufacturing	439
<input type="checkbox"/> 57	Phosphate Manufacturing	422
<input type="checkbox"/> 58	Photographic Processing	459
<input type="checkbox"/> 59	Plastic Molding & Forming	463
<input type="checkbox"/> 60	Porcelain Enameling	466
<input type="checkbox"/> 61	Printed Circuit Board Manufacturing	413
<input type="checkbox"/> 62	Pulp, Paper, & Paperboard Mills	430
<input type="checkbox"/> 63	Refining	421
<input type="checkbox"/> 64	Rubber Processing	428
<input type="checkbox"/> 65	Smelting	421
<input type="checkbox"/> 66	Soap & Detergent Manufacturing	417
<input type="checkbox"/> 67	Steam Electric Power Generation	423
<input type="checkbox"/> 68	Sugar Processing	409
<input type="checkbox"/> 69	Textile Mills Manufacturing	410
<input type="checkbox"/> 70	Timber Products Manufacturing	429
<input type="checkbox"/> 71	Transportation Equipment Cleaning	442

## Appendix B SOURCES of PER- and POLY-FLOUROALKYL SUBSTANCES (PFAS)

Last year 2018, the State of Michigan, through the Michigan Department of Environmental Quality, required the GLWA to identify and determine the possible sources of Per- and Poly-fluoroalkyl Substances (PFAS) within the Great Lakes service areas. Due to PFAS' impacts on human health and impairments on fisheries, the following are incorporated in this application. Please answer all items accordingly.

1	Does your company use/store PFAS in the past?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	If Yes, indicate approximately when the company uses PFAS in the past.	<input type="checkbox"/> 1-5 years	<input type="checkbox"/> 6-10 years <input type="checkbox"/> > 10 years
2	Does your company currently use/store PFAS?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3	Does your company plan to use PFAS in the future?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
4	Does your company use AFFF fire fighting foam?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
5	Does your company perform coating operation (i.e. chrome plating)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
6	Does your company use textile and/or fabric protection chemicals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
7	Does your company use fume and vapor suppressants, demisters or wetting agents?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8	Does your company receive offsite waste for storage and transport?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
9	Is the company a Centralized Waste Treatment facility?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10	Is the company a landfill?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
11	Is the company a tannery or uses leather treatment chemicals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
12	Does your company perform paint formulations?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
13	Does your company manufacture chemicals?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
14	Does your company produce packaging materials using paper and/or cardboard?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
15	Does your company perform petroleum processing or refining?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
16	Does your company use PTFE coatings or Teflon?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

If you respond "Yes" to any items above, the company is required to sample and analyze the PFAS pollutants as enumerated in Section J, 3.



**Wastewater Operating Services**  
**Industrial Waste Control**  
 9300 W. Jefferson, Ste. 210  
 Detroit, MI 48209  
 Phone: 313-297-5850

## SPECIAL DISCHARGE PERMIT APPLICATION

This application is hereby made to obtain a Special Discharge Permit from the Great Lakes Water Authority (GLWA). The information provided in this application will be used to decide whether a permit can be granted. Permits are required for all discharges, which contain regulated pollutants, made into the sewerage system and its tributaries.

<b>Section A. General Information</b>		<input type="radio"/> Application	<input type="radio"/> Reapplication	Permit No. ....
1	Business Name of Applicant	.....		
2	Mailing Address	.....		
3	Name of Authorized Representative	.....		
	Title	.....	Telephone Number	.....
4	Project Site Name	.....		
	Project Address	.....		
5	Name of the Site Owner <i>(if different from applicant)</i>	.....		
6	Name of Consultant <i>(if applicable)</i>	.....		
	Consultant Address	.....		
7	Name of Contact Person	.....		
	Title	.....	Telephone Number	.....
	Email address	.....		

<b>Section B. Site Specific Information</b>	
1	Source and type of pollutants at site <i>(List activities and/or sources which contributed to the site contamination)</i>
	.....
2	Identify environmental regulations and/or licenses administered for this site. Give license number(s) and permit numbers(s). Also provide details about the site classification, if applicable.
	.....
3	Has there been any previous denial for discharge for this site? If yes, explain below.
	..... <input type="radio"/> Yes <input type="radio"/> No

4	Description of the wastewater treatment facility. Also attach a written and more detailed description of the treatment system, if available. Include carbon breakthrough calculations, if applicable. .....
5	Attach drawings showing (1) Location of the site ( <a href="#">map</a> ), etc.; (2) Site layout ( <a href="#">monitoring wells</a> , <a href="#">recovery well(s)</a> , if determined, <a href="#">leaking tanks</a> , <a href="#">sanitary sewers</a> , <a href="#">storm sewers</a> , <a href="#">discharge conduit</a> and location of discharge point, <a href="#">treatment system</a> , <a href="#">property boundaries</a> ); (3) Flow sheet of treatment system including location of necessary sampling valves ( <a href="#">influent</a> , <a href="#">mid-fluent</a> , <a href="#">effluent</a> )

### Section C. Wastewater Discharge

1	Indicate the constituents that are or could be present in the wastewater
	<input type="radio"/> Ammonia <input type="radio"/> Oil and Grease <input type="radio"/> Acids <input type="radio"/> Flammable Substances <input type="radio"/> Pesticides <input type="radio"/> Detergents <input type="radio"/> Caustics <input type="radio"/> Solvents <input type="radio"/> PCBs <input type="radio"/> Heavy Metals <input type="radio"/> Sulfides <input type="radio"/> Radioactive Substances <input type="radio"/> Brine <input type="radio"/> Mud, Sand, Silt <input type="radio"/> Other: .....
2	Describe the method of discharging the wastewater from the site to the sewer system ( <a href="#">above ground</a> , <a href="#">in ground</a> , <a href="#">gravity flow</a> , <a href="#">pressure flow</a> , <a href="#">hose</a> , <a href="#">pipe</a> , <a href="#">channel</a> etc.) .....
3	Describe the location of the proposed point of discharge ( <a href="#">indicate also on site plan</a> ) .....
4	Total estimated volume of water to be discharged over the duration of the project                      .....                      gallons
5	Proposed duration of the discharge project                      .....
6	Proposed rate of discharge                      .....                      gpd,                      .....                      gpm (max.)
7	Schedule of discharge from .....                      to .....                      (hours) from .....                      to .....                      (days of week)
8	Type of discharge <input type="radio"/> Batch <input type="radio"/> Continuous

### Section D. Wastewater Analysis

- Attach analytical results of the wastewater to be discharged. Samples should be representative of the untreated and contaminated recovery stream (groundwater and/or collected water). The results are used in breakthrough calculations (activated carbon treatment) and also serve as a determination of prohibited pollutants present at the site.
- Sampling and analysis must be conducted in accordance with the EPA protocol in 40 CFR 136. At a minimum, samples are to be analyzed for pH, BOD, TSS, P, FOG, metals and toxic organic priority pollutants according to the attached list.
- Required sampling includes the recovery well (if determined) and at least two other monitoring wells in the contaminated area (contaminant plume).

- Detection limits of the method must be stated. Interferences require documentation. Higher detection limit due to dilution must be indicated. All analysis reports should be supported by a QC report.
- The State of Michigan, through the Michigan Department of Environmental Quality, required the GLWA to identify and determine the possible sources on discharges of Per- and Poly-fluoroalkyl Substances (PFAS) within the Great Lakes service areas. As a result, all source dischargers, where the Special Discharge Permit is applied for that perform/handle any of the following operation/process as tabulated below, are required to sample and analyze for PFAS pollutants (see attachment, page 9) as this becomes mandatory due to the potential impacts on human health and impairments on fisheries.

Airfield	Leather Tanning and Processing	Handle any of the following: Aviation Fuel Storage Fire-Fighting Materials Fire Department Foam Response PFAS (see page 9 for PFAS listings) Photo Lithography / Photographic Coating Underground Storage Tank / Aboveground Storage Tank
Centralized Waste Treatment	Paint Formulating	
Chemical Manufacturing	Paper & Cardboard	
Electroplating and Metal Finishing (e.g. chrome plating)	Refinery	
Industrial/Commercial Laundries	Transportation Equipment Cleaning	
Landfills	Textiles	

- If the site is listed in Table – Non-Residential/Commercial Establishments (see page 10), the applicant is exempted from wastewater sampling and analysis.

### Section E. Acceptance from Local Agency

Attach a letter of acceptance from the local community allowing the discharge of wastewater from the site into the sanitary sewer at a specified discharge location. The acceptance letter shall include details of the location of a specific discharge point. Discharge into a storm system leading to open waters is prohibited.

### Section F. Fee

The company shall pay applicable fees to the GLWA, or local authority based on the actual volume of wastewater discharged into the sewer system and any violations of the permit parameter limitations. Failure to pay the sewerage fees and fine can be subjected to appropriate enforcement action as determined by the GLWA or by the local authority.

### Section G. Certification Statement

I certify under penalty of law that I have personally examined and I am familiar with the information in this application and all attachments and that based upon my inquiry of those persons immediately responsible for obtaining the information contained in this application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and/or imprisonment.

-----  
Authorized Representative Signature

-----  
Date

-----  
Authorized Representative Name (Please print)

-----  
Telephone No.

## Instructions for Completing the Special Discharge Permit

The application consists of six sections listed as follows:

- Section A - General Information**
- Section B - Site Specific Information**
- Section C - Wastewater Discharge**
- Section D - Wastewater Analysis**
- Section E - Acceptance Letter from Local Authority**
- Section F - Fee**
- Section G - Certification Statement**

### A. General Information

- 1-3 Give the complete business name and mailing address of the applicant. Indicate if the applicant is a site owner or consultant or others. Specify the name, title and phone number of the designated contact person employed by the applicant.
- 4-5 Give the specific project's site name and address at which the wastewater is collected or generated. Give the name of the present owner and also the previous owner(s) under whose ownership the site was contaminated. If the wastewater is treated and/or disposed off-site, indicate the off-site location under.
- 6-7 Give the name and address of the consultant if different from the applicant; else, specify N/A (i.e. not applicable). Also provide the name of the contact person (project leader or engineer), phone number and fax number. The consultant is the company providing technical expertise and professional advice to the applicant.

Additional details should be provided when two or more parties are involved. Specify the business relationship between company and person(s) involved.

### B. Site Specific Information

- 1 Briefly describe present and previous activities, the nature of business operations and processes which were involved in contaminating the site.
- 2 Identify and explain if the site is classified under the following list; else, specify N/A.
  - a) EPA National Priority List (NPL)
  - b) Michigan Environmental Contamination Priority List (under Act 307)
  - c) Sites contaminated by chemicals listed in the EPA Priority Pollutant List and/or the Michigan Critical Materials List, and/or
  - d) Sites covered by other regulations and licenses.
- 3 Indicate and explain if the site was previously denied by the Detroit Water and Sewerage Department (DWSD), Great Lakes Water Authority (GLWA) or any other agency from discharging the accumulated and/or stored wastewater.
- 4 If the initial wastewater analysis shows unacceptable pollutant levels, a pretreatment system may be required. Describe the processes and methods employed to treat the wastewater. Attach a more detailed description of the treatment process, such as used in a proposal or project description, if available. Also, attach any calculations showing treatment efficiency such as carbon breakthrough calculations, etc.

- 5 Submit essential drawings as described in the application form. Note that any facilities are prohibited from discharging wastewater into the storm sewers (i.e. leading to open waters) without the Michigan Department of Environmental Quality's approval. Care must be taken to determine proper sewer lines that are connected to the GLWA collection system. If necessary, consult with your local authority and/or the GLWA.

**C. Wastewater Discharge**

- 1 Mark the pollutants suspected to be present in the wastewater.
- 2 Verify the manner of discharging the wastewater assuring the GLWA that the discharge will be made to the proper sanitary sewer and not to the storm sewer. Indicate whether the system is combined or not. Describe the type of conduit that will carry the discharge. Care must be taken that pedestrian and vehicle traffic is safe and not unduly impeded.

3-8 Self-explanatory.

**D. Wastewater Analysis**

To determine the presence of known, suspected and other pollutants, the following parameters must be analyzed:

pH, BOD, TSS, P, FOG, metals (As, Cd, Cu, Fe, Pb, Hg, Ni, Ag, Cr and Zn), CN and priority organic pollutants.

For ground remediation, the applicant must sample at least three (3) wells in the contaminant plume area. If the recovery well is determined, it should be included in the three sampled wells.

Any additional sampling and analytical results available in the project should be attached.

Discharge limits applied are as follows: (1) Compatible pollutants (BOD, TSS, P, FOG), pH, Metals, PCBs and phenols as listed in the City of Detroit Ordinance 08-05 and (2) Toxic Organics at 20 µg/L (ppb). If the initial analysis shows unacceptable pollutant levels, then, pretreatment is required before discharging.

**E. Acceptance Letter from Local Authority**

This section applies only to sites located outside the City of Detroit. The applicant must secure a letter of acceptance from the local community serviced by the GLWA. The acceptance letter must express the local community's permission granting the applicant to discharge said wastewater and specify details of the discharge point. Some communities may also require a letter of approval from the county.

**F. Fees**

This section pertains to the applicable sewerage charges to be levied by the applicable local community (city, township, village etc.) on the actual volume of wastewater discharged into the sanitary sewer system and any fine imposed by The Great Lakes Water Authority for any violation of permit conditions, not to exceed five hundred dollars (\$500.00) per day per violation.

**G. Certification Statement**

The company's authorized representative responsible for the overall project operation must sign this section. The authorized representative shall refer to a corporate officer, a general partner, a proprietor; if the company is a corporation, a partnership, or a proprietorship respectively.

The Great Lakes Water Authority, as agent for the Detroit Water & Sewerage Department, will accept and evaluate applications for Special Wastewater Discharge Permit in accordance with Detroit's Policy 92-01 restated below.

**POLICY NO. 92-01**  
**DETROIT POLICY FOR SPECIAL WASTEWATER DISCHARGE**

Wastes and wastewater generated and/or accumulated from groundwater, storm water, site remediation (not subjected to SARA and CERCLA), and other wastewater sources into the system in accordance with the following conditions.

1. The applicant for the special wastewater discharge shall not discharge any wastewater into the sewer system without a Special Discharge Permit.
2. The applicant shall apply for a Special Discharge Permit and satisfy the following requirements:
  - a. The background history of the site where the wastewater is accumulated and/or generated.
  - b. The characteristics of the wastewater including quality, quantity, flow rate, frequency, type and duration of the wastewater discharge.
  - c. A wastewater analysis based on the EPA Priority Pollutants conducted in accordance with the EPA 40 CFR 136.
  - d. An approval from the local authority granting the applicant an acceptance to discharge and specifying the discharge point.
  - e. A certification of the application by the owner of the site or an authorized representative of the company responsible for the overall project operation.
3. The maximum special wastewater discharge shall not exceed 100,000 gallons per day, based on a twenty-four (24) hour period. The discharge may be further limited by the carrying capacity of the sewer line discharged into.
4. The applicant shall install all wastewater pretreatment system necessary to comply with the discharge requirements.
5. The GLWA reserves the right to inspect the remediation and treatment facility before any discharges are made.
6. The GLWA shall issue the Special Discharge Permit only after the applicant complies with all the requirements.
7. The Special Discharge Permit shall contain the discharge limitations, monitoring requirements, reporting requirements, and other general conditions needed for compliance.
8. The applicant shall comply with all the established conditions and requirements as issued on the Special Discharge Permit. Failure to comply shall result in immediate permit revocation and appropriate enforcement action.

## Organic Pollutants

Purgeable Compounds	Limit	Extractable Compounds	Limit
1,1,1-Trichloroethane	20 ppb	Alpha-BHC	20 ppb
1,1,1,2-Tetrachloroethane	20 ppb	Alpha-Endosulfan or (Endosulfan I)	20 ppb
1,1,2-Trichloroethane	20 ppb	Anthracene	20 ppb
1,1-Dichloroethane	20 ppb	Benzidine	20 ppb
1,1-Dichloroethylene	20 ppb	Benzo (a) Anthracene or (1,2-Benzanthracene)	20 ppb
1,2-Dichlorobenzene	20 ppb	Benzo (a) Pyrene or (3,4-Benzopyrene)	20 ppb
1,2-Dichloroethane	20 ppb	Benzo (b) Fluoranthene or (3,4-Benzofluoranthene)	20 ppb
1,2-Dichloropropane	20 ppb	Benzo (ghi) Perylene or (1,12-Benzoperylene)	20 ppb
1,3-Dichloropropylene or (1,3-Dichloropropene)	20 ppb	Benzo (k) Fluoranthene or (11,12-Benzofluoranthene)	20 ppb
1,2-Trans-Dichloroethylene or (Trans-1,2-Dichloroethene)	20 ppb	Beta-BHC	20 ppb
1,3-Dichlorobenzene	20 ppb	Beta-Endosulfan or (Endosulfan II)	20 ppb
1,4-Dichlorobenzene	20 ppb	Bis (2-Chloroethoxy) Methane	20 ppb
2-Chloroethylvinyl Ether	20 ppb	Bis (2-Chloroethyl) Ether	20 ppb
Acrolein	20 ppb	Bis (2-Chloroisopropyl) Ether	20 ppb
Acrylonitrile	20 ppb	Bis (2-Ethylhexyl) Phthalate	20 ppb
Benzene	20 ppb	Butyl benzyl phthalate or (Benzyl butyl phthalate)	20 ppb
Bromoform or (Tribromomethane)	20 ppb	Chlordane	20 ppb
Carbon Tetrachloride or (Tetrachloromethane)	20 ppb	Chrysene	20 ppb
Chlorobenzene	20 ppb	Delta-BHC	20 ppb
Chlorodibromomethane or (Dibromochloromethane)	20 ppb	Dibenzo (a,h) Anthracene or (1,2,5,6- Dibenanthracene)	20 ppb
Chloroethane	20 ppb	Dieldrin	20 ppb
Chloroform or (Trichloromethane)	20 ppb	Diethyl Phthalate	20 ppb
Dichlorobromomethane or (Bromodichloromethane)	20 ppb	Dimethyl Phthalate	20 ppb
Ethylbenzene	20 ppb	Di-N-Butyl Phthalate	20 ppb
Methyl Bromide or (Bromomethane)	20 ppb	Di-N-Octyl Phthalate	20 ppb
Methyl Chloride or (Chloromethane)	20 ppb	Endosulfan sulfate	20 ppb
Methylene Chloride or (Dichloromethane)	20 ppb	Endrin	20 ppb
Tetrachloroethylene or (Tetrachloroethene)	20 ppb	Endrin Aldehyde	20 ppb
Toluene	20 ppb	Fluoranthene	20 ppb
Trichloroethylene or (Trichloroethene)	20 ppb	Fluorene	20 ppb
Vinyl Chloride or (Chloroethylene)	20 ppb	Gamma-BHC	20 ppb
Xylene	20 ppb	Heptachlor	20 ppb
Extractable Compounds	Limit	Heptachlor Epoxide or (BHC-Hexachlorocyclohexane)	20 ppb
1,2,4-Trichlorobenzene	20 ppb	Hexachlorobenzene	20 ppb
1,2-Diphenylhydrazine	20 ppb	Hexachlorobutadiene	20 ppb
2,3,7,8-Tetrachlorodibenzo-p-Dioxin	20 ppb	Hexachlorocyclopentadiene	20 ppb
2,4,6-Trichlorophenol	20 ppb	Hexachloroethane	20 ppb
2,4-Dichlorophenol	20 ppb	Indeno (1,2,3-cd) Pyrene or (2,3-o-Phenylene Pyrene)	20 ppb
2,4-Dimethylphenol	20 ppb	Isophorone	20 ppb
2,4-Dinitrophenol	20 ppb	Naphthalene	20 ppb
2,4-Dinitrotoluene	20 ppb	Nitrobenzene	20 ppb
2,6-Dinitrotoluene	20 ppb	N-Nitrosodimethylamine	20 ppb
2-Chloronaphthalene	20 ppb	N-Nitrosodi-N-Propylamine	20 ppb
2-Chlorophenol	20 ppb	N-Nitrosodiphenylamine	20 ppb
2-Nitrophenol	20 ppb	PCB-1016 or (Arochlor 1016)	Non-detect*
3,3-Dichlorobenzidine	20 ppb	PCB-1221 or (Arochlor 1221)	Non-detect*
4,4-DDD or (p,p-TDE)	20 ppb	PCB-1232 or (Arochlor 1232)	Non-detect*
4,4-DDE or (p,p-DDX)	20 ppb	PCB-1242 or (Arochlor 1242)	Non-detect*
4,4-DDT	20 ppb	PCB-1248 or (Arochlor 1248)	Non-detect*
4,6-Dinitro-o-Cresol	20 ppb	PCB-1254 or (Arochlor 1254)	Non-detect*
4-Bromophenyl Phenyl Ether	20 ppb	PCB-1260 or (Arochlor 1260)	Non-detect*
4-chloro-3-methyl phenol or (p-Chloro-m-Cresol)	20 ppb	Pentachlorophenol	20 ppb
4-Chlorophenyl Phenyl Ether	20 ppb	Phenanthrene	20 ppb
4-Nitrophenol	20 ppb	Phenol	20 ppb
Acenaphthene	20 ppb	Pyrene	20 ppb
Acenaphthylene	20 ppb	Toxaphene	20 ppb
Aldrin	20 ppb		

\* Quantification level shall not exceed 0.2 ug/L based on U.S.EPA method 608

## Specific Pollutant Prohibitions

Compatible Pollutants		Limit (mg/L)
Fats, Oil or Grease	FOG	1500.0
Total Suspended Solids	TSS	7500.0
Biochemical Oxygen Demand	BOD	7500.0
Phosphorus	P	250.0
Non-Compatible Pollutants		Limit (mg/L)
Acidity/Alkalinity (pH)	pH	5.0 - 11.5 Units
Arsenic	As	1.0
Cadmium	Cd	1.0
Chromium	Cr	25.0
Copper	Cu	2.5
Cyanide (Available)	AVCN	1.0
Iron	Fe	1000.0
Lead	Pb	1.0
Mercury	Hg	Non-detect**
Nickel	Ni	5.0
Silver	Ag	1.0
Total PCB	PCB	Non-detect*
Total Phenolic Compounds	PHENOL	1.0
Zinc	Zn	7.3

\* Quantification level shall not exceed 0.2 ug/L based on U.S.EPA method 608

\*\* Quantification level shall not exceed 0.2 ug/L based on U.S.EPA method 245.1

## Per- and Poly- fluoroalkyl Substances (PFAS)

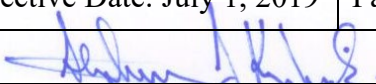
PFAS Pollutants	
Perfluorobutanoic acid	PFBA
Perfluoropentanoic acid	PFPeA
Perfluorohexanoic acid	PFHxA
Perfluoroheptanoic acid	PFHpA
Perfluorooctanoic acid	PFOA
Perfluorononanoic acid	PFNA
Perfluorodecanoic acid	PFDA
Perfluoroundecanoic acid	PFUnDA
Perfluorododecanoic acid	PFDoDA
Perfluorotridecanoic acid	PFTTrDA
Perfluorotetradecanoic acid	PFTeDA
Perfluorobutane Sulfonic acid	PFBS
Perfluoropentane Sulfonic acid	PFPeS
Perfluorohexane Sulfonic acid	PFHxS
Perfluoroheptane Sulfonic acid	PFHpS
Perfluorooctane Sulfonic acid	PFOS
Perfluorononane Sulfonic acid	PFNS
Perfluorodecane Sulfonic acid	PFDS
Perfluorooctane sulfonamide	FOSA
4:2 Fluorotelomer sulfonic acid	4:2 FTSA
6:2 Fluorotelomer sulfonic acid	6:2 FTSA
8:2 Fluorotelomer sulfonic acid	8:2 FTSA
N-Ethyl perfluorooctane sulfonamidoacetic acid	EtFOSAA
N-Methyl perfluorooctane sulfonamide	N-MeFOSA

Analytical Requirement: USEPA Method 537 (modified) or ASTM D7979

## Non-Residential/Commercial Establishments

Mark	Sources/Business Type	Comments
<input type="radio"/>	Accounting Services	Auditing, Bookkeeping, CPA
<input type="radio"/>	Agencies	Booking, Entertainment, Personnel
<input type="radio"/>	Amusement and Recreation	Art galleries, Bowling alleys, Entertainment bazaar, Game rooms, Parks, Theater
<input type="radio"/>	Accommodation Places	Apartments, Bed & Breakfast, Condominium, Community houses, Cottages, Hotels, Inns, Motels
<input type="radio"/>	Appraisers	Automobile, Real estate
<input type="radio"/>	Athletic Fields	Arena, Stadium
<input type="radio"/>	Bank Institution	Credit Union, Financial Institution, Mortgage, Savings & Loans
<input type="radio"/>	Broadcasting	Radio & Television stations
<input type="radio"/>	Business & Office	Advertising, Architect, Attorney, Brokers, Computer, Consultant, Contractor, Counselling, Data processing, Detective agency, Employment & Placement agency, Engineering, Financial, Furniture, Insurance, Investment, Leasing, Legal service, Locksmith, Marketing, Notary Public, Post Office, Real Estate, Security System (Burglar alarm, Detection devices), Trailer office, Underwriter
<input type="radio"/>	Cable Company	
<input type="radio"/>	Clinics	Dental, Medical, Optical, Orthopedic, Podiatry, Veterinary
<input type="radio"/>	Clubs	BAR, Cocktail lounge, Night club, Tavern
<input type="radio"/>	Contractors	Air Conditioning, Electrical, Home/Office building & improvement, Landscape, Plumbing, Waterproofing
<input type="radio"/>	Correctional Facilities	Jails, Prison, Juvenile detention, Reformatory
<input type="radio"/>	Child Care	Nursery, Montessori, Daycare center
<input type="radio"/>	Dealership	Boat, Motorcycle ( <b>except Automobile</b> ), Recreational vehicle
<input type="radio"/>	Distributors	
<input type="radio"/>	Educational Institutions	Academy, Adult, Bartender, Computer, Cosmetology, Elementary, High School, college, University, Training Center
<input type="radio"/>	Food Service	Bakery (Retail), Cafeteria, Carry-Out, Catering, Dine-in, Fast food, Restaurant
<input type="radio"/>	Funeral home	
<input type="radio"/>	Glass Replacement Shop	
<input type="radio"/>	Government Offices	
<input type="radio"/>	Halls	Ballroom, Banquet, Charitable, Social
<input type="radio"/>	Movers	Moving company, Rental truck
<input type="radio"/>	Nursing Home	Convalescent home
<input type="radio"/>	Personal Services	Barber shop, Beauty salon, Escort service, Massage parlor, Tanning salon
<input type="radio"/>	Physical fitness	Aerobic/Fitness center, Health club, Gym
<input type="radio"/>	Post Office	
<input type="radio"/>	Print Shop	Quick print shop
<input type="radio"/>	Religious Establishment	Church, Convent, Seminary
<input type="radio"/>	Stores	Antique, apparel, Agricultural, Appliance, Aquarium supply, Artist, Audio, Boutique, Carpet, Craft, Communication (Beeper, Cellular, Paging, Signaling), Convenience (Party), Cosmetic, Department, Drug, electrical, Electronic, factory Outlet, Florist, Furniture, Grocery, Hardware, Health, Hobby, Home furnishing, Industrial sale, Instrumental, Jewelry, Landscaping, Lighting fixture, Mall, Nursery (Plants, Trees), Optical, Paint, Perfumery, Pet shop, Photography, Plumbing, Religious, Sporting good, Supermarket, Toys, Video, Wholesale trade, Yard supply
<input type="radio"/>	Towing services	
<input type="radio"/>	Trailer Park Properties	
<input type="radio"/>	Travel Agencies	Airline, Cruise
<input type="radio"/>	Vending Companies	
<input type="radio"/>	Warehouses	Non-chemicals
<input type="radio"/>	Woodshops	

ATTACHMENT 3

<b>User Guidance Information</b>	GLWA PFAS Inquiry Guidance for Identifying Potential Significant Sources of PFAS Compounds	
Version: 2019 -10_1	Effective Date: July 1, 2019	Pages: 2
Authorization Signature		

**Objectives & Scope**

This guidance has been prepared to assist staff in the evaluation of information received in a Survey form, Permit Application or Special Discharge Permit Application in applying responses to questions about past, present or future uses of PFAS compounds. This information is provided for guidance purposes only and addresses the general case. Specific facts about an individual User may result in a different result.

**Discussion**

PFAS compounds refers to per- and poly-fluoroalkyl substances, a group of chemicals that have been used in a wide range of applications since the 1940s. The man-made chemicals are/were used in firefighting, stain resistance, water repellants, and other industrial applications.

As a result of the numerous industrial applications for PFAS, it is not possible to provide a complete listing of all applications or activities likely to have PFAS contamination. However, the list below is intended to provide guidance when monitoring is required to evaluate the potential contributions of PFAS. As new information becomes available, this list may be amended.

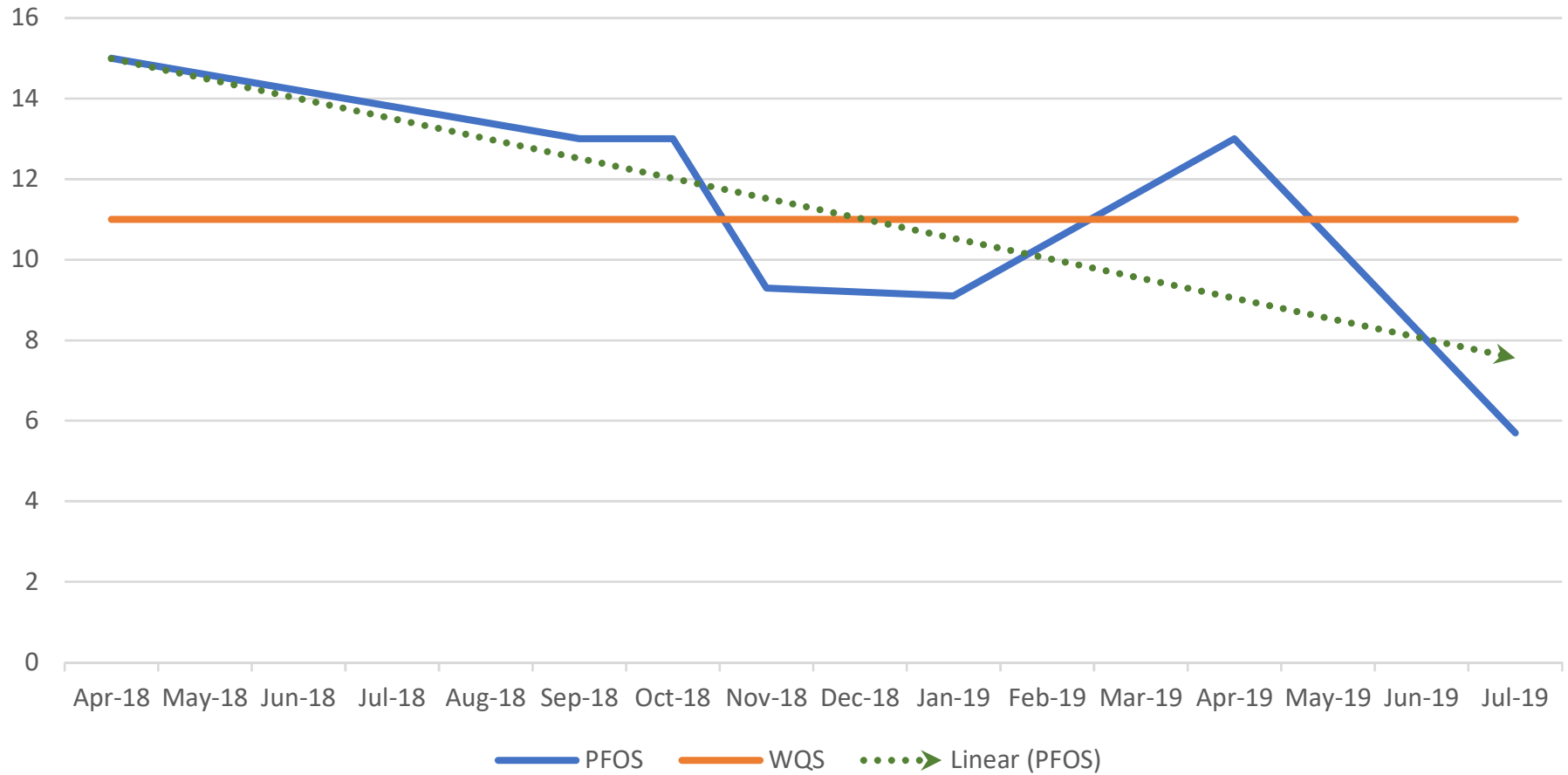
<b>Industrial Processes</b>		
Electroplating and Metal-finishing Processes	See 40 CR 413 and 433	Eg. Chrome plating; Chromating
Paint Formulating	See 40 CFR 446	
Transportation Equipment Cleaning	See 40 CFR 442	
Landfills	All types	
Centralized Waste Treatment	See 40 CFR 437	
Leather Tanning & Processing		
Industrial & Commercial Laundries		
Chemical Manufacturing		
Paper & Cardboard		
Textiles		
<b>Applications</b>		
Fire-fighting Materials		Airfields; Refineries;
Fire Department Foam Response		

Photo lithography; Photographic Coatings		
<b>Groundwater</b>		
Any sites performing aforementioned Industrial Processes or applications		
Aviation fuels & storage		
Other fuel (UST/AST)		See Note #4 Below

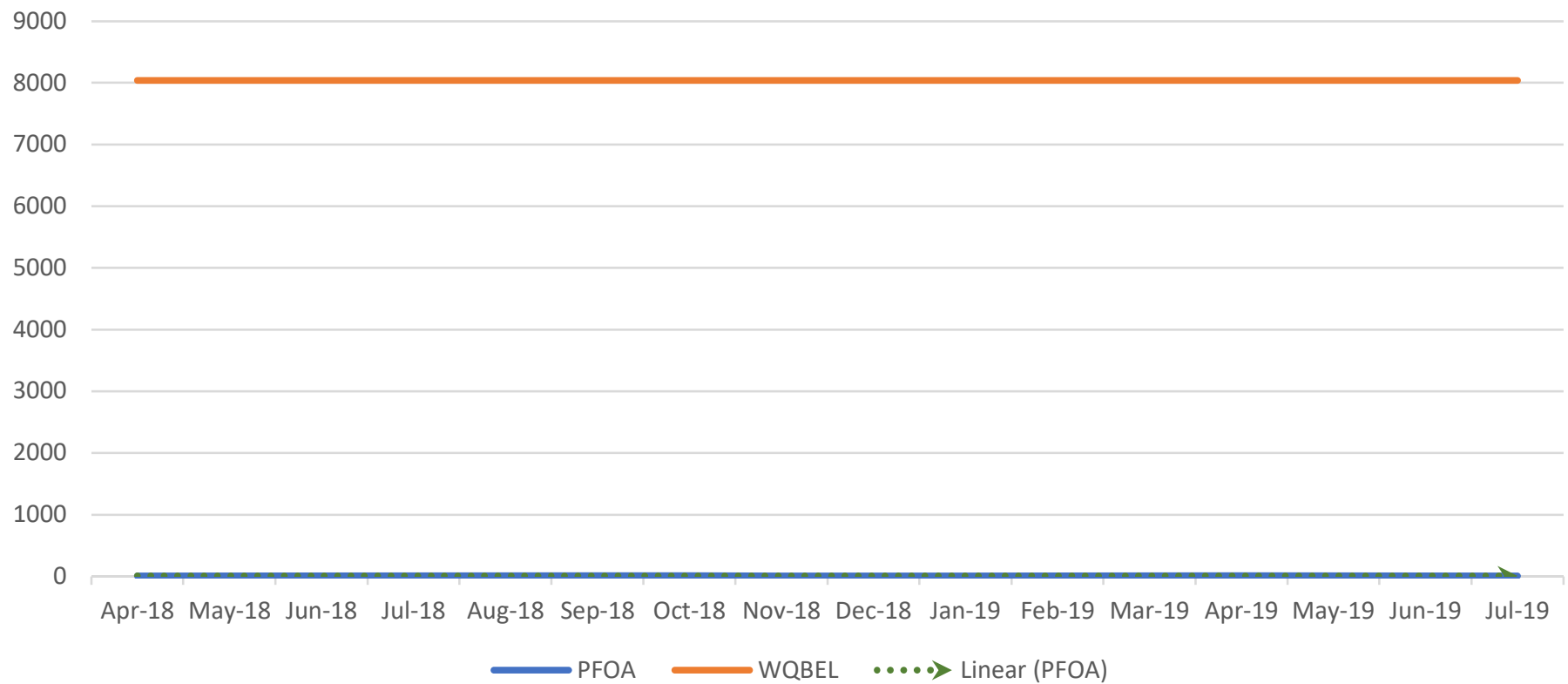
1. At a minimum, all applications for survey or permit (all types) must answer questions above past, present or future usages of PFAS. If incomplete, staff should follow-up with the applicant to secure the additional information and document the response for the User file.
2. Any facility or operation involving any of the above, or where such activities were formerly performed must include analysis for PFAS compounds with their application or re-application. NOTE: Where a User provides a Baseline Monitoring Report in lieu of a GLWA Permit Application, staff should follow-up with the applicant to secure the additional information and document the response for the User file.
3. Groundwater projects with a 12 months or greater history must include an analysis for PFAS compounds.
4. Facilities who do not correspond to either (2) or (3) above, may require monitoring if: (a) PFAS usage is suspected; (b) there is either a known PFAS history of past, current or future usage; (c) other reason (must be identified and documented by staff).

ATTACHMENT 4

**Attachment 4.2 - 2018/19 GLWA WRRF  
PFOS Baseline Data (WQS = 11 ngms/l)  
Avg<sub>YTD</sub> = 11.16 ng/l**



**Attachment 4.3 - 2018/19 GLWA WRRF  
PFOA Baseline Data (WQBEL = 8,040 ngms/l)  
Avg<sub>YTD</sub> = 8.470 ng/l**



ATTACHMENT 5

Attachment 5: Significant Sources evaluated and Identified for PFOS/PFOA by GLWA - 2018/19

Report_month	User #	Facility Name	Facility Address	City	County	Zip Code	SIU/CIU SIC Code(s) or NAICS Code(s)	SIU/CIU SIC/NAICS Primary Code Indicator	Industrial User Type (SIU/CIU)	For CIUs, list all applicable Categories by 40 CFR Part Number(s)	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Significant Sources
														420	11		
O	1	3M Company	11900 E. 8 Mile Road	Detroit	Wayne	48205	3291	327910	SIU	SIU	15,585	Continuous	8/20/2018	ND	<9.28	Probable Significant Source	Yes
D	2	A. G. Simpson (USA), Inc.	6640 Sterling Drive South	Sterling Heights	Macomb	48312	3471/3479	332813	CIU	433.A.15(a) (PSES) Metal Finishing	31,000.00	Continuous	10/22/2018	ND	350	Significant Source	Yes
O	6	Advanced Resource Recovery, L.L.C.	27140 Princeton Avenue	Inkster	Wayne	48141	5093	562219	CIU	437.D.46b (PSES) Centralized Waste Treatment	96,551	Batch	4/18/2018	290	ND (<23ng/l)	Significant Source	Yes
D	8	Aevitas Specialty Services Corp.	663 Lycaste Street	Detroit	Wayne	48214	5093	562219	CIU	437.B.26 (PSNS) Centralized Waste Treatment	53,000	Batch	10/15/2018	10	70	Significant Source	Yes
O	15	Arted Chrome Plating Inc.	38 Piquette Street	Detroit	Wayne	48202	3471	332813	CIU	413.14 A(d) (PSES) Electroplating <10,000 gpd	6,124	Continuous	8/8/2018	<1.9	69	Significant Source	Yes
N	16	A-W Custom Chrome, Inc.	17726 E. 9 Mile Road	East Pointe	Macomb	48021	3471	332813	CIU	413.A.14(b)(f) (PSES) Electroplating Discharging <10,000 gpd	630	Continuous	9/26/2018	ND	180	Significant Source	Yes
D	18	Beacon Park Finishing, LLC (Howard Finishing Roseville)	15765 Sturgeon	Roseville	Macomb	48066	3471	332813	CIU	413.A.14(c)(g), 413.E.54(c)(g) (PSES) Electroplating Discharging >10,000 gpd	71,900.00	Continuous	10/22/2018	ND	2560	Significant Source	Yes
D	24	Chor Industries Inc.	500 Robbins	Troy	Oakland	48083	3479	332812	CIU	433.A.17a (PSNS) Metal Finishing	12,303.00	Continuous	10/30/2018	ND	250	Significant Source	Yes
O	25	Cintas Corporation - Westland	39145 Webb Drive	Westland	Wayne	48185	7218	812332	SIU	SIU	71,183	Continuous	9/11/2018	ND	40	Significant Source	Yes
N	26	City of Livonia - Type III Landfill	32500 Glendale Road	Livonia	Wayne	48150	4953	562212	SIU	SIU	16,000	Continuous	10/15/2018	50	100	Significant Source	Yes
N	27	City of Pontiac	575 Collier Road	Pontiac	Oakland	48340	4953	562212	SIU	SIU	97,000	Continuous	10/5/2018	75	15	Significant Source	Yes
N	28	Color Coat Plating Company	355 W. Girard	Madison Heights	Oakland	48071	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing	1,139	Batch	9/26/2018	ND	230	Significant Source	Yes
D	29	Controlled Power Company	1955 Stephenson Highway	Troy	Oakland	48083	3479/3612	335311	CIU	433.A.17a (PSNS) Metal Finishing	551.00	Batch	10/30/2018	ND	20	Significant Source	Yes
O	32	Dana Container, Inc. Tank Cleaning Division	1551 Caniff Street	Detroit	Wayne	48211	7999	562991	CIU	442.A.15a (PSES) Transportation Equipment Cleaning	12,950	Batch	9/10/2018	280	140	Significant Source	Yes
O	37	Detroit Chrome Electro Forming Co.	7515 Lyndon	Detroit	Wayne	48238	3471	332813	CIU	413.14 A(b) (PSES) Electroplating <10,000 gpd	2,180	Batch	9/25/2018	ND	9750	Significant Source	Yes
N	38	Detroit Diesel Corporation	13400 W. Outer Drive	Detroit	Wayne	48239-1309	3471	332813/333618	SIU	SIU	117,400	Continuous	9/28/2018	5.3	11	Significant Source	Yes
J	39	Detroit Metropolitan Wayne County Airport	One L. C. Smith Terminal - Mezzanine	Detroit	wayne	48242	4581		SIU	SIU	700,000	Continuous	12/18/2019	140	220	Significant Source	Yes
O	42	Disposal and Recycling Technologies, Inc.	8647 Lyndon	Detroit	Wayne	48238	4953	562219	CIU	437.D.47e (PSNS) Centralized Waste Treatment	250,300	Continuous	9/11/2018	1790	530	Significant Source	Yes
O	43	Domestic Uniform Rental	3800 18th Street	Detroit	Wayne	48208	7218	812332	SIU	SIU	64,276	Continuous	9/10/2018	20	50	Significant Source	Yes
O	50	EQ Detroit dba US Ecology	1923 Frederick Street	Detroit	Wayne	48211	4953	562211/562219	CIU	437.D.46b.1 (PSES) Centralized Waste Treatment AND 437.C.35 (PSES) Centralized Waste Treatment	155,702	Batch	9/11/2018	60	650	Significant Source	Yes
N	51	EQ Resource Recovery Inc.	36345 Van Born Road	Romulus	Wayne	48174-4057	4953/5093	562211/562219	CIU	437.C.35 (PSES) Centralized Waste Treatment	129,358	Continuous	10/15/2018	130	240	Significant Source	Yes
	57	Ford Motor Company - Allen Park Clay Mine Landfill	17005 Oakwood Blvd.	Allen Park	Wayne	MI	48101	4953	562212	SIU	35,020	Continuous	2/20/2019	50	160	Significant Source	Yes
N	59	Ford Motor Company - Dearborn Truck Plant	3001 Miller Road	Dearborn	Wayne	48121	3711/3479/3465/3714	336112/332812/336399	CIU	433.A.15(a) (PSES) Metal Finishing	534,878	Batch	10/15/2018	30	50	Significant Source	Yes
N	64	G2O Energy, LLC	8750 Grinnell	Detroit	Wayne	48213	4953	562219/562119	SIU				10/15/2018	ND	10	Significant Source	Yes

Attachment 5: Significant Sources evaluated and Identified for PFOS/PFOA by GLWA - 2018/19

Report Month	User #	Facility Name	Facility Address	City	County	Zip Code	SIU/CIU SIC Code(s) or NAICS Code(s)	SIU/CIU SIC/NAICS Primary Code Indicator	Industrial User Type (SIU/CIU)	For CIUs, list all applicable Categories by 40 CFR Part Number(s)	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Significant Sources
O	66	General Motors Company	2500 East General Motors Boulevard	Detroit	Wayne	48211	3711	336111	CIU	433.A.17a (PSNS) Metal Finishing	488,199	Batch	8/13/2018	ND	ND	Probable Significant Source	Yes
D	67	General Motors LLC., Orion Assembly	4555 Giddings Road	Lake Orion	Oakland	48359	3711		CIU	433.A.15a (PSES) Metal Finishing	293,736.00	Continuous	11/1/2018	ND	30	Significant Source	Yes
O	70	Hajjar Plating Services, Inc.	38300 Van Born Rd.	Wayne	Wayne	48184	3471	332813	CIU	413.14 A(b&f) (PSES) Electroplating <10,000 gpd	1,400	Continuous	8/8/2018	ND	370	Significant Source	Yes
O	80	International Hardcoat Inc.	12400 Burt Road	Detroit	Wayne	48228	3471	332813	CIU	433.A.17a (PSNS) Metal Finishing	60,000	Continuous	9/11/2018	ND	20	Significant Source	Yes
O		Lear Corporation dba Eagle Ottawa								425.D.46 (PSNS) Leather Tanning and Finishing			9/21/2018	43	14	Significant Source	Yes
O	84	MacDermid, Inc.	1221 Farrow Avenue	Ferndale	Oakland	48220	2899	325998	CIU	433.A.15a (PSES) Metal Finishing	17,119	Batch	8/27/2018	28	840	Significant Source	Yes
O	85	Marathon Petroleum Company, LP	1300 S. Fort Street	Detroit	Wayne	48217	2911/5171	324110/424710	CIU	419.B.25 (PSES) and 419.B.27a Petroleum Refining	1,718,849	Continuous	6/27/2018	30	360	Significant Source	Yes
O	86	McGean-Rohco, Inc.	38521 Schoolcraft Road	Livonia	Wayne	48150	2842	325612	SIU	SIU	4,600	Continuous	9/11/2018	120	310	Significant Source	Yes
O	94	Oakland Heights Development, Inc.	2350 Brown Rd	Auburn Hills	Oakland		4953	562212	SIU		30,097	Continuous	9/12/2018	840	700	Significant Source	Yes
O	96	Pine Tree Acres, Inc.	36600 29 Mile Road	Lenox Township	Macomb	48048	4953	562212	SIU	Landfill	161,215.0	Continuous	11/20/2018	1800	430	Significant Source	Yes
D	99	PSB Credit Services, Inc.	561 Collier Rd.	Auburn Hills	Oakland	48326	4953		SIU	SIU	32,000.00	Continuous	11/28/2018	200	160	Significant Source	Yes
O	101	Racer Trust (Groundwater)	13000 Eckles Road	Livonia	Wayne					Groundwater	726,850	Continuous	5/24/2018	5	86	Significant Source	Yes
D	103	Richcoat, L.L.C.	40573 Brentwood	Sterling Heights	Macomb	48310	3471	332813	CIU	433.A.17(a) (PSNS) Metal Finishing	12,900.00	Continuous	10/22/2018	ND	30	Significant Source	Yes
D	105	RJL Equity Holdings, LLC	4430 Lapeer Road	Auburn Hills	Oakland	48326	4953		SIU	SIU	6,000.00	Continuous	11/2/2018	ND	20	Significant Source	Yes
O	109	Selfridge Air National Guard Base	127 WG/CE 28890 Selfridge Avenue	Selfridge ANGB	Macomb	48045	9999		SIU	SIU	153,264	Continuous	5/15/2018	21	240	Significant Source	Yes
O	110	Selfridge Plating, Inc.	42081 Irwin Road	Harrison Twsp.	Macomb	48045	3471	332813	CIU	433.A.17(a) (PSNS) Metal Finishing 413.A.14(c)(g), 413.D.44(c)(g), 413.E.54(c)(g); (PSES); Electroplating Discharging >10,000 gpd	17,617	Continuous	9/17/2018	ND	30	Significant Source	Yes
D	112	South Macomb Disposal Authority	21290 - 24 Mile Road	Macomb	Macomb	48042	4953	562212	SIU	SIU	69,928.00	Continuous	10/25/2018	30	20	Significant Source	Yes
D	113	Southeastern Oakland County Resource Recovery Authority	1741 School Rd.	Rochester Hills	Oakland	48309	4953		SIU	SIU	37,400.00	Continuous	11/28/2018	30	40	Significant Source	Yes
N	127	US Ecology Michigan, Inc.	6520 Georgia Street	Detroit	Wayne	48211-1661	4953	562211	CIU	437.D.46b.1 (PSES) Centralized Waste Treatment	75,000	Batch	10/15/2018	ND	30	Significant Source	Yes
O	128	Usher Oil Company	9000 Roselawn Street	Detroit	Wayne	48204	5093	562219	CIU	437.D.46e (PSES) Centralized Waste Treatment	340,000	Batch	9/11/2018	40	120	Significant Source	Yes
M	129	Waste Management of MI, Inc.-Eagle Valley Recycle & Disposal	600 W. Silverbell Road	Orion	Oakland	48359	4953		SIU	Landfill	29,537	Continuous	11/20/2018		170	Significant Source	Yes
M	130	Waste Management of MI, Inc.-Woodland Meadows North Landfill	4620 Hannan Road	Wayne	Wayne	48184	4953	562212	SIU	Landfill	14,917	Continuous	11/20/2018	150	57	Significant Source	Yes



ATTACHMENT 6

**Attachment 6 - PFOA and PFAS Sample Data Received by GLWA as of September 15, 2019**

Industry Number	Industry Name	Sample Number	Industry No	Sample Date	PFOS (ng/l)	PFOA (ng/l)
1	561 Collier, Inc. (PSB Credit Services)	S05093.02	96731	7/22/2019	220	230.00
2	A. G. Simpson (USA) Inc.	S02150.01	92724	5/13/2019	1300	ND
	A. G. Simpson (USA) Inc.	92724-011119-01	92724	1/11/2019	58.2	1.87
3	Advanced Disposal Services Solid Waste Midwest, Inc.	S00378.01	27555	3/25/2019	170	49
4	Aevitas Specialty Services Corp.	IU_05072019	94645	5/7/2019	2300	47
	Aevitas Specialty Services Corp.	S01894.11	94645	5/7/2019	8400	170
5	Arted Chrome Plating Inc.	S03350.01	27589	6/11/2019	ND	ND
6	A-W Custom Chrome, Inc.	S02434.02	27254	5/20/2019	230	ND
	A-W Custom Chrome, Inc.	27254-050219-01	27254	5/2/2019	<10	<10
	A-W Custom Chrome, Inc.	27254-050819-01	27254	5/8/2019	43	<11
	A-W Custom Chrome, Inc.	27254-051619-01	27254	5/16/2019	<9.7	<9.7
7	Beacon Park Finishing, LLC	S02150.07	97177	5/14/2019	21	ND
	Beacon Park Finishing, LLC	97177-051019-01	97177	5/10/2019	<9.6	<9.6
	Beacon Park Finishing, LLC	97177-051719-01	97177	5/17/2019	<9.8	<9.8
	Beacon Park Finishing, LLC	97177-052319-01	97177	5/23/2019	<10	<10
	Beacon Park Finishing, LLC	97177-060719-01	97177	6/7/2019	<9.7	<9.7
	Beacon Park Finishing, LLC	97177-061419-01	97177	6/14/2019	<9.5	<9.5
	Beacon Park Finishing, LLC	97177-062819-01	97177	6/28/2019	<9.9	<9.9
	Beacon Park Finishing, LLC	97177-071019-01	97177	7/10/2019	<9.6	<9.6
8	Chor Industries Inc.	S01894.05	27566	5/6/2019	27	ND
9	Cintas Corporation - Westland	S02150.02	27522	5/13/2019	35	36
	Cintas Corporation - Westland	IU-20190417 PFAS	27522	4/17/2019	<13	<9.6
	Cintas Corporation - Westland	IU-20190418 PFAS	27522	4/18/2019	<9.3	11
	Cintas Corporation - Westland	IU-20190419 PFAS	27522	4/19/2019	<25	11
	Cintas Corporation - Westland	IU-20190422 PFAS	27522	4/22/2019	<20	11
	Cintas Corporation - Westland	IU-20190423 PFAS	27522	4/23/2019	<17	11
10	City of Livonia - Type III Landfill	S01894.01	27487	5/6/2019	33	26
11	City of Pontiac	S05093.01	93175	7/22/2019	27	58
12	Clean Earth of Michigan, LLC.	S01303.01	91572	4/25/2019	7100	1200
	Clean Earth of Michigan, LLC.	IU_05082019	91572	5/8/2019	65	400
	Clean Earth of Michigan, LLC.	IU_05152019	91572	5/15/2019	110	430
	Clean Earth of Michigan, LLC.	IU_05222019	91572	5/22/2019	130	300
	Clean Earth of Michigan, LLC.	S02611.02	91572	5/28/2019	900	1600
	Clean Earth of Michigan, LLC.	IU_05292019	91572	5/29/2019	97	430
	Clean Earth of Michigan, LLC.	IU_06052019	91572	6/5/2019	250	480
	Clean Earth of Michigan, LLC.	IU_06122019	91572	6/12/2019	67	330
	Clean Earth of Michigan, LLC.	IU_06262019	91572	6/26/2019	83	700
	Clean Earth of Michigan, LLC.	IU_07092019	91572	7/9/2019	180	100
	Clean Earth of Michigan, LLC.	IU_07242019	91572	7/24/2019	320	690
	Clean Earth of Michigan, LLC.	IU_08082019	91572	8/8/2019	81	660
13	Closed Waterford Hills Landfill/MDEQ, RRD	S01589.01	27572	4/29/2019	12	58
14	Color Coat Plating Company	S01894.04	27739	5/6/2019	25	ND
	Color Coat Plating Company	IU-20190531 PFAS	27739	5/31/2019	ND	ND
15	Dana Container, Inc. Tank Cleaning Division	S01894.08	27353	5/6/2019	640	210
16	Detroit Chrome, Inc. dba DCI Aerotech	S02434.05	27434	5/20/2019	19000	ND
	Detroit Chrome, Inc. dba DCI Aerotech	IU-05232019	27434	5/23/2019	ND	ND
	Detroit Chrome, Inc. dba DCI Aerotech	IU-06072019	27434	6/7/2019	ND	ND
	Detroit Chrome, Inc. dba DCI Aerotech	IU-06142019	27434	6/14/2019	ND	ND
	Detroit Chrome, Inc. dba DCI Aerotech	IU-07032019	27434	7/3/2019	140	ND
	Detroit Chrome, Inc. dba DCI Aerotech	IU-07102019	27434	7/10/2019	700	ND
17	Detroit Diesel Corporation	S02611.03	27435	5/28/2019	49	26
18	Domestic Uniform Rental	S01894.06	27584	5/6/2019	51	13
	Domestic Uniform Rental	IU_20190510PFAS	27584	5/10/2019	46	61
19	EnviroSolids, L.L.C.	IU-01082019	94075	1/8/2019	64	170
	EnviroSolids, L.L.C.	IU-02122019	94075	2/12/2019	39	110
	EnviroSolids, L.L.C.	IU-03012019	94075	3/1/2019	42	120
	EnviroSolids, L.L.C.	IU-04022019	94075	4/2/2019	33	100
	EnviroSolids, L.L.C.	IU-05022019	94075	5/2/2019	36	110
	EnviroSolids, L.L.C.	IU-05072019	94075	5/7/2019	31	70
	EnviroSolids, L.L.C.	IU-05132019	94075	5/13/2019	24	94
	EnviroSolids, L.L.C.	IU-05242019	94075	5/24/2019	30	76
	EnviroSolids, L.L.C.	IU-05312019	94075	5/31/2019	24	83
	EnviroSolids, L.L.C.	IU-06042019	94075	6/4/2019	29	80
	EnviroSolids, L.L.C.	S03350.02	94075	6/11/2019	120	320
	EnviroSolids, L.L.C.	IU-06112019	94075	6/11/2019	27	76
	EnviroSolids, L.L.C.	IU-06182019	94075	6/18/2019	25	69
20	EQ Detroit dba US Ecology	IU-05032019	91964	5/3/2019	250	42
	EQ Detroit dba US Ecology	S01894.12	91964	5/7/2019	200	330
	EQ Detroit dba US Ecology	IU-05152019	91964	5/10/2019	80	79
	EQ Detroit dba US Ecology	IU-05182019	91964	5/18/2019	100	110

**Attachment 6 - PFOA and PFAS Sample Data Received by GLWA as of September 15, 2019**

Industry Number	Industry Name	Sample Number	Industry No	Sample Date	PFOS (ng/l)	PFOA (ng/l)
	EQ Detroit dba US Ecology	IU-05242019	91964	5/24/2019	310	240
	EQ Detroit dba US Ecology	IU-05312019	91964	5/31/2019	130	120
	EQ Detroit dba US Ecology	IU-06072019	91964	6/7/2019	92	180
	EQ Detroit dba US Ecology	IU-06142019	91964	6/14/2019	110	20
	EQ Detroit dba US Ecology	IU-06212019	91964	6/21/2019	83	53
	EQ Detroit dba US Ecology	IU-07022019	91964	7/2/2019	200	91
	EQ Detroit dba US Ecology	IU-07152019	91964	7/15/2019	220	310
	EQ Detroit dba US Ecology	IU-07192019	91964	7/19/2019	28	29
21	Ford Motor Company - Allen Park Clay Mine Landfill	1823580	27416	3/27/2019	150	34
	Ford Motor Company - Allen Park Clay Mine Landfill	S01894.03	27416	5/6/2019	ND	ND
22	Ford Motor Company - Dearborn Truck Plant	S01894.09	27417	5/7/2019	230	27
	Ford Motor Company - Dearborn Truck Plant	27417-020419-01	27417	2/4/2019	1.7	1.7
	Ford Motor Company - Dearborn Truck Plant	27417-022019-01	27417	2/20/2019	1.9	1.9
	Ford Motor Company - Dearborn Truck Plant	IU_2019Feb21	27417	2/21/2019	8.9	4.4
	Ford Motor Company - Dearborn Truck Plant	27417-040919-01	27417	4/9/2019	3.7	6.5
	Ford Motor Company - Dearborn Truck Plant	27417-051419-01	27417	5/14/2019	1.2	3
	Ford Motor Company - Dearborn Truck Plant	27417-060419-01	27417	6/4/2019	1.9	1.9
23	G2O Energy, LLC	IU-20190503 PFAS	96937	5/3/2019	<10	<5
24	General Motors LLC., Orion Assembly	S01589.02	93957	4/29/2019	ND	ND
25	GST Auto Leather, Inc.	IU_20190501PFAS	92614	5/1/2019	<9.8	15
	GST Auto Leather, Inc.	S02434.06	92614	5/20/2019	ND	16
	GST Auto Leather, Inc.	IU_20190529PFAS	92614	5/29/2019	<11	15
	GST Auto Leather, Inc.	IU_20190627PFAS	92614	6/27/2019	<10	15
26	Hajjar Plating Services, Inc.	S02150.03	27539	5/13/2019	110	ND
27	International Hardcoat Inc.	S02434.04	27462	5/20/2019	87	ND
28	Lear Corporation dba Eagle Ottawa	S02611.04	97133	5/28/2019	ND	43
29	MacDermid, Inc.	S02150.10	27625	5/15/2019	2400	ND
	MacDermid, Inc.	IU_05162019	27625	5/16/2019	24000	74
	MacDermid, Inc.	IU_05162019_2	27625	5/16/2019	58000	ND
	MacDermid, Inc.	IU_05292019	27625	5/29/2019	290000	ND
	MacDermid, Inc.	IU_06202019	27625	6/20/2019	7400	nd
30	Marathon Petroleum Company, LP	IU_20190403	27370	4/3/2019	180	4.8
	Marathon Petroleum Company, LP	S01894.10	27370	5/7/2019	220	13
	Marathon Petroleum Company, LP	IU_20190522	27370	5/22/2019	380	35
	Marathon Petroleum Company, LP	IU_20190606	27370	6/6/2019	320	12
	Marathon Petroleum Company, LP	IU_PFAS_20190709_A	27370	7/9/2019	140	17
	Marathon Petroleum Company, LP	IU_PFAS_20190709_B	27370	7/8/2019	150	18
	Marathon Petroleum Company, LP	IU_PFAS_20190808_A	27370	8/8/2019	150	18
	Marathon Petroleum Company, LP	IU_PFAS_20190808_B	27370	8/8/2019	710	10
31	McGean-Rohco, Inc.	IU_20190404PFAS	27514	4/4/2019	1100	ND
	McGean-Rohco, Inc.	S02434.07	27514	5/20/2019	ND	52
32	Oakland Heights Development, Inc.	S04492.01	27570	7/11/2019	74	310
33	Pine Tree Acres, Inc.	S02150.11	90694	5/16/2019	320	1400
34	RACER Trust site/ Former GM Livonia	SDS-20190430	94508	4/30/2019	95	4.1
	RACER Trust site/ Former GM Livonia	SDS-20190523	94508	5/23/2019	100	5.2
35	Richcoat, L.L.C.	S02150.09	27168	5/14/2019	19	ND
	Richcoat, L.L.C.	27168-072619-01	27168	7/26/2019	17	<9.3
	Richcoat, L.L.C.	27168-082319-01	27168	8/23/2019	16	<10
36	RJL Equity Holdings, LLC	S02150.06	96607	5/13/2019	20	52
37	Selfridge Air National Guard Base	S05319.01	27167	7/29/2019	1200	33
38	Selfridge Plating, Inc.	S01589.04	27251	4/30/2019	13	ND
	Selfridge Plating, Inc.	CK01219	27251	5/9/2019	<9.5	<9.5
	Selfridge Plating, Inc.	27251-071119-01	27251	7/11/2019	17	<9.4
39	South Macomb Disposal Authority	S01589.05	94478	4/30/2019	32	33
	South Macomb Disposal Authority	94478-052819-01	94478	5/28/2019	43	50
40	Southeastern Oakland County Resource Recovery Authority	S02150.12	94089	5/16/2019	120	37
41	Sterling Metal Finishing	S00378.03	27330	3/27/2019	ND	ND
42	Strength Environmental, LLC	IU-01032019	27488	1/3/2019	<10	47
	Strength Environmental, LLC	IU-01102019	27488	1/10/2019	<10	140
	Strength Environmental, LLC	IU-01152019	27488	1/15/2019	<10	56
	Strength Environmental, LLC	IU-01252019	27488	1/25/2019	<10	43
	Strength Environmental, LLC	IU-02072019	27488	2/7/2019	<10	7.4
	Strength Environmental, LLC	IU-02152019	27488	2/15/2019	27	190
	Strength Environmental, LLC	IU-02282019	27488	2/28/2019	<10	180
	Strength Environmental, LLC	IU-03082018	27488	3/8/2019	<10	76
	Strength Environmental, LLC	IU-03152019	27488	3/15/2019	<10	240
	Strength Environmental, LLC	IU-03222019	27488	3/22/2019	<10	300
	Strength Environmental, LLC	IU-03272019	27488	3/27/2019	<10	110
	Strength Environmental, LLC	IU-04052019	27488	4/5/2019	<10	200
	Strength Environmental, LLC	IU-04092019	27488	4/9/2019	<10	110

Note: Sample Number Key = S\*\*\*\*\* is a GLWA Sample Number; IU-\*\*\*\*\* is a self-monitoring sample number

As of 9/15/2019

**Attachment 6 - PFOA and PFAS Sample Data Received by GLWA as of September 15, 2019**

Industry Number	Industry Name	Sample Number	Industry No	Sample Date	PFOS (ng/l)	PFOA (ng/l)
	Strength Environmental, LLC	IU-04182019	27488	4/18/2019	<10	<5
	Strength Environmental, LLC	IU-04192019	27488	4/19/2019	<10	9.2
	Strength Environmental, LLC	IU-04242019	27488	4/24/2019	<10	19
	Strength Environmental, LLC	IU-05012019	27488	5/1/2019	<10	56
	Strength Environmental, LLC	IU-05092019	27488	5/9/2019	14	180
	Strength Environmental, LLC	S02150.08	27488	5/14/2019	96	710
	Strength Environmental, LLC	IU-05152019	27488	5/15/2019	11	160
	Strength Environmental, LLC	IU-05212019	27488	5/21/2019	24	240
	Strength Environmental, LLC	IU-05292019	27488	5/29/2019	57	280
	Strength Environmental, LLC	IU-07162019	27488	7/16/2019	64	
43	US Ecology Michigan, Inc.	IU_05012019	27310	5/1/2019	140	22
	US Ecology Michigan, Inc.	S01894.13	27310	5/8/2019	190	110
	US Ecology Michigan, Inc.	IU_05142019	27310	5/14/2019	69	53
	US Ecology Michigan, Inc.	IU_05242019	27310	5/24/2019	530	140
	US Ecology Michigan, Inc.	IU_05292019	27310	5/29/2019	220	70
	US Ecology Michigan, Inc.	IU_06052019	27310	6/5/2019	170	34
	US Ecology Michigan, Inc.	IU_06142019	27310	6/14/2019	180	7.9
	US Ecology Michigan, Inc.	IU_07032019	27310	7/3/2019	160	NA
44	US Ecology Romulus, Inc.	IU-02222019	27517	2/22/2019	NA	180
	US Ecology Romulus, Inc.	IU-05242019	27517	5/24/2019	340	170
	US Ecology Romulus, Inc.	IU-05282019	27517	5/28/2019	350	110
	US Ecology Romulus, Inc.	IU-06072019	27517	6/7/2019	65	100
	US Ecology Romulus, Inc.	IU-06172019	27517	6/17/2019	67	170
	US Ecology Romulus, Inc.	S05319.02	27517	7/30/2019	390	0.00
45	Usher Oil Company	S01894.07	27449	5/6/2019	160	66
	Usher Oil Company	IU_05312019	27449	5/31/2019	34	28
	Usher Oil Company	IU_06022019	27449	6/2/2019	190	33
	Usher Oil Company	IU_06242019	27449	6/24/2019	59	57
	Usher Oil Company	IU_06252019	27449	6/25/2019	130	41
	Usher Oil Company	IU_06262019	27449	6/26/2019	85	30
	Usher Oil Company	IU_07192019	27449	7/19/2019	170	63
	Usher Oil Company	IU_07242019	27449	7/24/2019	73	37
	Usher Oil Company	IU_07262019	27449	7/26/2019	72	60
	Usher Oil Company	IU_07292019	27449	7/29/2019	16	29
46	Waste Management of MI, Inc.-Woodland Meadows North Landfill	S02150.05	27499	5/13/2019	140	630
	Waste Management of MI, Inc.-Woodland Meadows RDF-Van Buren	S02150.04	27484	5/13/2019	490	2800
47	Waste Management of MI, Inc.-Eagle Valley Recycle & Disposal	S01589.03	27573	4/29/2019	190	680
48	Wolverine Plating Corporation	IU_05102019	27144	5/10/2019	<1.8	<1.8
	Wolverine Plating Corporation	IU_05172019	27144	5/17/2019	<21	<21
	Wolverine Plating Corporation	S02434.03	27144	5/20/2019	78	11
	Wolverine Plating Corporation	IU_05202019	27144	5/20/2019	<5.5	<5.7
	Wolverine Plating Corporation	IU_06202019	27144	6/20/2019	<9	<9
49	Z Technologies Corporation	S01894.02	27478	5/6/2019	120	57
	Z Technologies Corporation	IU_20190717PFAS	27478	7/17/2019	<10	<5
50	MDOT-Parcel 5348	5348-EB01-20190118	30007	1/18/2019	14.00	29.00
	MDOT-Parcel 5348	5348-EB01-20190205	30007	2/5/2019	ND	ND
	MDOT-Parcel 5348	5348-EB01-20190220	30007	2/20/2019	ND	7.40
	MDOT-Parcel 5348	5348-EB01-20190308	30007	3/8/2019	ND	ND

ATTACHMENT 7



Attachment 7: October 2019 Progress Assessment Summary																			
Report_month	Industri_Class	User #	Facility Name	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Reclassification Requested?	Reclassification Established?	BMP Submitted	BMP Incorporated into CA or Permit?	Date	Sample Results Available (See attachment 6)	Facility Reported Progress?	How?	GLWA Review - Progress Made?	How?
							420	11		Y/N	Y/N	Y/N			Y/N	Y/N		Y/N	
D	ElectroPlating/Metal Finishing	23	Chor Industries Inc.	12,303.00	Continuous	10/30/2018	ND	250	Significant Source	N	N	Yes	CA	5/1/2019	Yes	N/A		N/A	
N	ElectroPlating/Metal Finishing	27	Color Coat Plating Company	1,139	Batch	9/26/2018	ND	230	Significant Source			Yes	CA	7/5/2019	Yes	Yes	Treatment system Proposed	Yes	Design after 6-mo evaluation period
D	ElectroPlating/Metal Finishing	28	Controlled Power Company	551.00	Batch	10/30/2018	ND	20	Significant Source			Yes	CA		No	N/A		N/A	
O	ElectroPlating/Metal Finishing	36	Detroit Chrome Electro Forming Co.	2,180	Batch	9/25/2018	ND	9750	Significant Source	NA	NA	Yes	CA	None	Yes	Yes	Pilot Treatment system	Yes	Final Treatment in Design
N	ElectroPlating/Metal Finishing	58	Ford Motor Company - Dearborn Truck Plant	534,878	Batch	10/15/2018	30	50	Significant Source Probable			Yes	CA		Yes	N/A		N/A	
O	ElectroPlating/Metal Finishing	65	General Motors Company (Hamtramck)	488,199	Batch	8/13/2018	ND	ND	Significant Source			N	N						
D	ElectroPlating/Metal Finishing	66	General Motors LLC., Orion Assembly	293,736.00	Continuous	11/1/2018	ND	30	Significant Source				RECLASSIFIED		Yes	N/A			Remove
O	ElectroPlating/Metal Finishing	69	Hajjar Plating Services, Inc.	1,400	Continuous	8/8/2018	ND	370	Significant Source	NA	NA	Yes	CA		Yes	Yes	Treatment system	Yes	GAC
O	ElectroPlating/Metal Finishing	79	International Hardcoat Inc.	60,000	Continuous	9/11/2018	ND	20	Significant Source			Yes	CA		Yes	N/A		N/A	
D	ElectroPlating/Metal Finishing	103	Richcoat, L.L.C.	12,900.00	Continuous	10/22/2018	ND	30	Significant Source	NA	NA	Yes	CA		Yes	N/A		N/A	
O	ElectroPlating/Metal Finishing	110	Selfridge Plating, Inc.	17,617	Continuous	9/17/2018	ND	30	Significant Source	NA	NA	Yes	CA	7/29/2019	Yes	N/A		N/A	
O	ElectroPlating/Metal Finishing	137	Wolverine Plating Corporation	114,150	Continuous	9/10/2018	ND	60	Significant Source	Y	N	Yes	CA	5/6/2019	Yes	N/A		N/A	
O	Groundwater	100	Racer Trust (Groundwater)	726,850	Continuous	5/24/2018	5	86	Significant Source			Yes	CA		Yes	N/A		N/A	
J, F	Groundwater	142	MDOT - Parcel 5348	320,000.00	Continuous	1/18/2019	29	14	Significant Source				CA				GAC System	Yes	Completed. To be removed
N	Landfill	25	City of Livonia - Type III Landfill	16,000	Continuous	10/15/2018	50	100	Significant Source			Yes	CA		Yes	N/A		N/A	
N	Landfill	26	City of Pontiac	97,000	Continuous	10/5/2018	75	15	Significant Source	N	N	Yes	CA		Yes	N/A		N/A	
	Landfill	56	Ford Motor Company - Allen Park Clay Mine Landfill	35,020	Continuous		50	160	Significant Source			Yes	CA		Yes	N/A		N/A	
O	Landfill	93	Oakland Heights Development, Inc.	30,097	Continuous	9/12/2018	840	700	Significant Source			Yes	CA		Yes	N/A		N/A	
	Landfill	95	Pine Tree Acres, Inc.	161,215.0	Continuous	11/20/2018	430	1800	Significant Source			Yes	CA		Yes	N/A		N/A	
D	Landfill	98	PSB Credit Services, Inc. 561 Collier Rd	32,000.00	Continuous	11/28/2018	200	160	Significant Source	N	N	Yes	CA	6/27/2019	No	N/A		N/A	
D	Landfill	105	RJL Equity Holdings, LLC	6,000.00	Continuous	11/2/2018	ND	20	Significant Source						Yes	N/A		N/A	
D	Landfill	113	South Macomb Disposal Authority	69,928.00	Continuous	10/25/2018	30	20	Significant Source			Yes	CA		No	N/A		N/A	
D	Landfill	114	Southeastern Oakland County Resource Recovery Authority	37,400.00	Continuous	11/28/2018	30	40	Significant Source			Yes	CA		Yes	N/A		N/A	
M	Landfill	130	Waste Management of MI, Inc.-Eagle Valley Recycle & Disposal	29,537	Continuous	11/20/2018	170	490	Significant Source			Yes	CA		Yes	N/A		N/A	

Attachment 7: October 2019 Progress Assessment Summary																			
Report_month	Industri_Class	User #	Facility Name	IU Flow to WWTP (GPD)	Continuous or Batch discharger?	Sample Date	PFOA result (ng/l)	PFOS result (ng/l)	Classification	Reclassification Requested?	Reclassification Established?	BMP Submitted	BMP Incorporated into CA or Permit?	Date	Sample Results Available (See attachment 6)	Facility Reported Progress?	How?	GLWA Review - Progress Made?	How?
							420	11		Y/N	Y/N	Y/N			Y/N	Y/N		Y/N	
M	Landfill	131	Waste Management of MI, Inc.-Woodland Meadows North Landfill	14,917	Continuous	11/20/2018	150	57	Significant Source			Yes	CA		Yes	N/A		N/A	
M	Landfill	132	Waste Management of MI, Inc.-Woodland Meadows RDF-Van Buren	36,025	Continuous	11/20/2018	510	2000	Significant Source			Yes	CA		Yes	N/A		N/A	
O	Landfill	133	Waterford Hills Landfill/MDEQ, RRD	2,000	Continuous	8/2/2018	680	130	Significant Source			Yes	PERMIT	N	No	Yes	Treatment installed	Yes	GAC & Anion Exchange resin
O	Laundry	24	Cintas Corporation - Westland	71,183	Continuous	9/11/2018	ND	40	Significant Source			Yes	CA	7/2/2019	Yes	Yes	Solids hauled away	N/A	
O	Laundry	42	Domestic Uniform Rental	64,276	Continuous	9/10/2018	20	50	Significant Source	N	N	Yes	CA	5/31/2019	Yes	N/A		N/A	
O	Leather		Lear Corporation dba Eagle Ottawa			9/21/2018	43	14	Significant Source						Yes	N/A		N/A	
O	Other	1	3M Company	15,585	Continuous	8/20/2018	ND	<9.28	Probable Significant Source			Yes	N		No	N/A		N/A	
N	Other	37	Detroit Diesel Corporation	117,400	Continuous	9/28/2018	5.3	11	Significant Source			Yes	CA	6/20/2019	Yes	Yes	Source identified	N/A	
N	Other	63	G2O Energy, LLC			10/15/2018	ND	10	Significant Source			Yes	CA	6/28/2019	Yes	N/A		N/A	
N	Paint	141	Z Technologies Corporation	510	Continuous	10/15/2018	20	60	Significant Source	N	N	Yes	CA	5/7/2019	Yes	N/A		N/A	
O	Refining	84	Marathon Petroleum Company, LP	1,718,849	Continuous	6/27/2018	30	360	Significant Source	N	N	Yes	PERMIT	5/1/2019	Yes	Yes	Source identified	Yes	C8 replaced with C6
O	Tank	31	Dana Container, Inc. Tank Cleaning Division	12,950	Batch	9/10/2018	280	140	Significant Source	N	NA	Yes	CA	4/30/2019	Yes	N/A		N/A	

ATTACHMENT 8

## Attachment 8.1 – Guidance Information for General Users: Best Management Program Plans - PFAS Compounds

Any permittee who has been identified as a significant source or potential significant source of PFAS Compounds shall submit a Best Management Plan (BMP) with the information specified below, within 90 days or by March 31, 2019.

Upon receipt, the BMP shall be reviewed and used to develop a modified Wastewater Discharge Permit with appropriate conditions and requirements. As necessary, the permittee shall provide an updated Wastewater Discharge Permit Modification (Permit Application form), so that conditions and requirements may include, where appropriate, self-monitoring; compliance standards, and other requirements for PFOS and PFOA.

### Minimum Information Requirements to Support a BMP:

1. Best Management Program Plans (BMP) - The permittee shall develop, maintain and implement a comprehensive program as part of its PFAS Monitoring and Management plan that include treatment methods employed, sampling protocols used, percentage removal, BMP and other Management protocols; for the control, reduction and elimination of PFAS. The program is subject to inspection by GLWA during permittee's annual onsite Comprehensive Inspection. The permittee will review and update its PFAS Monitoring and Management Plan on an annual basis for any changes to its program. The permittee will also update its Waste Analysis Plan to include treatment of PFAS substances. The permittee shall provide a written documentation that it has complied with this requirement and it shall be included with every December Six Month Report.
2. Additional Monitoring and Source Investigation – The GLWA understands that your classification as a significant source or potential significant source of PFAS Compounds is based upon a limited number of sample results and that additional monitoring, analysis and investigations may be needed as part of a comprehensive BMP.
  - i. A permittee who intends to pursue additional monitoring and source investigations shall develop an approvable schedule as part of their BMP;
  - ii. A permittee who does not intend to pursue additional monitoring and source investigations shall indicate so as part of their BMP.
3. Treatment & Removal Capabilities – Where the discharge contributions equal or exceed the compliance standards<sup>1</sup> (PFOS – 60 ng/l and PFOA 2300 ng/l):
  - i. The permittee shall provide a description of the waste and wastewater treatment technologies and/or disposal protocols to be used at the facility for the treatment of waste and wastewaters containing PFAS substances.
  - ii. The permittee shall provide documentation showing its capability to treat wastes and wastewaters containing PFAS Substances based upon the treatment technology(ies) described in paragraph A(i). Such documentation includes but is not limited to treatises, bench-scale treatment models, actual self-monitoring data or equivalent methods. This demonstration must, at a minimum, establish the removal efficiencies expected to be achieved; the volume(s) of waste or wastewater processed for the demonstration and analytical results to calculate the mass loadings of PFAS substances before and after treatment.
  - iii. Where the discharge does not exceed the GLWA's compliance standard, the specifications of subparagraphs I and ii are optional. As appropriate, the permittee shall indicate this as part of their BMP.

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<sup>1</sup> Compliance Standards have been calculated as preliminary maximum allowable discharge concentrations until such time as a formal local limits evaluation study has been completed.

## Attachment 8.1 – Guidance Information for General Users: Best Management Program Plans - PFAS Compounds

4. Self-Monitoring Program
  - i. The permittee shall propose a self-monitoring program for all parameters identified in Table 1 below. Currently, GLWA proposes weekly sampling for PFAS Compounds, but will consider alternative proposals.
  - ii. Compliance standards may be developed and incorporated into Wastewater Discharge Permits at the discretion of GLWA.
5. Record-keeping
  - i. The permittee shall develop and maintain records of the source, volume, and any characterization data collected for specific wastes and wastewaters. The permittee shall maintain this information for onsite inspection by the GLWA and, at a minimum, include calculation of the loading (pounds) received, the loading (pounds) discharged and loading (pounds) disposed off-site per month; and
  - ii. The permittee shall develop and maintain records for the disposal of any liquids or solids resulting from the treatment of PFAS substances. Such information shall be made available for onsite inspection upon request by GLWA.
6. Permit Modifications – GLWA will review and evaluate the BMP and determine applicable permit conditions and requirements to acknowledge and implement the BMP.

Attachment 8.1 – Guidance Information for General Users: Best  
Management Program Plans - PFAS Compounds

**Table 1 - Compliance Standards For Per and Polyfluoroalkyl Substances:**

Perfluorobutanoic acid (PFBA)	Report	TBD
Perfluoropentanoic acid (PFPeA)	Report	TBD
Perfluorohexanoic acid (PFHxA)	Report	TBD
Perfluoroheptanoic acid (PFHpA)	Report	TBD
Perfluorooctanoic acid (PFOA)	<i>TBD</i> µg/l	TBD
Perfluorononanoic acid (PFNA)	Report	TBD
Perfluorodecanoic acid (PFDA)	Report	TBD
Perfluoroundecanoic acid (PFUnDA)	Report	TBD
Perfluorododecanoic acid (PFDoDA)	Report	TBD
Perfluorotridecanoic acid (PFTrDA)	Report	TBD
Perfluorotetradecanoic acid (PFTeDA)	Report	TBD
Perfluorobutane Sulfonic acid (PFBS)	Report	TBD
Perfluoropentane Sulfonic acid (PFPeS)	Report	TBD
Perfluorohexane Sulfonic acid (PFHxS)	Report	TBD
Perfluoroheptane Sulfonic acid (PFHpS)	Report	TBD
Perfluorooctane Sulfonic acid (PFOS)	<i>TBD</i> µg/l	TBD
Perfluorononane Sulfonic acid (PFNS)	Report	TBD
Perfluorodecane Sulfonic acid (PFDS)	Report	TBD
Perfluorooctane sulfonamide (FOSA)	Report	TBD
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	Report	TBD
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	Report	TBD
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	Report	TBD
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	Report	TBD
N-Methyl perfluorooctane sulfonamide (N- MeFOSA)	Report	TBD

## Attachment 8.2 -Guidance Information: Centralized Waste Treatment Facility and Additional Wastewater Discharge Permit PFAS Compound Conditions

Option #1: A Centralized Waste Treatment Facility who intends to process and discharge wastewater containing Per and Polyfluoroalkyl Substances (PFAS) shall submit Best Management Plan (BMP) with the information specified below, within 90 days or by March 31, 2019.

Upon receipt, the BMP shall be reviewed and used to develop a modified Wastewater Discharge Permit with appropriate conditions and requirements. As necessary, the CWT shall provide an updated Wastewater Discharge Permit Modification (Permit Application form), so that conditions and requirements may include, where appropriate, self-monitoring; compliance standards, and other requirements for PFOS and PFOA.

### Minimum Information Requirements to Support a BMP:

1. Best Management Program Plans (BMP) - The permittee shall develop, maintain and implement a comprehensive program as part of its PFAS Monitoring and Management plan that include treatment methods employed, sampling protocols used, percentage removal, BMP and other Management protocols; for the control, reduction and elimination of PFAS. The program is subject to inspection by GLWA during permittee's annual onsite Comprehensive Inspection. The permittee will review and update its PFAS Monitoring and Management Plan on an annual basis for any changes to its program. The permittee will also update its Waste Analysis Plan to include treatment of PFAS substances. The permittee shall provide a written documentation that it has complied with this requirement and it shall be included with every December Six Month Report.
2. Data and Information Investigation – Additional data may be necessary to quantify or size treatment and other requirements. The BMP shall include the steps to be taken and a brief schedule for accomplishing this task.
3. Treatment & Removal Capabilities – Where the discharge contributions equal or exceed the compliance standards<sup>2</sup> (PFOS – 60 ng/l and PFOA 2300 ng/l):
  - A. The permittee shall provide a description of the waste and wastewater treatment technologies and/or disposal protocols used at the facility for the treatment of waste and wastewaters containing PFAS substances.
  - B. The permittee shall provide documentation showing its capability to treat wastes and wastewaters containing PFAS Substances based upon the treatment technology(ies) described in paragraph 1. Such documentation includes but is not limited to treatises, bench-scale treatment models, actual self-monitoring data or equivalent methods. This demonstration must, at a minimum, establish the removal efficiencies expected to be achieved; the volume(s) of waste or wastewater processed for the demonstration and analytical results to calculate the mass loadings of PFAS substances before and after treatment.
4. Waste & Wastewater Characterization & Evaluation
  - A. The permittee shall develop, and implement, a screening and monitoring program for identifying and evaluating PFAS substances in waste and wastewater accepted for treatment. This program shall be made available for onsite review by GLWA, upon request.
  - B. The program description shall include the methods used for evaluating (fingerprinting) and characterizing wastes and wastewaters accepted for treatment.
  - C. At a minimum, the characterization of wastes and wastewaters shall be based on data

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<sup>2</sup> Compliance Standards have been calculated as preliminary maximum allowable discharge concentrations until such time as a formal local limits evaluation study has been completed.

Attachment 8.2 -Guidance Information: Centralized Waste Treatment  
Facility and Additional Wastewater Discharge Permit PFAS  
Compound Conditions

collected during the last 2 years

5. Self-Monitoring Program

- A. The permittee shall propose a self-monitoring program for all parameters identified in Table 1 below. Currently, GLWA proposes weekly sampling for PFAS Compounds, but will consider alternative proposals.
- B. Compliance standards may be developed and incorporated into Wastewater Discharge Permits at the discretion of GLWA.

6. Record-keeping

- A. The permittee shall develop and maintain records of the source, volume, and any characterization data collected for specific wastes and wastewaters. The permittee shall maintain this information for onsite inspection by the GLWA and, at a minimum, include calculation of the loading (pounds) received, the loading (pounds) discharged and loading (pounds) disposed off-site per month; and
- B. The permittee shall develop and maintain records for the disposal of any liquids or solids resulting from the treatment of PFAS substances. Such information shall be made available for onsite inspection upon request by GLWA.

7. Permit Modifications – GLWA will review and evaluate the BMP and determine applicable permit conditions and requirements to acknowledge and implement the BMP.

## Attachment 8.2 -Guidance Information: Centralized Waste Treatment Facility and Additional Wastewater Discharge Permit PFAS Compound Conditions

Option #2: A Centralized Waste Treatment Facility who **does not** intend to process and discharge wastewater containing Per and Polyfluoroalkyl Substances (PFAS) shall submit Best Management Plan (BMP) with the information specified below, within 90 days or by March 31, 2019.

Upon receipt, the BMP shall be reviewed and used to develop a modified Wastewater Discharge Permit with appropriate conditions and requirements. As necessary, the CWT shall provide an updated Wastewater Discharge Permit Modification (Permit Application form), so that conditions and requirements may include, where appropriate, self-monitoring; compliance standards, and other requirements for PFOS and PFOA.

### Minimum Information Requirements to Support a BMP:

1. Best Management Program Plans (BMP) - The permittee shall develop, maintain and implement a comprehensive program as part of its PFAS Monitoring and Management plan that include treatment methods employed, sampling protocols used, percentage removal, BMP and other Management protocols; for the control, reduction and elimination of PFAS. The program is subject to inspection by GLWA during permittee's annual onsite Comprehensive Inspection. The permittee will review and update its PFAS Monitoring and Management Plan on an annual basis for any changes to its program. The permittee will also update its Waste Analysis Plan to include treatment of PFAS substances. The permittee shall provide a written documentation that it has complied with this requirement and it shall be included with every December Six Month Report.
2. Data and Information Investigation – Additional data may be necessary to quantify or size treatment and other requirements. The BMP shall include the steps to be taken and a brief schedule for accomplishing this task.
3. Treatment & Removal Capabilities – Where the discharge contributions equal or exceed the compliance standards<sup>3</sup> (PFOS – 60 ng/l and PFOA 2300 ng/l):
  - A. The permittee shall provide a description of the waste and wastewater treatment technologies and/or disposal protocols used at the facility for the treatment of waste and wastewaters containing PFAS substances.
  - B. The permittee shall provide documentation showing its capability to treat wastes and wastewaters containing PFAS Substances based upon the treatment technology(ies) described in paragraph 1. Such documentation includes but is not limited to treatises, bench-scale treatment models, actual self-monitoring data or equivalent methods. This demonstration must, at a minimum, establish the removal efficiencies expected to be achieved; the volume(s) of waste or wastewater processed for the demonstration and analytical results to calculate the mass loadings of PFAS substances before and after treatment.
4. Waste & Wastewater Characterization & Evaluation
  - i. The permittee shall develop, and implement, a screening and monitoring program for identifying and evaluating PFAS substances in waste and wastewater accepted for treatment. This program shall be made available for onsite review by GLWA, upon request.
  - ii. The program description shall include the methods used for evaluating (fingerprinting) and characterizing wastes and wastewaters accepted for treatment.
  - iii. At a minimum, the characterization of wastes and wastewaters shall be based on

<sup>3</sup> Compliance Standards have been calculated as preliminary maximum allowable discharge concentrations until such time as a formal local limits evaluation study has been completed.

Attachment 8.2 -Guidance Information: Centralized Waste Treatment  
Facility and Additional Wastewater Discharge Permit PFAS  
Compound Conditions

data collected during the last 2 years

5. Self-Monitoring Program

- i. The permittee shall propose a self-monitoring program for all parameters identified in Table 1 below. Currently, GLWA proposes weekly sampling for PFAS Compounds, but will consider alternative proposals.
- ii. Compliance standards may be developed and incorporated into Wastewater Discharge Permits at the discretion of GLWA.

6. Record-keeping

- i. The permittee shall develop and maintain records of the source, volume, and any characterization data collected for specific wastes and wastewaters. The permittee shall maintain this information for onsite inspection by the GLWA; and
- ii. The permittee shall develop and maintain records for the disposal of any liquids or solids resulting from the treatment of PFAS substances. Such information shall be made available for onsite inspection upon request by GLWA.

7. Permit Modifications – GLWA will review and evaluate the BMP and determine applicable permit conditions and requirements to acknowledge and implement the BMP.

Attachment 8.2 -Guidance Information: Centralized Waste Treatment  
Facility and Additional Wastewater Discharge Permit PFAS  
Compound Conditions

**Table 1 - Compliance Standards For Per and Polyfluoroalkyl Substances:**

Perfluorobutanoic acid (PFBA)	Report	TBD
Perfluoropentanoic acid (PFPeA)	Report	TBD
Perfluorohexanoic acid (PFHxA)	Report	TBD
Perfluoroheptanoic acid (PFHpA)	Report	TBD
Perfluorooctanoic acid (PFOA)	<i>TBD</i> µg/l	TBD
Perfluorononanoic acid (PFNA)	Report	TBD
Perfluorodecanoic acid (PFDA)	Report	TBD
Perfluoroundecanoic acid (PFUnDA)	Report	TBD
Perfluorododecanoic acid (PFDoDA)	Report	TBD
Perfluorotridecanoic acid (PFTrDA)	Report	TBD
Perfluorotetradecanoic acid (PFTeDA)	Report	TBD
Perfluorobutane Sulfonic acid (PFBS)	Report	TBD
Perfluoropentane Sulfonic acid (PFPeS)	Report	TBD
Perfluorohexane Sulfonic acid (PFHxS)	Report	TBD
Perfluoroheptane Sulfonic acid (PFHpS)	Report	TBD
Perfluorooctane Sulfonic acid (PFOS)	<i>TBD</i> µg/l	TBD
Perfluorononane Sulfonic acid (PFNS)	Report	TBD
Perfluorodecane Sulfonic acid (PFDS)	Report	TBD
Perfluorooctane sulfonamide (FOSA)	Report	TBD
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	Report	TBD
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	Report	TBD
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	Report	TBD
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	Report	TBD
N-Methyl perfluorooctane sulfonamide (N- MeFOSA)	Report	TBD

## Attachment 8.3: Guidance Information: Landfills and Additional Wastewater Discharge Permit PFAS Compound Conditions

Option #1: An active landfill facility who intends to process and discharge wastewater containing Per and Polyfluoroalkyl Substances (PFAS) shall submit Best Management Plan (BMP) with the information specified below, within 90 days or by March 31, 2019.

Upon receipt, the BMP shall be reviewed and used to develop a modified Wastewater Discharge Permit with appropriate conditions and requirements. As necessary, the CWT shall provide an updated Wastewater Discharge Permit Modification (Permit Application form), so that conditions and requirements may include, where appropriate, self-monitoring; compliance standards, and other requirements for PFOS and PFOA.

### Minimum Information Requirements to Support a BMP:

1. Best Management Program Plans (BMP) - The permittee shall develop, maintain and implement a comprehensive program as part of its PFAS Monitoring and Management plan that include treatment methods employed, sampling protocols used, percentage removal, BMP and other Management protocols; for the control, reduction and elimination of PFAS. The program is subject to inspection by GLWA during permittee's annual onsite Comprehensive Inspection. The permittee will review and update its PFAS Monitoring and Management Plan on an annual basis for any changes to its program. The permittee will also update its Waste Analysis Plan to include treatment of PFAS substances. The permittee shall provide a written documentation that it has complied with this requirement and it shall be included with every December Six Month Report.
2. Data and Information Investigation – Additional data may be necessary to quantify or size treatment and other requirements. The BMP shall include the steps to be taken and a brief schedule for accomplishing this task.
3. Treatment & Removal Capabilities – Where the discharge contributions equal or exceed the compliance standards<sup>4</sup> (PFOS – 60 ng/l and PFOA 2300 ng/l):
  - A. The permittee shall provide a description of the waste and wastewater treatment technologies and/or disposal protocols to be used at the facility for the treatment of waste and wastewaters containing PFAS substances.
  - B. The permittee shall provide documentation showing its capability to treat wastes and wastewaters containing PFAS Substances based upon the treatment technology(ies) described in paragraph A(i). Such documentation includes but is not limited to treatises, bench-scale treatment models, actual self-monitoring data or equivalent methods. This demonstration must, at a minimum, establish the removal efficiencies expected to be achieved; the volume(s) of waste or wastewater processed for the demonstration and analytical results to calculate the mass loadings of PFAS substances before and after treatment.
4. Waste & Wastewater Characterization & Evaluation
  - A. The permittee shall develop, and implement, a screening and monitoring program for identifying and evaluating PFAS substances in waste and wastewater accepted for treatment. This program shall be made available for onsite review by GLWA, upon request.
  - B. The program description shall include the methods used for evaluating (fingerprinting) and characterizing wastes and wastewaters accepted for treatment.
  - C. At a minimum, the characterization of wastes and wastewaters shall be based on data

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<sup>4</sup> Compliance Standards have been calculated as preliminary maximum allowable discharge concentrations until such time as a formal local limits evaluation study has been completed.

## Attachment 8.3: Guidance Information: Landfills and Additional Wastewater Discharge Permit PFAS Compound Conditions

collected during the last 2 years

### 5. Self-Monitoring Program

- A. The permittee shall propose a self-monitoring program for all parameters identified in Table 1 below. Currently, GLWA proposes weekly sampling for PFAS Compounds, but will consider alternative proposals.
- B. Compliance standards may be developed and incorporated into Wastewater Discharge Permits at the discretion of GLWA.

### 6. Record-keeping

- A. The permittee shall develop and maintain records of the source, volume, and any characterization data collected for specific wastes and wastewaters. The permittee shall maintain this information for onsite inspection by the GLWA and, at a minimum, include calculation of the loading (pounds) received, the loading (pounds) discharged and loading (pounds) disposed off-site per month; and
  - B. The permittee shall develop and maintain records for the disposal of any liquids or solids resulting from the treatment of PFAS substances. Such information shall be made available for onsite inspection upon request by GLWA.
7. Additional Requirements or Conditions – The State of Michigan is working with other landfill operators in the state and may propose alternative or other conditions and requirements. Such information is not expected until after March 1, 2019. To the extent, that alternative or other requirements are recommended, the GLWA will consider and incorporate equivalent conditions and requirements in any Wastewater Discharge Permit.
8. Permit Modifications – GLWA will review and evaluate the BMP and determine applicable permit conditions and requirements to acknowledge and implement the BMP.

## Attachment 8.3: Guidance Information: Landfills and Additional Wastewater Discharge Permit PFAS Compound Conditions

Option #2: A active landfill facility who **does not** to process and discharge wastewater containing Per and Polyfluoroalkyl Substances (PFAS) shall submit Best Management Plan (BMP) with the information specified below, within 90 days or by March 31, 2019.

Upon receipt, the BMP shall be reviewed and used to develop a modified Wastewater Discharge Permit with appropriate conditions and requirements. As necessary, the CWT shall provide an updated Wastewater Discharge Permit Modification (Permit Application form), so that conditions and requirements may include, where appropriate, self-monitoring; compliance standards, and other requirements for PFOS and PFOA.

### Minimum Information Requirements to Support a BMP:

1. Best Management Program Plans (BMP) - The permittee shall develop, maintain and implement a comprehensive program as part of its PFAS Monitoring and Management plan that include treatment methods employed, sampling protocols used, percentage removal, BMP and other Management protocols; for the control, reduction and elimination of PFAS. The program is subject to inspection by GLWA during permittee's annual onsite Comprehensive Inspection. The permittee will review and update its PFAS Monitoring and Management Plan on an annual basis for any changes to its program. The permittee will also update its Waste Analysis Plan to include treatment of PFAS substances. The permittee shall provide a written documentation that it has complied with this requirement and it shall be included with every December Six Month Report.
2. Data and Information Investigation – Additional data may be necessary to quantify or size treatment and other requirements. The BMP shall include the steps to be taken and a brief schedule for accomplishing this task.
3. Treatment & Removal Capabilities – Where the discharge contributions equal or exceed the compliance standards<sup>5</sup> (PFOS – 60 ng/l and PFOA 2300 ng/l):
  - A. The permittee shall provide a description of the waste and wastewater treatment technologies and/or disposal protocols to be used at the facility for the treatment of waste and wastewaters containing PFAS substances.
  - B. The permittee shall provide documentation showing its capability to treat wastes and wastewaters containing PFAS Substances based upon the treatment technology(ies) described in paragraph A(i). Such documentation includes but is not limited to treatises, bench-scale treatment models, actual self-monitoring data or equivalent methods. This demonstration must, at a minimum, establish the removal efficiencies expected to be achieved; the volume(s) of waste or wastewater processed for the demonstration and analytical results to calculate the mass loadings of PFAS substances before and after treatment.
4. Waste & Wastewater Characterization & Evaluation
  - A. The permittee shall develop, and implement, a screening and monitoring program for identifying and evaluating PFAS substances in waste and wastewater accepted for treatment. This program shall be made available for onsite review by GLWA, upon request.
  - B. The program description shall include the methods used for evaluating (fingerprinting) and characterizing wastes and wastewaters accepted for treatment.
  - C. At a minimum, the characterization of wastes and wastewaters shall be based on data collected during the last 2 years

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<sup>5</sup> Compliance Standards have been calculated as preliminary maximum allowable discharge concentrations until such time as a formal local limits evaluation study has been completed.

## Attachment 8.3: Guidance Information: Landfills and Additional Wastewater Discharge Permit PFAS Compound Conditions

5. Self-Monitoring Program
  - A. The permittee shall propose a self-monitoring program for all parameters identified in Table 1 below. Currently, GLWA proposes weekly sampling for PFAS Compounds, but will consider alternative proposals.
  - B. Compliance standards may be developed and incorporated into Wastewater Discharge Permits at the discretion of GLWA.
6. Record-keeping
  - A. The permittee shall develop and maintain records of the source, volume, and any characterization data collected for specific wastes and wastewaters. The permittee shall maintain this information for onsite inspection by the GLWA and, at a minimum, include calculation of the loading (pounds) received, the loading (pounds) discharged and loading (pounds) disposed off-site per month; and
  - B. The permittee shall develop and maintain records for the disposal of any liquids or solids resulting from the treatment of PFAS substances. Such information shall be made available for onsite inspection upon request by GLWA.
7. Additional Requirements or Conditions – The State of Michigan is working with other landfill operators in the state and may propose alternative or other conditions and requirements. Such information is not expected until after March 1, 2019. To the extent, that alternative or other requirements are recommended, the GLWA will consider and incorporate equivalent conditions and requirements in any Wastewater Discharge Permit.
8. Permit Modifications – GLWA will review and evaluate the BMP and determine applicable permit conditions and requirements to acknowledge and implement the BMP.

## Attachment 8.3: Guidance Information: Landfills and Additional Wastewater Discharge Permit PFAS Compound Conditions

Option #3: A closed landfill facility who received wastes and waste materials containing Per and Polyfluoroalkyl Substances (PFAS) shall submit a Best Management Plan (BMP) with the information specified below, within 90 days or by March 31, 2019.

Upon receipt, the BMP shall be reviewed and used to develop a modified Wastewater Discharge Permit with appropriate conditions and requirements. As necessary, the Landfill shall provide an updated Wastewater Discharge Permit Modification (Permit Application form), so that conditions and requirements may include, where appropriate, self-monitoring; compliance standards, and other requirements for PFOS and PFOA.

### Minimum Information Requirements to Support a BMP:

1. Best Management Program Plans (BMP) - The permittee shall develop, maintain and implement a comprehensive program as part of its PFAS Monitoring and Management plan that include treatment methods employed, sampling protocols used, percentage removal, BMP and other Management protocols; for the control, reduction and elimination of PFAS. The program is subject to inspection by GLWA during permittee's annual onsite Comprehensive Inspection. The permittee will review and update its PFAS Monitoring and Management Plan on an annual basis for any changes to its program. The permittee will also update its Waste Analysis Plan to include treatment of PFAS substances. The permittee shall provide a written documentation that it has complied with this requirement and it shall be included with every December Six Month Report.
2. Data and Information Investigation – Additional data may be necessary to quantify or size treatment and other requirements. The BMP shall include the steps to be taken and a brief schedule for accomplishing this task.
3. Treatment & Removal Capabilities – Where the discharge contributions equal or exceed the compliance standards<sup>6</sup> (PFOS – 60 ng/l and PFOA 2300 ng/l):
  - A. The permittee shall provide a description of the waste and wastewater treatment technologies and/or disposal protocols used at the facility for the treatment of waste and wastewaters containing PFAS substances.
  - B. The permittee shall provide documentation showing its capability to treat wastes and wastewaters containing PFAS Substances based upon the treatment technology(ies) described in paragraph 1. Such documentation includes but is not limited to treatises, bench-scale treatment models, actual self-monitoring data or equivalent methods. This demonstration must, at a minimum, establish the removal efficiencies expected to be achieved; the volume(s) of waste or wastewater processed for the demonstration and analytical results to calculate the mass loadings of PFAS substances before and after treatment.
4. Waste & Wastewater Characterization & Evaluation
  - A. The permittee shall develop, and implement, a screening and monitoring program for identifying and evaluating PFAS substances in waste and wastewater accepted for treatment. This program shall be made available for onsite review by GLWA, upon request.
  - B. The program description shall include the methods used for evaluating (fingerprinting) and characterizing wastes and wastewaters accepted for treatment.
  - C. At a minimum, the characterization of wastes and wastewaters shall be based on data collected during the last 2 years

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<sup>6</sup> Compliance Standards have been calculated as preliminary maximum allowable discharge concentrations until such time as a formal local limits evaluation study has been completed.

## Attachment 8.3: Guidance Information: Landfills and Additional Wastewater Discharge Permit PFAS Compound Conditions

5. Self-Monitoring Program
  - A. The permittee shall propose a self-monitoring program for all parameters identified in Table 1 below. Currently, GLWA proposes weekly sampling for PFAS Compounds, but will consider alternative proposals.
  - B. Compliance standards may be developed and incorporated into Wastewater Discharge Permits at the discretion of GLWA.
6. Record-keeping
  - A. The permittee shall develop and maintain records of the source, volume, and any characterization data collected for specific wastes and wastewaters. The permittee shall maintain this information for onsite inspection by the GLWA and, at a minimum, include calculation of the loading (pounds) received, the loading (pounds) discharged and loading (pounds) disposed off-site per month; and
  - B. The permittee shall develop and maintain records for the disposal of any liquids or solids resulting from the treatment of PFAS substances. Such information shall be made available for onsite inspection upon request by GLWA.
7. Additional Requirements or Conditions – The State of Michigan is working with other landfill operators in the state and may propose alternative or other conditions and requirements. Such information is not expected until after March 1, 2019. To the extent, that alternative or other requirements are recommended, the GLWA will consider and incorporate equivalent conditions and requirements in any Wastewater Discharge Permit.
8. Permit Modifications – GLWA will review and evaluate the BMP and determine applicable permit conditions and requirements to acknowledge and implement the BMP.

Attachment 8.3: Guidance Information: Landfills and Additional  
Wastewater Discharge Permit PFAS Compound Conditions

**Table 1 - Compliance Standards For Per and Polyfluoroalkyl Substances:**

Perfluorobutanoic acid (PFBA)	Report	TBD
Perfluoropentanoic acid (PFPeA)	Report	TBD
Perfluorohexanoic acid (PFHxA)	Report	TBD
Perfluoroheptanoic acid (PFHpA)	Report	TBD
Perfluorooctanoic acid (PFOA)	<i>TBD</i> µg/l	TBD
Perfluorononanoic acid (PFNA)	Report	TBD
Perfluorodecanoic acid (PFDA)	Report	TBD
Perfluoroundecanoic acid (PFUnDA)	Report	TBD
Perfluorododecanoic acid (PFDoDA)	Report	TBD
Perfluorotridecanoic acid (PFTrDA)	Report	TBD
Perfluorotetradecanoic acid (PFTeDA)	Report	TBD
Perfluorobutane Sulfonic acid (PFBS)	Report	TBD
Perfluoropentane Sulfonic acid (PFPeS)	Report	TBD
Perfluorohexane Sulfonic acid (PFHxS)	Report	TBD
Perfluoroheptane Sulfonic acid (PFHpS)	Report	TBD
Perfluorooctane Sulfonic acid (PFOS)	<i>TBD</i> µg/l	TBD
Perfluorononane Sulfonic acid (PFNS)	Report	TBD
Perfluorodecane Sulfonic acid (PFDS)	Report	TBD
Perfluorooctane sulfonamide (FOSA)	Report	TBD
4:2 Fluorotelomer sulfonic acid (4:2 FTSA)	Report	TBD
6:2 Fluorotelomer sulfonic acid (6:2 FTSA)	Report	TBD
8:2 Fluorotelomer sulfonic acid (8:2 FTSA)	Report	TBD
N-Ethyl perfluorooctane sulfonamidoacetic acid (EtFOSAA)	Report	TBD
N-Methyl perfluorooctane sulfonamide (N-MeFOSA)	Report	TBD